

# **Open access community child health services: A three-phase evaluation**

Submitted by

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A thesis submitted in total fulfilment of the requirements of the degree  
of Doctor of Philosophy.

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September 2010

## **Statement of Authorship and Sources**

This thesis contains no material published elsewhere or extracted in whole or in part from a thesis by which I have qualified for or been awarded another degree or diploma.

No parts of this thesis have been submitted towards the award of any other degree or diploma in any other tertiary institution.

No other person's work has been used without due acknowledgment in the main text of the thesis.

All research procedures reported in the thesis received the approval of the relevant Ethics/Safety Committees (where required).

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## **Abstract**

Despite significant evidence of the importance of the early years of life, to date limited research has evaluated how health services best support and assist families during this crucial time. One important service through which infant and children's health are promoted and monitored in Australia are the government-based community child health nursing services (CCHNS). Traditionally, child health surveillance and health promotion are provided through CCHNS via individual appointment-based clinics. In recent years, resource allocation and workload within CCHNS has changed, requiring the development of contemporary approaches to service delivery. One novel approach, which was examined in this study, was an Open Access Clinic (OAC), which provided a group-based, appointment-free clinic where parents could attend with their infant for child health nurse support and health care, based on parental needs and convenience.

The objective of this research study was to investigate the efficacy, quality and perceived value of the OAC approach to universal child health surveillance in one urban community child health service. A three-phase study, using method triangulation was conducted. It comprised a retrospective documentary analysis of pre- and post-OAC healthcare outcomes; a phenomenological inquiry into the lived experience of those directly involved with the OAC; and an 18-month prospective cohort study, tracking health care-seeking behaviours and child care practices of families who accessed the OAC.

The key findings from the retrospective documentary analysis (phase one) demonstrated that the OAC performed favourably when compared with the traditional individual appointment approach, specifically in the areas of infant nutrition (including breastfeeding and the introduction to solids), referral rates, health promotion (including immunisation and SIDS prevention strategies), and assessing for postnatal mood disorders. There was also a statistically significant increase in families receiving unemployment benefits (thus were from a relatively low socio-economic demographic) in the OAC cohort, when compared with the individual appointment approach. However, a statistically significant decrease was noted in the developmental assessment documentation in the OAC cohort when compared with the individual appointment cohort, which was further investigated in the prospective cohort study (phase three).

The second phase of the overall study was a phenomenological inquiry into the everyday experience of the OAC. The purpose of phase two was to understand what the OAC meant to those involved with it, and to gain insight into the everyday experience of the OAC. The methodology used for this phase was a North American phenomenological inquiry approach, which sought to describe and interpret the everyday experience of multiple participants' lived experiences of the phenomenon - the OAC. New knowledge and understanding has been generated through this inquiry. According to the participants the OAC represented a place where support and reassurance could be accessed flexibly and provided in a non-judgemental manner. The emerging themes described a busy and bustling clinic. It was a place where parents felt safe and supported. They enjoyed the flexibility, the appointment-free structure and valued the accessible location of the both the urban clinics, where shops were close by and public transport available. However, for working parents, services offered in extended hours would be of benefit. The service had a clear role definition and according to the participants achieved this purpose through the working of the OAC, in conjunction with other support services (such as the breastfeeding clinic and the early intervention specialists).

Furthermore, parents often shared experiences of feeling lonely and socially isolated. They valued the consistency of seeing the same child health nurse within the OAC, and the child health nurses valued this for reasons of continuity. The parents reported the benefits of the group approach, and overall preferred it to individual appointments. The mothers identified their use of other service providers, for example their general practitioner if sensitive or confidential issues required attention. The information discussed during the clinics was offered in a non-judgemental way, however the findings indicate that it is essential that the child health nurse's advice and practice is consistent with the latest evidence-based guidelines.

The child health nurses sometimes found the clinic stressful and busy, without enough time to perform thorough family assessments. The parents did not perceive this busyness to be a problem, neither did they identify waiting as an issue. Through reflective interpretation some areas for quality improvement have been generated by these experiences. Therefore, this second study has yielded new and greater understanding of the Open Access Approach to child health surveillance and parent support, as perceived by those with real life, direct experiences of it.

The prospective cohort study (phase three) involved the follow up of 72 families with a new born infant for a period of 18 months. Six questionnaires were administered during the 18

month period, collecting data in areas of service usage and attendance patterns; parent information and support; infant nutrition, growth and development; parental coping and well-being; and, health promotion, specifically immunisation, SIDS awareness and oral health. Through prospectively following this cohort insightful contemporary information has been gathered from local Queensland families. More specifically, clear trends of usage, such as increased visit frequency and use of breastfeeding clinics in the early weeks, provided helpful evidence to assist in service planning. Through understanding where parents access information, such as family and friends, health services may target these sources with health promotion activities. “The real challenge lies in ensuring sustained policy effort to achieve long-term measurable change in outcomes for children – to improve their health and well being, to modify the effects of social determinants, and to minimise the inequalities already apparent in early childhood” (Goldfeld & Oberklaid, 2005, p. 209).

This final phase affirmed that parents have varied patterns of attendance within the OAC, based on their immediate needs, and that these change with the age of the infant. Important data was also found detailing patterns of usage for other child health service providers, such as access of general practitioners and child health nurses for routine well-baby assessments. Potentially, parents could be provided with clearer service pathways prior to discharge from maternity units, informing them regarding which services are helpful for specific infant health issues. There is also potential for increased collaboration between Queensland Health and general practitioners and practice nurses, to ensure that services are streamlined and thus reduce unnecessary burden on the health care system. This may also be helpful in ensuring consistency of health care information provided to parents between different providers.

Whilst this phase was limited by the small sample size, and a context specific group of families, it does provide new information in key areas, such as why parents introduce solids early, when they consider prevention for childhood obesity, where they are attending for their infants’ developmental assessments, and health care needs at different stages between 0- eighteen months. These findings will provide Child Health Services, with valuable information to more efficiently and effectively plan services to meet parental and infant health needs.

Overall, the key findings from the combined phases found the OAC compared favourably to the traditional individual-appointment method of child health surveillance in the areas of parent and health care professional satisfaction, infant growth and nutrition, immunisation status and key health promotion areas such as Sudden Infant Death Syndrome prevention. However,

areas for quality improvement were also found, specifically in the areas of consistent evidence-based information, documentation in areas such as developmental assessment attendance, health care provider duplication and collaboration and timely discussion of parent-infant attachment.

This study has generated new knowledge and understanding regarding the effectiveness and quality of an OAC approach to community child health nursing services, specifically in the delivery of group-based, appointment-free universal child health surveillance services.

## **Outputs arising from this research study**

### Peer-reviewed journal article:

Kearney, L., Fulbrook, P., & Howlett, L. (2008). 'Drop-in' clinics compared with individual appointment clinics: An outcome evaluation of an innovative group model of care for parents with infants aged 0-18 months. *The Australian Journal of Child and Family Nursing*, 5(1), 8-16.

### Published report:

Queensland Health. Kearney, L., Fulbrook, P. & Howlett, L. (2009). Provision of Child Health Services: Evaluation of an Open Access Child Health Clinic. Brisbane: Queensland Health.

### Peer-reviewed conference papers:

*'Drop-in' clinics compared with individual appointment clinics: An outcome evaluation of an innovative group model of care for families with infants aged 0-18 months:* Presented at the 2nd biennial paediatric and child health nursing conference, Darwin, Australia - May 2008.

*'Drop-in' community child health clinics: clients, nurses and other key stakeholders experiences and perceptions:* Presented at the 2nd biennial paediatric and child health nursing conference, Darwin, Australia - May, 2008.

## **Key Words**

Maternal and child health; child health surveillance; child health nurse; community child health services; groups; child health care; parent support; early years; mixed-methods; North American phenomenology; evaluation; infant growth and development; breastfeeding.



## **Statement of Appreciation**

I would like to thank a number of people and organisations who have shown invaluable support, guidance and encouragement to me over the past number of years working on this thesis.

Firstly, a huge thank you to my supervisors Professor Paul Fulbrook and Dr Jan Pratt. The seemingly endless hours, emails, corrections, reviews and words of encouragement have been beyond my expectations. Thank you most sincerely for believing in me, the value of nursing research and the importance of improving quality of care for children and their families.

Many of the hours conducting the research for this project were generously funded by a number of organisations. Thank you to the Ipswich Hospital Foundation (phase one only); a novice research grant from the Queensland Nursing Council (phase two only) and the Royal Children's Hospital Foundation/Golden Casket Regional Research Project Grant (phases two and three), who financially supported this work. I would also like to acknowledge the National Centre for Clinical Outcomes Research and ACU National for granting me a PhD completion scholarship which helped incredibly in finishing the thesis.

The Community Child Health team where I worked for the vast duration of this study also deserves sincere thanks. Thank you all for your support, cups of coffee and the laughs we had along the way. You are an amazing group of women and the families whom you have touched I am sure will be changed forever.

Finally, but not in the least, I would like to thank my wonderful husband Jonathan who prevented me from giving up, believed in me and loved me through many doubts. Thank you also to my beautiful daughter Madeline, you have taught me much more about 'child health' than any book could ever have. Thank you also to my ever amazing parents and in-laws too for the many hours of babysitting, listening and encouragement, you're amazing!

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## **Abbreviations**

ABA	Australian Breastfeeding Association
CHN	Child Health Nurse
CCHS	Community Child Health Service
CCHNS	Community Child Health Nursing Service
EIS	Early Intervention Specialist
GP	General Practitioner
NHMRC	National Health and Medical Research Council
OAC	Open Access Clinic
PND	Postnatal Depression
SIDS	Sudden Infant Death Syndrome
WHO	World Health Organisation

## **Glossary**

**Australian Breastfeeding Association (ABA):** The leading non-government support organisation in Australia which supports and promotes breastfeeding.

**Community Child Health Services (CCHS):** These incorporate the overall multi-disciplinary community-based primary health care services, which support families with children aged 0-4 years. These are provided by the state government health department without cost to the families.

**Community Child Health Nursing Services (CCHNS):** This specifically refers to those CCHS which are provided by Child Health Nurses such as child health surveillance programmes and new parenting group programmes.

**Child Health Nurse (CHN):** Child Health Nurses are the primary providers of community-based child health care in Queensland. They are registered nurses with additional tertiary qualifications in child, adolescent and family health. Many child health nurses are also midwives and/or lactation consultants.

**Child Health Surveillance:** Child health surveillance is the oversight of the physical, social, and emotional health of children; measurement and recording of physical growth; monitoring of developmental progress; offering and arranging intervention when necessary; prevention of disease by immunisation and other means; and health education (Hall, 1996)

**Early Intervention Specialist (EIS):** Health care professionals (senior social workers or clinical psychologists) who specialise in advanced support of families with significant risk factors making parenting more challenging. These include significant child behavioural or developmental concerns, domestic violence, mental illness or financial stress.

**International Board Certified Lactation Consultant (IBCLC):** Health care professionals with an internationally accredited advanced qualification in breastfeeding practice.

**Open Access Clinic (OAC):** A group-based, appointment free child health surveillance and parental support service administered by child health nurses. At the time of commencement of the study this was a contemporary alternative to traditional individual appointment approaches to child health care.

**Postnatal Depression (PND):** The name given to depression that a woman experiences in the months after the birth of her baby. Postnatal depression affects almost 16 per cent of women giving birth in Australia. Perinatal depression is the collective term used to describe both antenatal and postnatal depression (Beyond Blue, 2010).

**Sudden Infant Death Syndrome (SIDS):** The sudden and unexpected death of a baby, when an autopsy, clinical history review and death circumstance investigation find no other cause of death.

**Universal services:** One, of a three-tiered approach to primary health care services. Universal services are usually offered where families do not seek help and children are not singled out for intervention (Keating & Hertzman, 1999). This type of service is available to everyone and the intervention is not targeted.

**Chapter One:**

**Introduction and Background**



## **1.1 Introduction**

This thesis presents a research project which investigated a key component of universal Community Child Health Nursing Services: The provision of child health surveillance, for infants aged 0-18 months old. To date, minimal research has investigated the provision of Australian child health nursing services and their effectiveness in this specific area.

The research project comprised of three linked studies. It was designed to critically analyse the efficacy, quality, and perceived value of a unique regional community child health surveillance clinic, through which nurses provided an appointment-free service. This novel approach to service provision meant that clients were able to choose when to attend, based on their own convenience. At the time of introduction, its contemporary approach to provision of universal child health nursing services represented a significant shift in service delivery. During the course of the research project this service became known as the Open Access Clinic (OAC).

This chapter provides an overview of Community Child Health Services, in Queensland, Australia and internationally and describes how child health surveillance has been provided traditionally. This is followed by a description of the research setting in which the provision of child health surveillance services was investigated: the OAC, and why there was a need to conduct research in this area. This chapter will conclude with a summary of the thesis content.

## **1.2 Community Child Health Services**

Community Child Health Services (CCHS) have been offered in Australia for over 100 years. These services are provided through the state and local governments, and vary somewhat between the various health departments. "Child, youth and family health services seek to strengthen and support families, prevent illness and manage risks, from both a short-term and long-term perspective" (Barnes & Rowe, 2007, p. xi). Furthermore, the aim of CCHS is to improve the health of a population of children, and to provide flexible services to meet the overall needs of children and their families (Colver, 1996).

The health of a society can be directly linked to the health of its families. "...the family, as the fundamental group in society and the natural environment for the growth and well-being of all

its members and particularly children, should be afforded the necessary protection and assistance so that it can fully assume its responsibilities within the community” (World Health Organisation, 1989). Within Australia, CCHS are one important vehicle through which this 'assistance' is provided, specifically in terms of health care in the early years of life (0-5 years).

At the time of commencement of this project, CCHS in the local regional area where the project was conducted comprised of a multi-disciplinary team, including registered nurses, early intervention specialists (social workers and/or clinical psychologists), paediatric physiotherapists, speech pathologists and occupational therapists. This project had a specific focus upon a *nursing* component of these CCHS: the Open Access Clinic.

Community child health nursing services are delivered in a variety of settings by registered nurses with post-graduate qualifications in child and family health care. In Queensland, nurses working in this area are called child health nurses, although this term varies from state to state. Child health nurses provide a variety of health care services, based within the community, all aimed at maintaining and improving infant, child and family health (Barnes & Rowe, 2007). The health care advice and message of child health nurses' is communicated in a variety of ways. In years gone by, child health nurses wrote letters to and from families (especially living in rural communities) and now this has transformed into busy 24 hour phone lines and internet websites and chat lines, staffed by child health nurses (Sarkardi & Bremburg, 2005).

CCHS operates as a broad spectrum of services to provide population child health care. Overall within population health care three tiers of service types exist. These are categorised as universal, selected or indicated (Keating & Hertzman, 1999). Within each of these pathways specific health care services reside and operate to address the factors affecting children's health. Universal services are usually offered where families do not seek help and children are not singled out for intervention (Keating & Hertzman, 1999). This type of service is available to everyone and the intervention is not targeted. The OAC (described in detail later in this chapter) is aligned with this level of intervention as it is for everyone and is a broad strategy to deliver child health surveillance. Child health surveillance is provided universally around Australia, although through various methods. Selected (targeted) services are provided when families also do not seek help and where a certain child or family is singled out to receive an intervention (for example through broad antenatal screening), but not

necessarily because they already have a disorder; rather they are at high risk of developing one. The Family CARE<sup>1</sup> programme is a service in this tier of population child health care. However, indicated services are usually clinical interventions. These interventions may include referrals to other healthcare professionals. For example, a child suspected of failure to thrive as a result of pyloric stenosis would be referred on for medical assessment.

Keating and Hertzman (1999) argue that a strategy to determine the best mix of these interventions is a difficult task, and requires effective monitoring of outcomes at the community level. Lowe (2007) recommends a 'progressive universalism' approach whereby a universal service is planned and delivered to give a continuum of support, according to need at neighbourhood and individual levels. The aim would be to achieve greater equity of outcomes for all children. Getting the right mix of these tiers is a significant challenge, and determining which models of care are efficient and effective in delivery requires sensitivity and innovation by child health care providers.

The latest recommendations made by the National Health and Hospitals Reform Commission (2009) in Australia are for a greater focus and resource to be allocated to *universal* child and family health services. While a universal approach to population health care has been indicated, there remains a paucity of good quality research to guide *how best to deliver* the universal services recommended.

### **1.3 Traditional and contemporary child health models of care**

At the commencement of this project the current model of care to guide practice in Queensland - *The Enhanced Child Health Model of Care for Community Health Services 0-12 Years*, the motto for service provision was "something for everyone and more for those who need it most" (Queensland Health, 2005). Arguably, those who access the service are best placed to determine the 'something'. However, traditional models of care can be paternalistic, providing services according to historical or government directives, rather than client/family need (Barnes, Courtney, Pratt, & Walsh, 2003). Potentially, by allowing government directives

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<sup>1</sup> Family CARE (Community-based Assistance Resourcing and Education) Programme is an intensive home visiting service also offered through Child Health Services for families at higher risk of child abuse and neglect, with risk factors such as domestic violence and maternal mental illness

to guide service provision without consumer feedback or research, universal services for all families will not meet individual needs.

Child health services are offered in significantly different ways throughout the world. In the United Kingdom, health visitors funded through the National Health Service offer a universal service to all families. In a recent review of health visitors there seemed to be a lack of consistency in the services offered to families and a lack of clarity regarding the role of health visitors (Lowe, 2007). The review stated that the focus of health visitors needed to be on early intervention and health promotion for young children and their families (Lowe, 2007). Furthermore it was asserted that services needed to be accessible, community based and targeting local health needs, not just doing what individual professionals enjoyed doing (Lowe, 2007).

In Sweden, the child health service aims to prevent mortality and morbidity in pre-school children, as well as to support parents aiming to reduce parental stress and promote healthy child development (Fagerskiold & Ek, 2003). Families regularly meet the child health nurse at the local clinic. This is a frequent occurrence, especially in the infant's first months of life, where a relationship is formed between the nurse and the parents (Fagerskiold & Ek, 2003).

In the United States of America, paediatricians primarily provide well child health care (Coker, Lawrence, Casalino, Alexander, & Lantos, 2006). Currently, the American Academy of Pediatrics recommends that all children receive comprehensive preventative care that includes screening, counselling, and guidance directed by or provided by a physician (Coker et al., 2006). However, this process is individually based rather than delivered within a socialised healthcare system and disparities exist in accessibility and quality of care (Olson, Inkelas, Halfon, Shuster, & O'Connor, 2004).

Throughout Australia, child health services differ from state to state. For example, in Victoria families are seen on an individual basis in community health centres, and nurses have expressed concern that this eliminates the opportunity for mothers to meet each other, as previously occurred with drop-in style, appointment free clinics (Buchanan, 2007). Tasmania has implemented a universal framework reducing the chance that families with unrecognised needs will be missed (Wilson, 2007). The models of care, resources and clinical pathways vary significantly not only between states in Australia, but also between the various health service districts within Queensland.

The past 100 years have seen significant variance in the way CCHS have been provided within Australia (Barnes & Rowe, 2007; Mein Smith, 1997). During the 1930's the Infant Welfare Movement throughout Australia grew rapidly in response to community-led awareness of the importance of healthy mothers and babies to the Australian economy and national culture (Mein Smith, 1997). This movement made a major contribution to community life, national culture and Australia's economic welfare through promoting the value and importance of babies (Mein Smith, 1997). By the end of the second world war there were over 1100 baby health centres, with Queensland having over 200 (Mein Smith, 1997). Therefore these baby health centres were visible, accessible and involved with the families within the local community. Prior to 1990, many CCHS operated as appointment-free services, in multiple community based locations, such as church halls and community centres. Very few individual appointments were made or available, and families were seen sequentially by the child health nurse as they arrived. Mothers were reported to discuss many parenting issues with each other in the waiting area while waiting to see the nurse. Due to Queensland Health organisational restructure, this system changed in the early 1990's and became predominantly appointment based client-nurse consultations. At around the same time many local clinics were closed and child health services became more centralised, and the concurrent closure of the state-wide coordination of CCHS ceased with local health service districts taking ownership of care service pathways. Nurses reported that little to no consultation with themselves or mothers in the community occurred regarding this change in process occurred. Therefore, for the past 20 years the traditional individual appointment system has been the predominant model of care used for child health surveillance within many CCHS throughout Queensland.

There are 15 health service districts (HSD) within the state of Queensland (see figure 1.1 - Map of Queensland) and each of these HSD coordinate and administer a CCHS. Due to the individual needs, resources and staff mix, each HSD varies significantly in their approach to the delivery of CCHS. This is in stark contrast to the previously centrally coordinated service, which was abolished in the early 1990s. It was beyond the scope of this study to examine the variance between each HSD, however a close examination of one particular HSD will yield valuable and insightful data into the everyday operation of CCHS.

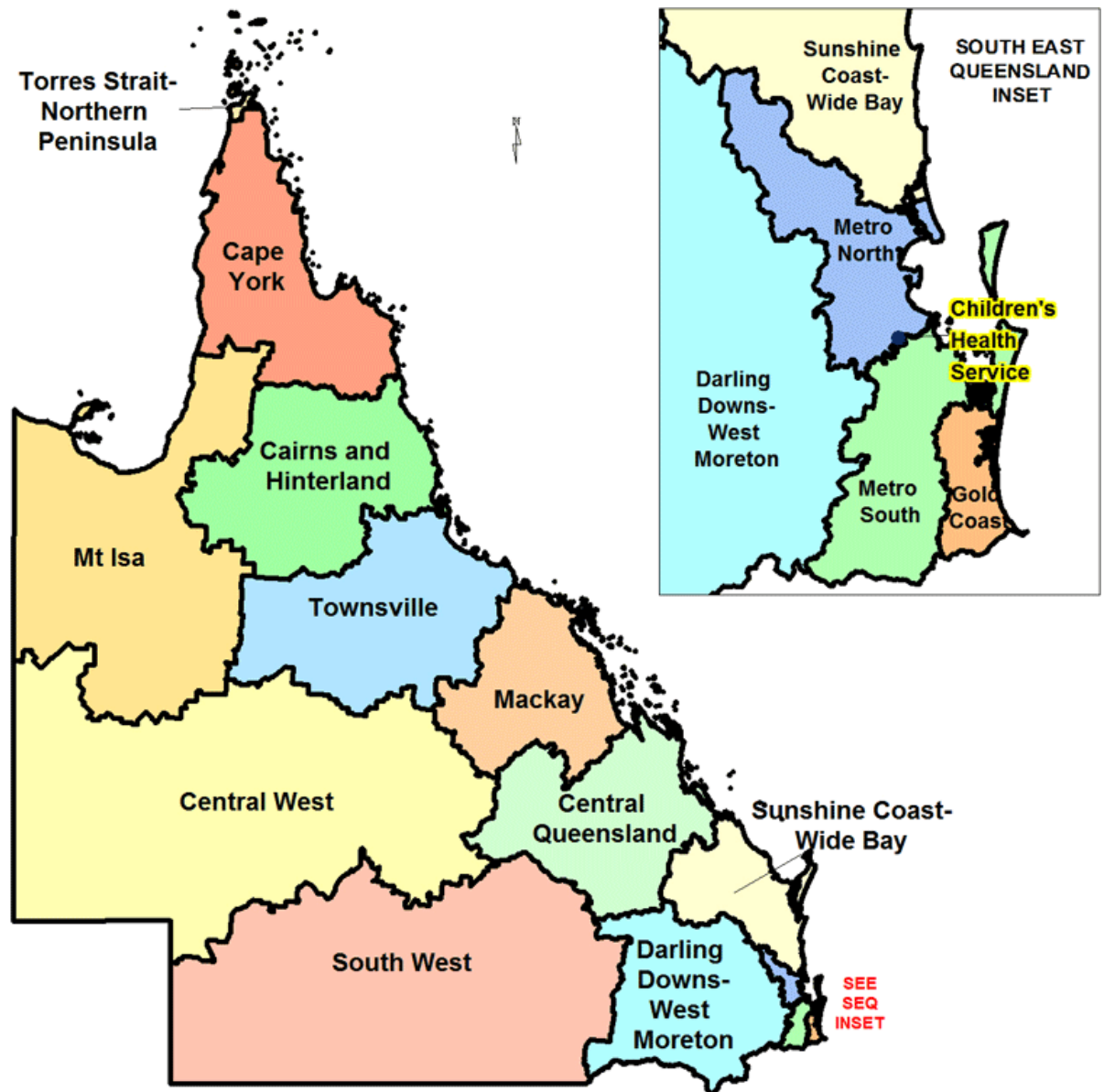
In Queensland, when this project commenced in 2004, families without identified child protection risk factors were seen on a one-to-one basis in a community child health clinic for

child health surveillance visits. The majority of health service districts throughout Queensland offered this as the only option for client consultation, if they were not being home-visited (Barnes et al., 2003). Families were only offered home visiting support if identified risk factors were present, such as domestic violence, maternal mental illness and financial stress. Anecdotal evidence, such as parental comments and feedback, suggested that individual clinic appointments tended not to be client-focused or directed, that long waiting times frequently occurred, and that parents had difficulty accessing this type of service.

However, since 2004 there have been a number of progressions regarding the delivery of child health surveillance and services in a number of health service districts throughout Queensland (Queensland Health, 2008). These have included (but not restricted to) early parenting groups, group parenting information sessions, Triple P programmes and the introduction of the Partnerships Approach to practice (Davis, Day, & Bidmead, 2002; Turner, Markie-Dadds, & Sanders, 1998). These initiatives and programmes and the literature surrounding them are discussed in greater detail in chapter two.

To provide effective health care in the face of reduced resources and significant population growth requires innovative models of care to be developed, evaluated and improved upon by child health nurses. At this point, it is important to examine the resource, population and socio-economic context of the project.

Figure 1.1 Map of the Queensland Health Service Districts



### 1.3.1 Research Project Demographics and Context

In recent years, Queensland (where this project was conducted) has experienced a significant population growth, especially in the area of families with young children and people immigrating from overseas (Australian Bureau of Statistics (ABS), 2010). During the data collection period of this project (2004-2009), Queensland experienced a 2.6% annual growth rate, making it the fastest growing state or territory in Australia for that period (ABS, 2010). More specifically the regional area of Queensland where this project was located experienced

the fastest growth, within south-east Queensland, increasing by 5% in the year 2008-2009 (ABS, 2010). As a natural consequence of this population growth, a subsequent increase in demand for health care services resulted. Without a substantial increase in resources for CCHS, clinicians have trialled innovative models of care to address the lengthening waiting lists for appointments with child health nurses and reduced accessibility of primary health care services in general. Yet, whilst these programmes have been implemented throughout many areas of Queensland, very little thorough research has evaluated their efficacy, client satisfaction levels or benefit in improving the health care of infants and their families. In many areas of CCHS group-based services have emerged with the belief they are more resource-efficient, yet very limited published research is available exploring this phenomenon.

One recent comparative study between child health nursing care via peer support groups or individual consultations was located and found that many women reported receiving support from not only the child health nurse but also other mothers (Kruske, Schmied, Sutton, & O'Hare, 2004). The authors interviewed mothers who had accessed a child health nursing peer support group, and also mothers who had chosen individual consultations. Mothers who chose to access individual appointments attended primarily for their baby and to address questions regarding their baby's growth and development (Kruske et al., 2004). They valued the individual care and privacy of the individual consultations (Kruske et al., 2004). However, mothers who accessed the group programme appeared to form meaningful relationships with one another, empowering the mothers through the group and de-emphasising the power and expertise of the health care professional (Kruske et al., 2004).

The Open Access Clinic (OAC), which was developed by a regional CCHS in south-east Queensland, Australia, offered an alternative approach to child health surveillance, based upon a wellness model of care. It focused on health promotion and disease prevention through *group participation*. This was in contrast to the previous traditional one-to-one, appointment-based, method of consultation.

#### **1.4 Child health surveillance**

A predominant role of CCHS is the delivery of child health surveillance. Child health surveillance is a broad phrase used to describe the oversight and monitoring of holistic growth and development of children; provision of parenting support and further intervention where



necessary; the prevention of disease (for example, immunisation); and, the promotion of family health (Hall & Elliman, 2006; NHMRC, 2002). Multiple models of care to deliver child health surveillance have existed over the years, including individual appointment clinics, structured parenting groups, mobile caravan outreach clinics, drop-in clinics and home visiting, all with the aim of giving parents and infants the healthiest start possible.

## **1.5 The research setting: the Open Access Clinic**

Traditionally, in Queensland, universal child health surveillance nursing services have been offered to families as individual consultations with a child health nurse via a scheduled appointment system within a community health care centre. However, due to the increasing volume of resource-intensive programmes now provided by Queensland child health nurses (such as the Family CARE programme), innovative models of care delivery have been implemented in some health services. This situation is not unique to Queensland CCHS. Research published in the United Kingdom regarding CCHS stated "nurses need to work in new ways, to extend and modernise their roles and introduce more nurse-led primary care services to improve accessibility and responsiveness" (Hamill & Bigger, 2005, p.10). This reduced accessibility is a key symptom of modern day resource shortages and increased staff workloads. Services are thus challenged to provide quality care, yet within new more user-friendly and efficient ways.

The child health surveillance service which was investigated in this research project is known as the Open Access Clinic (OAC). At the time of this project it provided a contemporary approach to the delivery of child health surveillance, via a 'drop-in' style, group setting, where parents attended according to their own needs and convenience.

The OAC was a component of one relatively large regional CCHS in south east Queensland, Australia. The OAC operated out of a number of service centres within the district, where the CCHS was based. For the purpose of this study, only the two urban service centres (that is, none of the rural service centres), have been included in the project.

In 2000, this regional CCHS introduced a new open access model of nursing care, which became known as the Open Plan Approach (OPA), (later changed to the Open Access Clinic), providing a similar service to the previous appointment-based model, but within a group environment and without the need for appointments. The development of the OAC was

originally informed by a consumer forum held in response to changes in resources and long waiting times for individual appointments.

During the course of the investigation it was found that the purpose of the OAC was to provide easily accessible child health surveillance, specifically in the areas of infant growth and development; infant nutrition; parenting; infant sleep and settling; and, an access point for referral to more targeted services. The OAC operated concurrent to an immunisation clinic; a breastfeeding clinic; and a parent education / support group, on certain days (also staffed separately) to see families for these health care needs also. For example, a mother may have presented to the OAC with a two week old baby to have them weighed, but may have been concerned about her breast milk supply, so she may immediately have consulted with the lactation consultant within the more private and specialised breastfeeding clinic, which ran concurrent to the OAC. Or, a father may have presented with his 12 month old infant to attend the infant's developmental assessment and immunisations. All these components of the OAC operated as a 'drop-in' style.

The OAC was staffed by two child health nurses (Registered Nurses with post-graduate qualifications in Child and Family Health). Parents chose when to attend, between specific hours (8.30 am - 11.30 am), without an appointment, and could visit as much or as little as they liked, based on their own health needs and convenience. Both urban clinics were open 3 mornings per week. Each of the urban clinics averaged at the time of the project 15-25 family consultations each morning session. Parents were seen individually by the nurse, in an open environment, thus information was often shared and discussed between the child health nurse, parent and parents waiting to be seen.

If a family required a more in-depth consultation, or they required more privacy in what they would like to discuss, individual appointments were also available and could be booked through the administration staff; or referrals could be made to more specialised services, such as paediatric physiotherapy or an early intervention parenting specialist. Therefore, this leads to the important consideration of how the OAC differed from the traditional child health surveillance approaches and what, if any impact this may have on service quality.

## **1.6 Key differences between the OAC and traditional approaches**

There are various attributes which differentiate the OAC from more traditional child health surveillance programmes, which further justifies the need to conduct a rigorous review of this new approach. At the time of commencement of this research project the OAC was found to be unique to the traditional approach in five key areas:

1. The OAC drew on parent-to-parent knowledge and support. During a traditional child health surveillance programme an individual appointment with a child health nurse and mother in a clinic room, this parent-to-parent expertise and support is not present.
2. During the OAC child health surveillance approach the consultation dialogue is not private, thus information and the consultation is open and shared amongst the nurse, parent and parents waiting to be seen. This is not present during a private, individual consultation
3. The OAC was found to average around 10 consultations per nurse in a three hour period. During a traditional appointment schedule, around 5-6 consultations would occur in that same time period. However, it was reported by the child health nurses that often parents 'did not show' for pre-scheduled appointments, thus reducing this number often to four.
4. The OAC did not prescribe how often or at which infant developmental stage parents must attend. A reference was made to the Personal Health Record (for routine visits in line with the immunisation schedule), however parents were encouraged to choose how often they attended, based on their own needs. In the traditional appointment child health surveillance programmes, parents were limited to accessing this service on average 3 times in the infant's first year of life (at 6-8 weeks, 6 months and 12-18 months).
5. The OAC was provided in a group setting, whereas the traditional appointment model was an individual service.

These five distinct differences emerged with the establishment of the OAC about 10 years ago. However, at the time of the project's commencement it was unknown whether this new approach attained the delivery of a comparably quality service, when assessed against the

traditional approach. Further, it was unknown whether those involved in the provision and receipt of the service were satisfied.

## **1.7 The need for research**

Despite the importance of the early years of life, there remains a shortage of good quality evidence to guide health care practice in this area (Oberklaid, Goldfeld, & Moore, 2003). To gain a greater understanding of the needs of families, the way they access and receive health care information, and patterns of health care behaviours requires an in-depth analysis of various factors within child and family health care. As evidenced, there is a specific knowledge gap in the area of universal child health service approaches and models of care (specifically within child health surveillance), and it is unknown which models are most effective and appropriate for the clients whom they serve. This study explored one group based approach (the OAC) to universal child health care. The research design incorporated three separate studies, and utilised triangulation of research methods to provide a multi-dimensional perspective of the OAC.

This research strategy ensured rich and detailed information about the OAC to be obtained. It comprised of:

- Phase one: A documentary analysis of patient records pre- and post-OAC to compare attendance patterns and achievement of healthcare targets
- Phase two: A phenomenological inquiry into the everyday experiences of those directly involved in the OAC
- Phase three: A prospective cohort study to follow up OAC clients for an eighteen-month period to gather detailed information about their health care behaviour and patterns.

Each of these studies contributed valuable information to inform child health practice, specifically in the area of group-based, universal child health surveillance services.

## **1.8 Conclusion**

Therefore, at the commencement of this study there remained a paucity of good quality evidence regarding the efficacy of child health surveillance programmes within Child Health

Nursing Services in Australia. Traditionally surveillance programmes in the regional health area where this study was conducted were offered via an individual appointment within a community health centre. Due to the demands of population growth, resource constraints and nursing shortages an innovative group-based approach was developed to address lengthening waiting times and improve accessibility for families. However, it was unknown whether this service was as effective as the traditional approach or whether families were satisfied with the quality of services provided through the OAC. This study has holistically investigated the OAC approach to child health surveillance as detailed in the forthcoming chapters.

Chapter two provides an in-depth review of the current literature regarding children's health care issues and a review of the current evidence for the use of group programmes both within child health surveillance and broadly in the area of health promotion. Chapter three outlines the overall research design for the study, discussing the purpose of choosing a triangulated mixed-methods approach to analysis. The fourth chapter includes the design, findings, discussion and conclusions from the first phase in the evaluation – the retrospective documentary analysis comparing the pre- and post-OAC child health services. Chapter five is the qualitative phase of the study and includes the research methodology, study methods, findings and discussion and recommendations for quality improvement. The final phase of the study, phase three (prospective cohort study) is chapter six. This chapter includes the research methods, findings, discussion and conclusions from the prospective cohort study. Chapter seven provides an in-depth discussion of the overall key findings from all three phases, how they confirm and complement each other, and discusses these in light of the wider literature. The final chapter summarises the new knowledge generated from this research study, the implications this has for nursing and further research and recommendations for future practices within the OAC.

**Chapter Two:**

**Literature Review**

## **2.1 Introduction**

As established in the first chapter, Community Child Health Services (CCHS) are concerned with providing health care, support and guidance to families with young infants and children. This literature review outlines both the historical and current perspectives regarding the development of infant, child and family health services in Australia and beyond. Modern day infant, child and family health issues will then be discussed and the dynamic influence of various factors which determine children's health. The evidence of how Community Child Health Services (CCHS) address these health issues will be reviewed, according to the strategies of health promotion, illness prevention and early intervention. The service delivery models within CCHS specifically in relation to child health surveillance programmes, will also be reviewed according to the literature, mindful of the various universal, selected and indicated programmes. Knowledge gaps identified, and areas for further research, will conclude this literature review.

## **2.2 Primary health care**

The tenets of primary health care provide an appropriate context within which to view the following review of the literature. CCHS work within a primary health care paradigm and thus reflect the values of this approach to health care. Primary health care incorporates personal health care with health promotion, prevention of illness and works within a wellness approach to community development (Keleher, 2001). Furthermore primary health care requires a sound evidence-based platform through which to provide universally accessible and socially appropriate first level health care services and systems, and maximises community and individual self-reliance, participation and control of health care (Australian Primary Health Care Research Institute, 2009). Primary health care also aims to reduce health inequalities and maintain the health of communities. These underlying principles were important in guiding the review of appropriate literature and assisted in the development of this evaluation project.

## **2.3 Child and family health**

Globally, there is significant variance in the health and well-being of infants and children. However, it is important to "...recognise the right of the child to the enjoyment of the highest

attainable standard of health and to facilities for the treatment of illness and rehabilitation of health...parties shall strive to ensure that no child is deprived of his or her right of access to such health care services" (Article 24: World Health Organisation, 1989). The universal rights of children are to survive, develop, be protected and participate (have a voice).

### **2.3.1 Right to survive**

Globally, the major causes of death among children less than five years of age and neonates include preterm birth and infectious disease, namely pneumonia, sepsis and diarrhoea ((World Health Organisation, 2008). Significantly, under-nutrition is an underlying cause of 53% of deaths among children under five years of age (World Health Organisation, 2008). In developed nations, the key morbidities for children include respiratory illness (such as asthma), injury, abuse and neglect, mental health and behavioural problems, overweight and obesity, and substance misuse (Queensland Health, 2005; World Health Organisation, 2007).

For the purpose of this review, a significant focus will be placed upon those factors affecting children's health that are currently reviewed by government infant, child and family health services in Australia. These include childhood nutrition and safe infant sleep practices, directly influencing sudden unexpected infant deaths.

#### **2.3.1.1 Infant nutrition**

Core business to child health services throughout Australia is the support and promotion of breastfeeding. The health benefits of breastfeeding are overwhelming, including increased protection against gastrointestinal illness, otitis media, respiratory tract infections and eczema (Hector, Webb, & Lymer, 2004).

However, less than 35% of infants worldwide are exclusively breastfed during the first four months of life; complementary feeding frequently begins either too early or too late, and foods are often nutritionally inadequate or unsafe (World Health Organisation, 2003). There is a strong relationship between socio-economic status and the rate of breastfeeding (Donath & Amir, 2000). Higher socio-economic status has been associated with higher rates of breastfeeding in Australia (Donath & Amir, 2000). However, the Northern Territory of Australia



has a relatively high rate of breastfeeding yet has a higher proportion of socio-economically disadvantaged areas than the rest of Australia (Donath & Amir, 2000). This indicates that the factors influencing breastfeeding are complex, and cultural factors also can play a role.

Breastfeeding can be supported through the health care system by providing skilled counselling and help for infant and young child feeding, for instance at well-baby clinics, and during immunisation sessions (World Health Organisation, 2003). A relatively recent Cochrane Systematic Review of interventions based on supporting breastfeeding mothers revealed two specific findings. The authors firstly concluded that additional professional support was effective in prolonging breastfeeding, yet with effects on exclusive breastfeeding remaining inconclusive (Britton, McCormick, Renfrew, Wade, & King, 2007). They also found that additional lay support was also effective, however it assisted in prolonging exclusive breastfeeding with effects on duration less clear (Britton et al., 2007). Therefore, it can be concluded that both health professional and lay support have been demonstrated to be effective in supporting duration of breastfeeding.

Furthermore, one detailed observational study noted a rise in breastfeeding rates at six weeks following the introduction of a policy of routine neonatal weight monitoring (McKie, Young, Macdonald, 2006). Whilst this study is context specific and indeed other variables may have impacted on the rise in breastfeeding rates, in various well conducted studies it has been identified that the support available can strongly influence the duration of breastfeeding following hospital discharge (Britton et al., 2007; Coutinho, de Lira, de Carvalho, & Ashworth, 2005; Oddy et al., 1999; Von Kries et al., 1999). Factors such as how accessible breastfeeding support is, what kind of information and expertise are available to families and the timeliness of support all play a significant role in determining breastfeeding outcomes.

A randomised controlled trial conducted in Brazil by Coutinho et al. (2005) demonstrated a significant rise in exclusive breastfeeding duration in the intervention group (n = 175), which received 10 routine support via home visits at significant times by a Baby Friendly Hospital Initiative (BFHI) trained health professional, compared to the control group (n = 175), which received no support post discharge. This study is important in that it signals that the type of support and how it is provided, does require thorough assessment, and is context specific. Thus, child health nurses' use of anticipatory guidance needs further evaluation to determine which health issues are improved by providing universal surveillance.

Infants who are breastfed in the first weeks of life are less likely to suffer childhood obesity, which is a key morbidity of 21<sup>st</sup> century children (Armstrong & Reilly, 2002). This not only emphasises the need for mothers to receive support to *initiate* breastfeeding, but also support and education for breastfeeding mothers in the early weeks to *continue* breastfeeding. Rising incidences of overweight and obesity in children are a matter of serious concern. Because poor feeding practices are a major threat to social and economic development, they are among the most serious obstacles to attaining and maintaining health that face this age group (World Health Organisation, 2003).

### **2.3.1.2      *Infant and child sleeping practice***

Another infant and child health concern for families in developed nations is infant and child sleeping patterns and safe sleeping practice. Unsettled infant behaviour, wakeful infant night sleeping patterns and prevention of sudden infant death syndrome (SIDS), are common discussion topics between parents and child health nurses.

Sleep and settling issues with infants and families are often discussed between parents and child health nurses. In a review of infant sleep disturbance literature, a New Zealand research team estimated that around 15-35% of parents report problems with their infant's sleep (France, Blampied, & Henderson, 2003). Child health nurses are often at the forefront of dealing with parents who are either experiencing difficulty in managing their infants' sleep behaviours or whose infants are exhibiting bona fide sleep problems (Thunstrom, 2000). Research has identified that sleep problems in infants and children can be very disruptive to family life and have the potential to cause parental stress and psychosocial conditions, including maternal exhaustion and depression (Armstrong, Fraser, Dadds, & Morris, 1999).

A cluster-randomised trial was conducted in 2008 (Hiscock, Bayer, Hampton et al., 2008), in six government well-child centers throughout Melbourne, Australia comparing a usual well-child health visit (n = 154) versus a brief behaviour modification program designed to improve infant sleep (n = 174). The intervention group demonstrated a statistically significant improvement in maternal depression when the child was aged 2 years, if a brief child health nurse – led sleep management intervention was implemented when the infant was aged 6-8 months. Additionally, the authors found no evidence of longer term adverse effects on child or parenting practices if the intervention was implemented (Hiscock et al., 2008). Therefore, the

infant sleep and settling interventions implemented by child health nurses (although brief) may have a significant effect upon reducing maternal depression in future years.

Buchanan (2007) conducted a qualitative study, exploring child health nurses' perceptions, experiences and concerns regarding infant sleep management in one urban maternal and child health service in Victoria, Australia. She found that nurses often found dealing with these sleep issues difficult. This was primarily due to parents' lack of preparedness for parenting, often compounded by a lack of social support (Buchanan, 2007). This finding is further supported by another Queensland study which found few mothers perceived that they were adequately prepared for the demands of parenting in the early months and years (Barnes, Pratt, Finlayson, Courtney, Pitt, & Knight, 2008). Barnes et al.'s study cohort comprised of first-time mothers who attended a selection of community child health centres in Brisbane, Australia. Three months after mothers entered the service, data were collected via telephone survey (n = 151). In addition, focus group interviews were conducted 7--9 months following entry to the service (n = 8). Their key findings included mothers reporting a lack of preparation for the physical or emotional demands of early parenting and a lack of knowledge in the area of management strategies for common early infant-maternal health issues.

The nurses in Buchanan's study also noted that the Victorian Maternal and Child Health Service has changed over the years to a situation where there are now less drop-in sessions (no appointment necessary). This reduces women's opportunities to meet each other in the waiting room and share information while they wait for the nurse. The nurses also recognised that supporting parents with infant sleep difficulties was an important part of their role. However, they found it difficult to meet all of the parents' informational needs (Buchanan, 2007).

The promotion of safe sleeping of infants is also an important role of child health nurses. SIDS is the sudden and unexpected death of an infant under one year of age, with onset of the lethal episode apparently occurring during sleep (Queensland Health, 2005). Although death from SIDS is relatively uncommon, it remains the leading cause of death in infants beyond the neonatal period (Australian Institute of Health and Welfare (AIHW), 2004). Whilst Queensland's SIDS rates have declined steadily since the introduction of the reduction recommendations (AIHW, 2004), its mortality rates remain relatively high compared to some other states. Evidence suggests that some health professionals are not fully aware of the risk factors for SIDS, and consequently accurate safe sleeping messages may not be passed on

to parents (Young, Schluter, & Francis, 2002). Young et al.'s study used a pre-test/post-test intervention design to survey nursing knowledge relating to risk factors for SIDS. The post-test survey, identical in content to the pre-test, was distributed to the 36 participants 6 weeks after the education session and was completed by 29 (81%) nurses. Pre-test, most nurses were aware that babies should be placed on their backs to sleep (n = 33, 92%), and kept smoke free (n = 34, 94%), but only 25 (69%) nurses correctly identified all three reduce the risk (RTR) messages. While the education session did not improve nurses' ability to correctly identify the three RTR messages (p = 0.41), knowledge of other risk factors associated with SIDS significantly increased for eight of the ten variables elicited (all p<0.05). Furthermore, a large study (n = 2299) conducted in the United States of America found that mothers who received consistent advice from doctors, nurses and the media were more likely to place their babies on their back to sleep (Kohern, Cormin, Huren, Lister, & Colson, 2010). Conversely, if the mother perceived the baby to be uncomfortable or more likely to choke on vomit while sleeping supine, then they were less likely to follow current recommendations (Kohern et al., 2010) thus highlighting the need for child health nurses to explore this area with parents to understand their beliefs and practices in the crucial child safety area. This is an area that requires further research to ascertain *how* nurses are conveying the safe sleeping message through their community health services, and the understanding by parents of this message.

### **2.3.2 *Right to develop***

Every child has the right to a standard of living that is adequate for the child's physical, mental, spiritual, moral and social development (Article 27: World Health Organisation, 1989). While it remains the parent or guardian's responsibility to provide this standard, it is the role of CCHS to promote child development, assisting children to reach their potential in all areas of development. For the purpose of this review, a focus on children's physical, mental, and social development has been taken.

#### **2.3.2.1 *Infant physical development***

Child developmental assessment, screening and surveillance have been promoted throughout Australia and New Zealand, over the past 90-100 years (Barnes & Rowe, 2007). The assessments are usually performed by child health nurses, general practitioners, and

paediatricians. They are conducted in a range of settings and aim to monitor children's growth and development according to guidelines and standards set by the respective health departments.

In Queensland, developmental assessments are conducted at routine ages, which are: at 0-4 weeks, then two, four, six, twelve and eighteen months (Queensland Health, 2009). These developmental assessments are targeted to coincide with immunisations. A developmental assessment may also be conducted outside these routine times when there is parental or health professional concern regarding an infant or child's development.

"It is estimated that 10-20% of children experience developmental or behavioural problems which are significant enough to interfere with their daily functioning" (Oberklaid, 2000, p. 731). Likewise, nearly a third of children referred to paediatricians in Australia have problems that relate to developmental and/or behavioural problems (Williams & Holmes, 2004). However, despite an apparently comprehensive child health nursing service, delayed detection of children's subtle developmental problems persists in Australia (Hart, Brinkman, & Blackmore, 2003).

In 2002, the National Health and Medical Research Council (NHMRC) in Australia conducted a review of child health surveillance and screening. The review concluded that there is little evidence for the effectiveness of screening programmes in many areas. Furthermore, there existed minimal data about the cost-effectiveness, programme quality, compliance with follow-up referrals, or whether facilities even exist for this process to occur (NHMRC, 2002). The review called for a system or programme which contains clear procedures and referral follow-up pathways and documentation (NHMRC, 2002). This review is now eight years old, and there remains a paucity of good quality evidence to determine consistency across service providers, effectiveness of models of care, and accessibility and compliance to child health developmental surveillance.

There are few published studies which assess the overall effectiveness of health surveillance for infants between the ages of 0-eighteen months and most relevant studies are concerned with specific screening procedures (Magnusson, Persson, & Sundelin, 2001). In their prospective and retrospective cohort study, Magnusson et al. (2001) found that severe health problems and key abnormalities were detected only to a limited extent through routine health examinations at two, six, nine, and twelve months of age. However, the number of minor and moderate problems that were detected justified a health surveillance programme.

In the more specific areas of infant health surveillance and screening (developmental dysplasia of the hip and immunisation), contrasting benefits have been found. A systematic review of the literature found that screening for developmental dysplasia of the hip (DDH), which is routinely performed by child health nurses, can identify newborns at increased risk for DDH, but because of the high rate of spontaneous resolution of neonatal hip instability, and the lack of evidence of effectiveness of intervention, the net benefits of screening are not clear (Shipman, Helfand, Moyer, & Yawn, 2006). On the other hand, in Szilagyi et al.'s (2005) systematic review on the effectiveness of interventions to improve immunisation rates, it was found that patient reminder/recall systems in primary health care settings are effective at improving immunisation rates. Their review included all randomised controlled trials, controlled before and after studies and interrupted time series, and thus provides strong evidence. Similarly, a review of anticipatory guidance in child health supervision concluded that encouraging parents to share books with their children and free book distribution during well-child visits improved child language development and home literacy activities (Nelson, Wissow, & Cheng, 2003).

There remains much potential for further research into the area of child developmental health and surveillance. Currently, there is insufficient evidence to guide accurately the provision of programmes in Australia; however evidence does not suggest a cessation of current programmes, rather an evaluation of their effectiveness and efficiency.

### **2.3.2.2      *Infant emotional and social development***

The emotional and social development of infants is a complex process. There is much that remains unknown about it. However, there has now emerged a significant body of literature examining neuro-developmental pathways in the early years.

There is strong evidence supporting the importance of children's early years of life in their future development across the life span (Cowley & Bidmead, 2009; Goldfeld, Wright, & Oberklaid, 2003; Schulz, 2003). Particularly, in the area of neuroscience, this evidence suggests that the early years of development (conception to six years old), especially the first three years, set the base for competence and coping skills for life, affecting lifelong learning, behaviour and health (Norrie-McCain & Mustard, 1999). The early years of life have been identified as the time when the brain develops most, and the basis of competence and coping

skills for the later stages of life are established (Norrie-McCain & Mustard, 1999). These early years are a critical period for the development of neural pathways and connections within the brain and nervous system, and are directly influenced by the level of nurture provided by parents and carers (Schulz, 2003). On the other hand, there is concerning evidence that children who do not receive the emotional and/or developmental stimulation necessary for good development in the earliest months and years of life may have great difficulty overcoming these deficits in later life (Norrie-McCain & Mustard, 1999).

The early months of an infant's life are crucial, and this emphasises the importance of early and timely intervention by health care services. Furthermore, there is encouraging evidence that good nutrition, nurturing and responsive care in the first years of life, linked with good early child development programmes, improve outcomes for all children's learning, behaviour, and physical and mental health throughout life (Norrie-McCain & Mustard, 1999). Child development programmes, which actively involve parents or other primary caregivers of young children, can influence how they relate to and care for children in the home, and can vastly improve outcomes for children's behaviour, learning and health in later life. Norrie-McCain and Mustard (1999) recommend that the earlier in a child's life these programmes begin the better. They also found that these programmes can benefit children and families from all socioeconomic groups in society.

At this point, it is essential to consider parents' adjustment to their new role as a parent and subsequent responsibility for their child's potential growth and development into adulthood. Mothers and fathers alike have described the process of adjusting to being a parent as overwhelming (Nystrom & Ohrling, 2004). When addressing factors which affect child development, it is essential to consider the child's family through a holistic lens, and to understand that how well a mother or father is coping directly influences the health of their child.

In developed countries, such as Australia and the United Kingdom, some mothers leave hospital within six to eight hours of delivering their new baby, with a relatively short post-partum stay of one to three days being the norm (Warren, 2005). Many parents feel unprepared for the demands of early parenting and have misplaced expectations (Barnes et al., 2008; Bryanton, & Beck, 2010). There remains limited evidence evaluating the effectiveness of postnatal parental education programmes, specifically with regards to how

they benefit the parent-infant relationship and enhancement of parenting intuition to infant cues and behaviour (Bryanton & Beck, 2010).

Furthermore, the benefits and risks of early discharge from hospital after childbirth remain ambiguous due to a lack of good quality studies evaluating this relatively recent occurrence (Brown, Small, Faber, Krastev, & Davis, 2002). In an update of this Cochrane review in 2009 the authors found there to be no adverse effects on breastfeeding or maternal depression when mothers are discharged early, if effective follow on midwife/nurse support is available (Brown, Small, Argus, Davis, & Krastev, 2002). Yet, the authors stated that this conclusion was based on generally poor quality studies (Brown et al., 2009). "Becoming a mother can cause anxiety because of the change of role from being a non-parent and responsible only for ones' self to having responsibilities of caring for a new baby" (Warren, 2005, p. 480). Naturally, the sooner a parent is able to easily access support and information, during this early postnatal period, the better.

Several small studies have suggested that new mothers benefit from emotional support, particularly that provided by partners; and also appraisal support, particularly from professionals, such as child health nurses (Tarkka, Paunonen, & Laippala, 2000). In their Finnish study, Tarkka et al. (2000, p. 25) stated that:

Guidance and advice given by the public health nurse as well as support for decision making in matters pertaining to child care were found to be important for the first-time mother's experience of a successful motherhood.

Furthermore, an earlier Finnish study of 271 mothers, by the same researchers, found that social support given by public health nurses had a positive correlation with the mother's coping with child care. Affirmation was their most strongly related form of social support, because mothers expected the nurse to give them expert advice on the child's growth and development (Tarkka, Paunonen, & Laippala, 1999). Whilst these findings cannot be generalised to Australian mothers, they do mirror the anecdotal evidence from Australian child health nurses, asserting the need for timely, responsive health care and support for new parents.

Warren's (2005) study measured social support in the specific context of first-time motherhood and confidence in infant care practices. A convenience sample of 135 first-time mothers was recruited. Warren found that frequent visits from a public health nurse during the



early post-partum period (0-eight weeks) gave significant opportunity for informational support on infant care practices. The most striking finding of this study was that, of the four functional elements of social support, appraisal support had the strongest relationship with confidence in infant care practices. Another significant finding of this study was that first-time mothers identified their partners as their primary sources of social support, thus it would be beneficial for partners to become active participants in antenatal and postnatal care.

Nyström and Öhring (2004) conducted a review of the literature exploring parenthood experiences in the child's first year. Through thematic analysis, they concluded an overall theme of 'living in a new and overwhelming world' (Nystrom & Ohrling, 2004, p. 324). Four key themes emerged from the mothers' experiences: being satisfied and confident as a mother; being primarily responsible for the child is overwhelming and causes strain; struggling with the limited time available for oneself; and being fatigued and drained. The fathers' experiences of the first year of parenting included: being confident as a father and partner; living up to the new demands causes strain; being prevented from achieving closeness to the child is hurtful; and being the protector and provider of the family.

Henderson and Brouse (1991) explored first-time fathers' experiences of the transition to parenthood, using a phenomenological approach. Some fathers described the first three weeks of their new infant's life as, "The first three weeks were a nightmare," and that it was, "The worst three weeks of our marriage" (Henderson & Brouse, 1991, p. 297). These were not unusual feelings and the fathers in this study consistently described feelings of frustration and helplessness. These feelings continued until the father made a conscious decision to become actively involved with their infant. The nursing interventions that these fathers had received were described as unhelpful, and this demonstrates that child health service providers need to be mindful of the effectiveness of their services, not only to mothers but also to fathers.

In order to foster the optimal growth and development of infants, there needs to be a positive parent-infant attachment (Kearney-Schenk, Kelley, & Schenk, 2005). This attachment, bond or relationship between an infant and their primary care giver (usually the infant's mother) is affected by various elements, for example postnatal depression (McLaren, Kuh, Hardy, & Mishra, 2007) or maternal drug dependence (Fraser, Barnes, Biggs, & Kain, 2007). It is necessary to reach families with young children, as there is so much evidence that behaviour patterns are embedded in the early years (Cowley & Bidmead, 2008). Child health nurses have an opportunity to explore this parent-infant relationship and attachment, through the

identification of issues that may be present to disrupt the connection, and offer support and referral to address this. As insecure attachments have the capacity to delay development and affect lifelong prospects (Norrie-McCain & Mustard, 1999), it is imperative that the means by which CCHS explore and support this area of health care is effective.

There has been much discussion in the health and social care literature about the importance and composition of the family. For families to be able to fulfil and provide an environment conducive to healthy child development they must have access to adequate income, housing, personal and community safety, quality child care, and adequate education and health services (Zubrich, Williams, Silburn, & Vimpani, 2000).

### **2.3.3 *Right to be protected***

Another vital aspect of children's health and well-being is that of a safe and nurturing environment, within which to grow and develop. It is the right of every child to live free from violence, abuse and neglect (World Health Organisation, 1989). Child abuse and neglect is a key health concern and morbidity for children of the 21<sup>st</sup> century (Queensland Health, 2005). A significant body of literature exists addressing the area of infants and children living at risk of emotional, mental and physical harm (Firkins & Candlin, 2006; O'Donnell, Scott, & Stanley, 2008; Tucci, Mitchell, & Goddard, 2007).

Throughout Western countries, this health concern is frequently addressed through nurse home visiting programmes. In New Zealand, a universal home visiting service is offered, providing developmental surveillance and parenting support (Royal New Zealand Plunket Society, 2008). Similarly, the United Kingdom also offers universal home visiting support for families, until the child is aged five years old (Lowe, 2007). Systematic reviews of home-visiting programmes in Canada, the United States of America and the United Kingdom have shown positive outcomes in the home environment, maternal well-being and parenting competence of families being visited (Gomby, Culross, & Behrman, 1999; Jack, DiCenso, & Lohfeld, 2005; Kearney, York, & Deatrck, 2000; Kendrick, Elkan, Hewitt et al., 2000). Armstrong et al.(1999) conducted a randomised controlled trial in Brisbane, Australia recruiting families in the immediate post-partum period based on self reported vulnerability factors (such as domestic violence). Women were randomly allocated to either the control group (n = 91) – receiving routine child health care; or the intervention group (n = 90) –

receiving structured nurse home visiting, supported by a paediatrician and social worker. The study demonstrated short-term positive outcomes from the intensive home visiting programme. More specifically, there was a reduction in parental stress and maternal depression, and parent-infant interactions increased (Armstrong et al., 1999). However, there was no demonstrated maintenance of a positive intervention impact on maternal depression after two years (Fraser, Armstrong, Morris, & Dadds, 2000). Despite its limited long-term benefits, the programme used by Armstrong et al. has been implemented throughout Queensland Health via the Family CARE programme. Seven Queensland Health Service Districts currently offer this resource-intensive programme (Queensland Health, 2005).

The Family CARE programme is provided when a family is judged to be at high risk of child abuse and neglect, and is based on an assessment of the presence of domestic violence, abnormal maternal mood, and, in conjunction with these factors, self-perceived financial stress. This assessment process is limited in that it adds ambiguity to the determination of socio-economic status. Thus, some families may not be assessed as high risk, when in fact they are. For example, there may be an infant with a low-birth weight, maternal substance use or intellectual impairment – all risk factors - yet the family is not eligible for intensive nurse home visiting, in districts where Family CARE is offered.

As a consequence of the introduction of the Family CARE programme, families *without* identified risk factors may have difficulty accessing or receiving adequate child health care. “The challenge now, as families ‘at risk’ are being targeted, is to ensure that families without risk factors do not develop problems as a result of limited services to support this group” (Barnes, Courtney, Pratt, & Walsh, 2003, p. 18). Similarly, if a family does not have, or does not disclose, specific circumstances (e.g. mental illness or domestic violence) to hospital maternity staff, and challenges arise once the baby is born, there needs to be an effective service, which is easily accessible, for families to seek help. Another limitation to thorough family assessment is that only families accessing public hospitals are screened for risk, and thus families who receive private maternity services - who may not be screened - may not be identified. Consequently their health care needs may be neglected. As demonstrated previously in this review, the important issue is the need for all families to be provided with effective child health services, regardless of whether or not they are assessed as belonging to a ‘high risk’ group.

### **2.3.4 Right to participate**

The final general principle outlined by the World Health Organisation (1989) is that there needs to be respect for the views of the child. This principle is one of client involvement in care planning, and advocating for those who cannot express their own views. This right should, in principle, be extended to the families with whom child health nurses work.

#### **2.3.4.1 Partnerships in practice**

Within the literature, there are multiple perspectives on the level or degree of involvement that families have in their care. In Brennan's (1998) review of child health nurse-client relationships, she suggests that the child health nurse is the leader in the conversation (for example regarding an infant's developmental assessment), thus reinforcing the notion of the 'expert' professional. However, a more unstructured conversation during a non-screening consultation may be client-led, and its importance in the literature is often overlooked (Brennan, 1998). It has also been documented in the literature that parents often want to participate 'to a level of partnership' with nurses in their child's care (Keatinge et al., 2002). However, the exact nature of this partnership and how it is created has yet to be clarified.

McVeigh's (1997) qualitative study described the experiences of 79 first time mothers. The study affirmed the support needed by new mothers and recommended the continuation of community-based women's networks that support the sharing of knowledge and experience. The generalisability of the findings is limited however, due to the qualitative nature of the research and the fact that only mothers who accessed maternal and child health centres were interviewed. Only one other study was found in the literature which investigated consumers' attitudes and perceptions of child health services. It was conducted in Sweden and employed a critical incident technique using interviews (Fagerskiold, Timpka, & Ek, 2003). The researchers invited mothers to describe three critical incidents with an encounter with a child health nurse. Although, again, this study is limited in terms of its generalisability, it is significant to note that in the constructed theme of 'sharing the realm of motherhood' the authors noted that for the mothers the most important factor was that the nurse could see things from their perspective. They also found that empathic nurses who were good listeners and who trusted the mother were valued more (by the mothers).

Furthermore, in a recent interpretive study of urban, middle-class Australian mothers, the researchers found that a key role of child health nurses was to enhance mothering know-how (Rowe & Barnes, 2006). Nurses felt that they provided the support that was once provided by extended families, and that they facilitated ongoing support networks for families (Rowe & Barnes, 2006). In addition to this finding, another qualitative phenomenological study into the relationship between child and family health nurses and parents (Kardamanidis, Kemp & Schmied, 2009), found that nurses identified elements of a trusting nurse-client relationship built up over time, and a continual process of give and take. They also identified that the personal qualities of the child health nurse were important in developing trust, as were the allocation of sufficient time to consult with the parent and continuity of care provider (Kardamanidis et al., 2009).

While partnership is of vital importance in child health care, health professionals and parents may view infants' health needs very differently. For example, currently there is great concern about the number of overweight and obese children and young people (Eckstein et al., 2006). Yet, a study in the United States found that few parents of overweight children recognised their child as being overweight or were concerned or worried about it (Eckstein et al., 2006). Further, a study that investigated maternal perceptions of their children's weight also found that only 21% of mothers of overweight children recognised that there was a health issue (Baughcum, Chamberlin, Deeks, Powers, & Whitaker, 2000). These research examples demonstrate the often contrary perception of children's health and well being between healthcare professionals and parents.

There can be a communication breakdown when planning children's health care, due to failure to collaborate by health professionals who provide services to young families (Mbwili-Muleya, Gunn, & Jenkins, 2000). The fragmentation of services between general practitioners, child health clinics, and other key stakeholders is considered to be an obstacle that affects potential improvement in Australia's health care system (Goldfeld et al., 2003).

“Understanding how families connect with the health system, including understanding the opportunities that might be available for anticipatory guidance, early detection and intervention, are important factors in developing appropriate strategies to guide practice and improve access to quality in health care” (Goldfeld et al., 2003, p.249).

In summary, globally, children and their families have the right to survive, develop, be protected and participate. Child Health Services serve a crucial role in supporting these principles and, arguably, they should underpin the delivery of all child health programmes.

## **2.4 Approaches to child health surveillance**

A thorough review of the literature has revealed only three other studies which investigated group approaches to well-child health care, specifically in the area of child health surveillance. Rice and Slater (1997) examined an alternative method of well-child consultation in a group setting and compared it to the traditional individual appointment method. Subjects were recruited from predominately Caucasian, middle class families. Twenty-five families were seen in groups of three to four families, and twenty-five families were seen on a one-to-one basis. Statistical analysis revealed that the group method was at least as good as the individual method in parental learning, recognition of maternal depressive symptoms, perceived maternal support and conveyed infant care, growth and development. A similar amount of time was allocated to both individual and group subjects; however the authors concluded that the groups could be managed with larger numbers, which would improve time effectiveness. Overall, the study demonstrated that group methods of child health care delivery were as effective as individual care in low risk, middle class families. Although this study had a relatively small sample, which was selected sequentially, the authors claim bias was minimal as the infants were born and entered the practice randomly. It is important to note however, that this study was based on child health supervision from paediatricians as opposed to child health nurses, and this makes the findings difficult to generalise to an Australian setting.

The second study was conducted in the United Kingdom and assessed a group approach to two-year old developmental assessments, due to limited resources threatening the cessation of this important development check (Lee, Parker, & Townsend, 2003). The authors evaluated a structured group setting, where up to 8 parents with their two-year olds attended, with one nurse observing the children playing and noting developmental progress, and the other facilitating a parent discussion regarding topical health issues, such as toilet training. Eighty-four families participated and interviews were also conducted with the nursing staff delivering the assessments. Overall the authors concluded that the group approach was

'practicable and workable' (p.79) and that overwhelmingly parents preferred it to the individual appointment approach due to the discussion with other parents and sharing of issues (Lee et al., 2003). The limitations of this study included a relatively small sample size, with purposive sampling, and did not include any other child health surveillance activities or alternate age assessments. The authors recommended a larger study to further investigate group approaches in light of their economic use of time and staff, and social benefits to parents.

A final English study evaluating a group-based approach to child health surveillance was also conducted in the early 1990's (Brooks, Fickling, Thornton, & Walker, 1993). The authors were a team of health visitors who introduced a group well-child health assessment service for 18 month and 3 year old health checks. The group approach was commenced in response to heavy caseloads and the introduction of a new framework which specified a new approach to child health surveillance incorporating health promotion, parental involvement and professional judgement based on normal patterns of development, rather than checklist assessments (Brooks et al., 1993). The group involved the booking-in of six families, and was conducted by two health visitors. The key findings from the study were that the group allowed the health visitors to draw upon parental expertise (rather than solely professional); parents were exposed to a range of normal development as demonstrated by the numerous toddlers playing together; and parental reassurance and areas for concern were able to be highlighted. The group-based approach was evaluated via a parent questionnaire, which was completed anonymously and handed in at the completion of the group. The total sample was 30 families. Overall the parents' preferred the group approach to the individual consultation (18 month assessment – 85%; 3 year old assessment – 69%). They also found that attendance uptake rates were comparable in the group approach to the individual appointment service (Brooks et al., 1993). While the key findings from the study are useful to inform practice, they are limited by the age and small sample of the study; that only an 18 month and 3 year old assessment were evaluated; and that this study was specific to an English service, which operates quite differently from that of CCHS in Queensland, Australia.

#### **2.4.1 Other group based child health programmes**

Group approaches to health promotion and care have been found to be effective in the management of a variety of health conditions, such as obesity, smoking and pregnancy

(Baldwin, 2006). Advantages to the group approach, when compared to individual appointments, include provision of thorough health care information and education, skill development and peer support (Baldwin, 2006). The Centering Pregnancy care model is a good example of group prenatal care (Kilma, Norr, Vonderheid, & Handler, 2009; Rising, Kennedy, & Kilma, 2004). It is based on a wellness approach for obstetrically low risk women and provides substantially more health promotion content than the traditional one-to-one prenatal care model. It also encourages and supports self-management. Group based pregnancy care is becoming increasingly common in Australia also, with substantial numbers of women now choosing midwife-led, group prenatal care (Turnball, Baghurst, Collins, Cornwall, Nixon, Donnelan-Fernandez, & Antoniou, 2009; Scherman, Smith, & Davidson, 2008). This perhaps prepares women also for group based postnatal care and continuation of similar health care approaches potentially may assist in health care usage and familiarity for families.

Additionally, group programmes are effective in providing education on behaviour management strategies to families (Barlow, Parsons, & Stewart-Brown, 2005). Parenting, especially in the first three years of a child's life, has been found to be crucial in affecting the emotional and behavioural adjustment of infants and toddlers (Barlow & Parsons, 2003). In a 2003 Cochrane systematic review of five randomised controlled trials, the authors concluded that there is support for group-based parenting programmes to improve the emotional and behavioural adjustment of children less than three years old (Barlow & Parsons, 2003). However, there is inconclusive evidence to suggest that these programmes may prevent longer-term problems and further research is required in this area.

There is also a range of studies that suggests that maternal psycho-social health can have a significant effect on mother-infant attachment and bonding, and thus long and short term implications for the mental health of that child. A systematic review of the literature by Barlow and Coren (2005) evaluated twenty-six studies addressing whether group programmes were effective in improving maternal psycho-social health including anxiety, depression and self esteem. Their analysis suggested that group programmes are very effective in the short-term, however there is limited evidence evaluating the effectiveness of the programmes long-term. Furthermore, some studies included in their review indicated no improvement in psycho-social health of the mothers. Further research is required to assess the quality of delivery in such programmes.



Other novel approaches to child health care include the use of the Internet as a source of child health information and social support, which is increasingly popular (Larkin, 2000). It has the advantage that it is a relatively cheap method for the provision of healthcare advice. A large cross-sectional study of a Swedish parenting website reviewed 2221 users via an anonymous online survey (Sarkadi & Bremburg, 2005). The researchers found that 95% of respondents were female and had a slightly higher, but not significantly higher than the national population, education. Interestingly, 68% of respondents had income levels at or below the national average, thus indicating that users were not socio-economically advantaged. This study suggests that the Internet may provide an exciting cost-effective opportunity for future developments in child and infant public health work.

Group programmes also provide a resource-efficient alternative to solely individualised care. When the South East Sydney Child Health Service introduced an 'Early Bird' programme (group child health programme) they noted a significant decrease in the waiting list for individual appointments, improving the accessibility for those clients requesting individual child health consultations as a result of the group approach (Kruske et al., 2004).

In summary, there is evidence in the literature that supports the use of group programmes within child health care. However, further research is required at a local level to identify specific programmes which will meet the needs of children and family health, in specific areas. Therefore, the aim of this research was to assess the efficacy, quality and perceived value of one approach to the delivery of child health surveillance - the Open Access Clinic.

## **2.5 Conclusions**

In summary, this literature review has highlighted the importance of the early years and how the support of families during this time enhances children's potential to develop. In order for health services to effectively address the UNICEF directed rights of every child, further research will be required to enlarge our understanding of which services work and which ones do not in achieving this goal.

It is evident from the literature that multiple knowledge gaps exist and there are some important concerns about the provision of child health care. Whilst it is clear that early intervention is both cost-effective and significant in improving the wellness of an individual over their lifespan, our experience in Queensland is that CCHS have suffered from a

reduction in resources, with services being provided according to particular political and economic directives.

Within Child Health Services (especially universal child health surveillance methods) there is significant variance in the models of care that are used and due to the lack of rigorous evidence in this area it is difficult to determine how effective different approaches are in improving health outcomes. This is primarily due to a lack of evidence about usage of Child Health Services and key performance indicators that are used to measure the services provided. Furthermore, there is minimal research that has investigated consumer perspectives of well child health services and little research that specifically details the needs of the universal population, especially in Australia. There is significant room for further clinical innovation and research in the area of community child health, the outcomes of which may have important implications for the delivery of Child Health Services throughout Queensland and Australia.

**Chapter Three:**

**Research Design**

### **3.1 Introduction**

This chapter details the research design chosen for this study. It provides a description of the aim and objectives of the research, a discussion of mixed-methods research, a review of the methodological approach selected, and ethical considerations for the study.

### **3.2 Aim and objectives**

The primary aim of this research project was to investigate the efficacy, quality and perceived value of a group-based method of service delivery (as described in chapter one) to provide universal child health surveillance.

The objectives were:

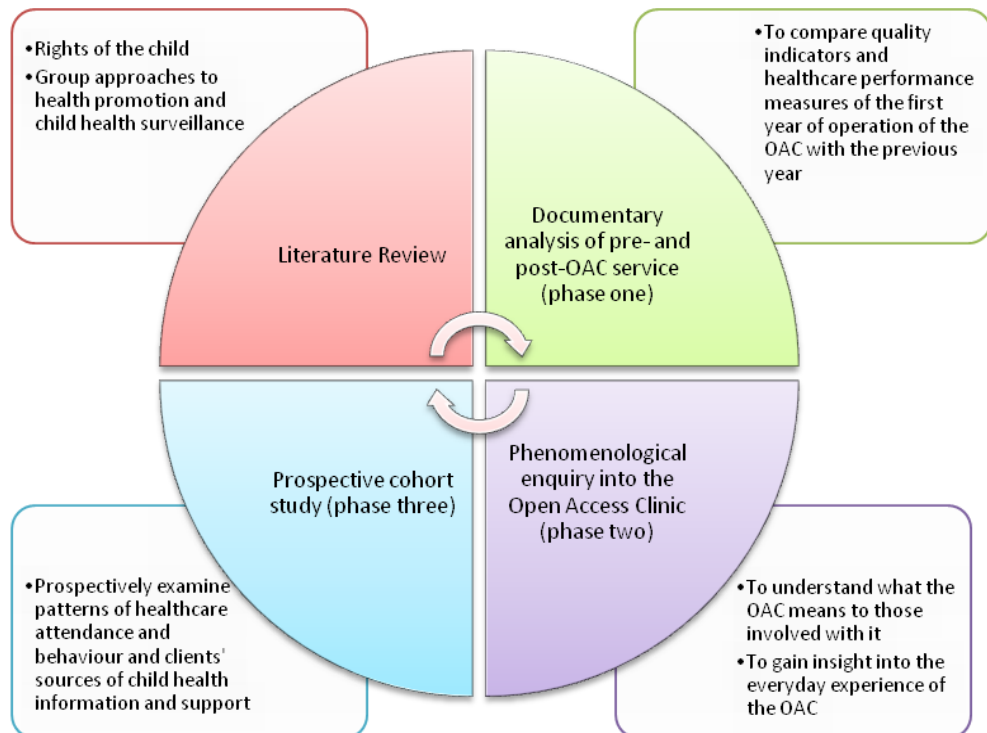
- To compare key clinical outcomes (such as breastfeeding rates and immunisation status) between the traditional individual appointment model and the group-based OAC (study one)
- To understand what the OAC means to those involved with it and to gain insight into the everyday experience of the OAC (phase two)
- To explore the patterns of health care behaviour of those families who have contact with the OAC (phase three)

Figure 3.1 (see below) diagrammatically represents each phase of the study, including study objectives and sub-aims and how each phase is linked.

The group-based service delivery method was implemented in a single community child health service, which was provided via two different urban child health clinics. Collectively, these clinics became known as Open Access Clinics (OAC). Because this research study investigated both clinics, they are referred to hereafter as one entity: the OAC.

Overall, the research project was designed to provide a thorough investigation of the OAC that would yield detailed findings about the quality of the service and its associated outcomes, from multiple perspectives. This, in turn, would enable identification of strengths and weakness, areas for improvement and the potential to inform future planning and policy development within CCHS. In order to achieve the primary aim, a mixed method, triangulated research design was chosen.

**Figure 3.1 Research design and objectives**



### 3.3 Mixed methods research

Since the 1950's social researchers have combined both quantitative and qualitative methodologies and methods to investigate complex health phenomena (Doyle, Brady, & Byrne, 2009; Giddings, 2006). More recently, this research approach became increasingly popular and has thus been described as the 'third methodological movement' (Tashakkori & Creswell, 2007). Mixed methods research may be defined as a research approach whereby the investigator uses both quantitative and qualitative methods in a single study (Doyle, Brady, & Byrne, 2009; Tashakkori & Creswell, 2007). It emerged in response to the limitations within a single methodology (that is either quantitative or qualitative) to fully understand and explore a phenomenon of interest (Doyle, Brady, & Byrne, 2009). This methodological approach is still evolving and it has been suggested that the discussion around its specific characteristics be kept open (Tashakkori & Creswell, 2007), and subsequently much debate and scepticism has emerged in the health care literature (Giddings, 2006; Gilbert, 2006). The predominant debate centres on the compatibility of such

divergent paradigms being incorporated into a single study (Gilbert, 2006) and the neglect of some authors to specify the epistemological stance of the study justification for a mixed methods approach to be taken.

This study has chosen a mixed methods research design to enable triangulation to occur and this is now discussed at length.

### **3.4 Triangulation in health care research**

Initially the term *triangulation* was utilised in the field of social research as a metaphor to describe the use of multiple methods to evaluate a specific construct (Shih, 1998). Some authors have suggested that a crystal (Sandelowski, 1995), or kaleidoscope (Flick, 1992) would better describe the process of using various viewpoints to explore a single phenomenon, yet the notion remains the same: to investigate a single construct from more than one perspective.

There are various types of triangulation, including theoretical, data, methodological and investigator (Halcomb & Andrew, 2005). Theoretical triangulation involves the testing of various hypotheses or differing explanations of one particular phenomenon within the research setting (Halcomb & Andrew, 2005; Thurmond, 2001). Alternatively, data triangulation uses multiple data sources, for example analysing the same phenomenon at different points in time (Thurmond, 2001). Investigator triangulation is another form which employs multiple researchers to examine one problem or issue. These researchers may be from multiple disciplines providing additional dimensions to the study (Halcomb & Andrew, 2005). Finally, methodological triangulation uses a variety of research methods and thus data collection and analysis processes to examine a single construct. This form of triangulation has been selected for this study due to the complex and multi-faceted nature of child health surveillance programme: the OAC. The following section outlines the benefits of this approach in addressing the stated research objectives, and further detail as to why methodological triangulation was preferred.

### **3.4.1 Methodological triangulation**

As stated earlier, this research study employed methodological triangulation to gain greater insight into the multi-faceted dimensions of the OAC. Methodological triangulation is defined as the "use of two or more research methods in a single study" (Casey & Murphy, 2009, p.41), with the purpose often being to use multiple methods to evaluate a single construct (Halcomb & Andrew, 2005). Methodological triangulation has seen regular use as a method to conduct health care research since the 1950s (Bailey & Hutter, 2008; Näslindh-Ylispaangar, Sihvonen, & Kekki, 2008). Consistent with methodological triangulation, this research project has utilised both quantitative and qualitative methodological approaches, in three separate studies, yet all with the coherent purpose of exploring the efficacy, quality and perceived value of the OAC. This section details the purpose of using methodological triangulation for this study, including the strengths and limitations of this approach.

#### **3.4.1.1 Confirmation and completeness**

The literature specifies two key reasons why researchers may employ triangulation: confirmation of findings, and completeness of the data (Adami & Kiger, 2005; Casey & Murphy, 2009; Halcomb & Andrew, 2005; Thurmond, 2001). Firstly, confirmation means to enhance the validity and thus confidence in the findings from a study (Halcomb & Andrew, 2005), through the use of various approaches which should ultimately support one another's findings. However, Sandelowski (1995) argues that in order for triangulation to meet this purpose, three assumptions must be made: that there is a single reality upon which convergence can be made; that various methods offset the limitations of the other; and that research methods are paradigm neutral. The assumptions raised by Sandelowski (1995) specifically were concerned with the potential of triangulation to ignore the distinct philosophical differences between the various research methodologies, which she describes as a "misplaced ecumenicism" (p.569), purposed to reduce conflict, yet with the cost being the trivialisation of the differences between the modes of inquiry. These assumptions are certainly problematic in terms of maintaining ontological, epistemological and methodological congruency. The nature of reality and structure of being can vary greatly between various philosophies (Rawnsley, 1998). Not only are there ontological issues, there are also epistemological differences. For instance, in the interpretive paradigm it is proposed that there is more than one reality of a phenomenon, therefore assuming a single reality (as is

done with the notion of confirmation of findings), is inconsistent with this value. Furthermore, Razum and Gerhardus (1999) reject the assumption that one method compensates for or has priority over another. To overcome this dilemma Foss and Ellefsen (2002) argue that qualitative and quantitative methods can be combined, on the basis of an epistemological position that acknowledges the need for various types of knowledge, not attempting to rank them hierarchically according to weight or importance. This new epistemological position holds that within "a complex and differentiated reality we need different and various types of knowledge. Knowledge gained from qualitative and quantitative approaches should not be seen as irreconcilable pools of knowledge, but as different positions on a continuum of knowledge" (Foss & Ellefsen, 2002, p.244). This continuum thus acknowledges the different types of knowledge and allows for their differences, yet values each component's contribution to enhancing overall nursing understanding and knowledge.

Similarly, to overcome this conundrum ontologically it can be acknowledged that each research approach, within each aspect of the triangulation perceives a different way of being in the world, yet not weighted against each other, rather alongside one another, recognising there are various ways of being.

The second broad purpose for choosing methodological triangulation is completeness. Also known as holism, completeness aims to increase the scope of the findings (Jones & Bugge, 2006). According to Thurmond (2001), the use of more than one methodological approach can counterbalance the limitations of a single strategy, thus enhancing the overall understanding of a particular phenomenon by looking at it through different lenses.

Triangulation adds to the researcher's depth and breadth of understanding (Adami & Kiger, 2005) and enhances the contextual portrayal (Jick, 1983) of the research topic. The nursing discipline often encounters complex and un-ordered phenomena, and thus a research approach which enables a multi-faceted approach is consistent with the often non-linear experience of nurses. However, with respect to completeness, the mathematical term of 'triangulation' has been challenged in respect to this approach (Sandelowski, 1995), as this multi-dimensional, complete picture of a phenomenon may better be described as a kaleidoscope (Flick, 1992).

Nevertheless, the use of multiple methodological approaches provides the increased scope to explore a phenomenon from various angles. The justification for the use of this approach to investigate the OAC, is based on this advantage of triangulation. For example, if the OAC



was explored purely in quantitative measures of clinical outcomes, such as breastfeeding rates, important elements of the quality of the service would be unknown. Thus, by also conducting a qualitative exploration of the experiences of the parents accessing the service, another valuable dimension of the phenomenon is added, providing a deeper understanding of the OAC and thus enhancing the opportunity to make better informed recommendations for practice.

### **3.4.2 Justification for the use of methodological triangulation in this study**

The first consideration when justifying methodological triangulation was to ensure that the methodological approach chosen would address the research purpose and objectives. As stated, the research purpose was to critically analyse the efficacy, quality and perceived value of the OAC. This purpose was multi-dimensional, and contained both quantitative and qualitative aspects. While *efficacy* of the service could be determined through performance measures or health indicators, *perceived value* required more qualitative exploration. Additionally, the research objectives included comparative analysis and health care behaviour trends (quantitatively measured) alongside phenomenological inquiry (qualitative study) into participants' experiences of the OAC approach to child health surveillance. To provide a rigorous examination of the OAC all these various attributes required attention, and a sole methodology would not enable this to occur.

Secondly, the OAC was itself a multi-faceted approach to health care delivery. It provided a variety of services to parents, which aimed to improve both health care and parental confidence and ability through supporting parents with their infants. The aspect of the service which aimed to improve health status (such as increased breastfeeding or immunisation rates) lent itself to quantitative measurement. Furthermore, the comparison between the traditional and new approaches could also be evaluated statistically. However, whilst this would help assess one aspect of the OAC, this service was also *human*. How clients interacted and attached meaning to their experiences of the OAC was also valuable, because they are in fact the ones who the OAC was designed to service. If a parent immunised their child, yet felt isolated and unsupported in their parenting, the overall health outcomes and well-being of that family may be diminished.

Another advantage of adopting this approach was that broadly the goal of this health service research was to achieve improved quality. The use of both qualitative and quantitative approaches overcomes the often cited criticism of the tendency for quantitative research to ignore personal experience of illness or health and the accusation that qualitative research is romantic (Foss & Ellefsen, 2002). In order for nursing research to be pragmatic and useful to nurses, it is important that it is not only ontologically, epistemologically and methodologically sound, but also holds internal logic, so that the findings may be accepted and used (Foss & Ellefsen, 2002).

Triangulation enables exploration of the phenomenon of interest from multiple perspectives, which reveals its various dimensions and provides richness of detail and more complete understanding (Halcomb & Andrew, 2005). Therefore, by grounding the research approach for this study in the previously mentioned objectives of comparison, exploration and understanding the OAC, a triangulated study design will best reflect the 'kaleidoscope' and complexity of this phenomenon, by enabling the freedom to value each type of knowledge as equally insightful and important in improving health care quality.

### **3.4.3 Limitations of methodological triangulation**

The predominant debate around methodological triangulation has focused upon the epistemological and paradigmatic differences inherent in qualitative and quantitative approaches and the difficulty in combining these (Barbour, 1999; Foss & Ellefsen, 2002; Jones & Bugge, 2006). Therefore, the key difficulty lies in the differing paradigms and epistemologies of each approach.

A paradigm is a systematic set of beliefs, together with their accompanying methods (Lincoln & Denzin, 2005). Paradigms shape the approach taken for a research study. Within the context of research paradigms differing positions exist toward the social world and the very nature of reality and existence: this is known as *ontology* (Holloway & Wheeler, 2002). From this base, core assumptions about knowledge arise with different ways of thinking pertaining to particular claims of knowledge (Grbich, 1999). This is known as *epistemology*. With traditional (or single method) approaches, it would be seen as epistemologically inconsistent to use both qualitative and quantitative approaches to explore one phenomenon. Some researchers manage this difference by prioritising one method over another (Razum &

Gerhardus, 1999), however this does not address the epistemological conundrum of methodological triangulation.

Foss and Ellefsen (2002) propose an alternative *new epistemology*. They conclude "that the complexity and diversity of reality provides the ontological basis" (p.242) for this approach. This new epistemology is anchored in the diversity of nursing practice, thus acknowledging the diversity of knowledge, enabling nurse researchers to describe and conceptualise these health care phenomena (Foss & Ellefsen, 2002). Contrary to a hierarchical view of the different approaches, they argue that nursing research needs designs which mirror the non-linear, complex world within which nurses practice and that methodological triangulation has potential to facilitate this nursing knowledge (Foss & Ellefsen, 2002).

To maintain epistemological rigour with the use of alternative perspectives, it is vital to recognise each of the individual epistemological stances and ensure that aspect of the study is sound. For example, one study within this research project employed a phenomenological methodology, therefore that individual study, within the whole, has been conducted with methodological reliability. By adopting this epistemological stance - that nursing knowledge is diverse and each approach has its own place on the continuum of knowledge, justified in its own right to inform understanding differently, yet complementarily - triangulation within this study remains the most appropriate route of investigation.

#### **3.4.4 Conclusions**

The most suitable and therefore implemented research design for this study was methodological triangulation. As detailed above, the research consisted of three distinct phases which all examined the same phenomenon - the OAC. The complementary nature of different research methods provided a more comprehensive understanding of the OAC, which enabled the research objectives to be met fully, and allowed a complex picture to emerge. Phases one and three employed quantitative methods whereas phase two utilised a qualitative approach. The specific methodological approaches and considerations pertaining to each of these phases are presented separately within each of the respective chapters.

In qualitative research the researcher is regarded as an instrument of research (Flick, 1998). This is specifically relevant to phase two of the research study. In qualitative research the researcher is not expected to distance herself from the research, rather she is integral to the

research inquiry, and therefore influences all stages of the research process. In this context the concept of research bias is redundant. Nevertheless, as part of the audit trail it is important for the researcher to declare their position. Therefore, in chapter five a description of research student's history and perspectives relevant to this study is provided.

### **3.5 Research study rigour**

The techniques employed which enhanced the quality, trustworthiness and validity of this research study collectively can be summarised as research study rigour (Polit, Beck & Hungler, 2001). A number of processes were adhered to which ensured that this study was both rigorous and trustworthy. Due to the inherent differences between qualitative and quantitative research methodologies, the strategies used to assess quality vary also. Therefore the techniques employed within each phase to enhance quality are discussed independently.

#### ***3.5.1 Research rigour – quantitative research (phase one and three)***

Phases one and three of this research study employed quantitative research approaches. Phase one was a retrospective documentary analysis which used a quantitative methodology. The first strategy used to improve the quality of this phase was the process of randomisation. Through the random selection of client health records, the sample was not subject to researcher biases (Polit, Beck, & Hungler, 2001). While there was no guarantee that the sample would provide a complete representation of this population, it did guarantee that the differences between the data sub-sets were purely a function of chance (Polit et al., 2001). Secondly, only one person, that is the researcher, collected and attended to the data entry, thus reducing potential data entry error. As no specific measurement tool was used within phase one there was no need to assess this usual aspect of quantitative research rigour. Finally for phase one, the data collected was consistent with the objective of the study, which was to analyse the difference between each model of care in terms of key performance indicators. The findings reflect this comparison. These techniques should ensure a soundly reliable critique of the study findings.

The final phase (three) of the study was also quantitative and involved an 18 month prospective cohort study with parents of newborn infants. The questionnaire tool utilised in phase three was not intended to measure a concept, rather it was designed to collect descriptive data regarding child health surveillance and the OAC, and analyse it accordingly. "The face validity of a questionnaire, for example, is when a researcher concludes that on the face of it the questions reflect and are relevant to the topic being explored" (Andrew & Halcomb, 2009, p.124). To enhance the face validity of the questionnaire utilised in phase three, it was reviewed by an expert panel, comprised of a number of experienced clinicians, including: a clinical nurse consultant within child and family health care services; two early intervention parenting specialists; the research student's supervisors; and an additional clinical nurse / midwife and International Board Certified Lactation Consultant. Secondly a pilot questionnaire was implemented to ascertain the reliability of the questions. Subsequently, minor changes were made to improve readability of the questions and reduce ambiguity. All questions were designed in such a way that they allowed only one answer within a multiple choice response, thus answers were easily allocated a numerical value and entered into the statistical database for analysis. As reflected in the data generated, this questionnaire did effectively collect data regarding the objectives of the phase.

Interrater reliability refers to the degree to which two raters, operating independently, would assign the same ratings or values for an attribute being measured (Polit & Hungler, 1991). All questionnaires were administered by the one researcher, therefore this minimised the likelihood of impaired reliability. Additionally, to ensure accuracy of the information collected, during the telephone interviews answers to each questionnaire were both hand written onto the paper questionnaire, and digitally recorded. Again, only one person attended to all data collection and data entry thus minimising potential for data entry error.

### **3.5.2 Research rigour – qualitative research (phase two)**

The second phase of this study was a phenomenological, qualitative study. It is important that qualitative research demonstrates truth value, meaning that it should be consistent in the processes and methods used to display this (Holloway & Wheeler, 2002). However, it should also be noted that "no one set of criteria can be expected to 'fit the bill' for every research study" (Streubert Speziale & Carpenter, 2007, p. 49), in assessing its rigour. Broadly the goal in qualitative research rigour is to ensure that the research accurately represents the

- Member checks were conducted to enhance credibility. Summarised copies of the interview and focus group transcripts were returned to each participant, inviting their confirmation of the accuracy of the data, and changes made if need be. Lincoln and Guba (1985) identify this as the most important technique for establishing the credibility of qualitative data.
- Prolonged engagement with the participants during the study which allowed time to engage and build rapport with them. Also a generous amount of time was spent reading and re-reading the transcripts, becoming more engaged and familiar with the data to improve understanding
- Methodological triangulation, another technique to enhance credibility (Polit et al., 2001) was also used, as outlined in chapter three. Additionally data source triangulation (Polit et al., 2001), with multiple participants from differing backgrounds were interviewed.

participants' experiences (Streubert Speziale & Carpenter, 2007). The following section details how credibility was strived for throughout this second phase of the study.

Credibility refers to the confidence a reader may have in the truth of the data (Polit et al., 2001). Steps to demonstrate enhanced credibility within this study included:

Another aspect of credibility is researcher credibility. Included later in this discussion is a summary of who I am as the researcher and a description of how journaling was used to provide researcher transparency.

"It is argued that the trustworthiness (rigour) of a study may be established if the reader is able to audit the events, influences and actions of the researcher" (Koch, 2006, p.91).

Therefore a clear decision trail is evident throughout phase two, with the themes grounded directly in the participants' experiences and descriptions, through referring regularly to the original data. Furthermore, researcher personal and professional prejudices are outlined within phase two, as too are excerpts from the journal written during the qualitative phase of the study. This decision trail is further explored within chapter five.

Furthermore, transferability refers to the extent to which the findings from the data could be transferred to a different setting or population groups (Lincoln & Guba, 1985). Provision of a rich description of the research setting (as outlined in chapter one) and the processes

observed during inquiry (as in the description of the research methods) may enable another to make a transfer to reach a conclusion about whether the study may be possibly transferred.

### **3.6 Ethical considerations**

When conducting research, it is essential to maintain human rights and dignity ensuring it is congruent with the ethical standards in Australia (National Health & Medical Research Council, 2007). Throughout all aspects of this study high ethical standards were followed. This research project had full ethical approval granted from both the Australian Catholic University Human Research Ethics Committee, and the regional Health Service District Human Research Ethics Committee where the project was conducted. Ethical considerations that are specific to each of the three phases are detailed in the relevant chapters.

An independent contact for any complaints about the study was available via the district Human Research Ethics Committee and also through the Australian Catholic University. Participants were made aware of this avenue and contact details provided to them, however this was not accessed by any participants for the duration of the project.

All printed data were stored in a locked filing cabinet, and all electronic data were saved in files only accessible by the researcher. In keeping with National Health and Medical Research Council guidelines (2007), the completed transcriptions are now stored in a locked filing cabinet for the next five years, after which they will be destroyed. At all times an independent contact for any complaints about the study was available via the district Human Research Ethics Committee and also through the Australian Catholic University; however this avenue was not utilised by any participants.

#### **3.6.6 Conclusion**

This chapter has provided a discussion of the research design for this project. A clear justification for the use of methodological triangulation has been presented, including the strengths and limitations of this approach provided. Ethical considerations and issues have also been outlined, in light of the National Health and Medical Research Council guidelines for the conduction of ethical research with humans.

**Chapter 4:**

**Documentary analysis of Pre- and Post-OAC service (phase one)**



## **4.1 Introduction**

The first of the three studies was the documentary analysis of the OAC. The following chapter will outline the aim and objectives of this study; the study design and research methods; results of the study; discussion of findings; conclusions and recommendations.

## **4.2 Study aim**

The aim of phase one of the research programme was to objectively analyse patterns of attendance of clients and healthcare performance measures before and after the introduction of the OAC service to determine the existence of differences between the two approaches in the delivery of child health services.

### **4.2.1 Study objectives**

1. To compare quality indicators and healthcare performance measures of the first year of operation of the Open Access Clinic with the previous year<sup>2</sup>.
2. To use the findings from the above studies to develop/refine key performance indicators for the service and to make evidence-based recommendations for improvements to the service.

## **4.3 Study design**

Phase one design was comparative, using a retrospective documentary analysis of clients' records (client health records).

Using a pre-designed data collection tool, raw data were extracted by hand from client records and entered into a statistics database (SPSS version 13). The data were examined initially to establish the following:

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<sup>2</sup> As a consequence of the results of the initial pre- and post-OAC analysis a second analysis was conducted using 2005 data; to determine whether the trends identified one year post-OAC were sustained.

- breastfeeding rates,
- frequency and pattern of attendance and attrition of clients,
- attendance of clients for developmental assessments and immunisations,
- and referral rates to other services, for example general practitioners and the day stay centre.

Data were then analysed further using inferential statistics, as appropriate, to compare differences in performance measures, pre- and post-introduction of the OAC service.

Where significant differences were found post-OAC (2001) a second data set was extracted from 2005 clients' records, to determine whether or not the significant findings from 2001 were sustained in 2005. A further 200 patients' client health records from 2005 were accessed randomly for this purpose.

#### **4.4 Study Sample**

For the purpose of this study, a randomised sample of client records which documented contact with CCHS were accessed. The inclusion and exclusion criteria are described below.

Inclusions: All families with infants aged 0-18 months who attended the urban CCHS clinics of the regional health care service where the study was conducted.

Exclusions: Clients being visited in their homes and/or clients who lived within the rural areas of the regional CCHS.

##### **4.4.1 Rationale for sample selection**

The objective of this documentary analysis was to identify and compare differences in key performance indicators specific to child health surveillance. Therefore, only those client records which documented specific care in this area were selected. A random sample of 200 clients' records was retrieved from the whole year (1999) prior to the year in which the OAC was implemented (2000). No data were collected from the year 2000 because this was a transition period during which the traditional service and the OAC overlapped. 200 clients' records were selected randomly from the first whole year following the establishment of the

OAC (2001) and a further 200 records were sampled from the year 2005 – five years after the OAC was established.

The randomisation process involved extracting a complete list of all client unit record (UR) numbers, by the medical records department for each of the relevant years (1999, 2001 and 2005). Each UR was allocated a number and a random numbers operation within Microsoft Excel provided a random numbers sequence and these randomly selected client health records were subsequently retrieved by the researcher. If it was found once the client health record was retrieved that the client lived in a rural part of the district or was being home visited then the client health record was returned to medical records and another retrieved, therefore limiting all data to those clients seen in the urban CCHS clinics.

#### **4.4.2 Sample size**

Power analysis was used to determine the sample size within this documentary analysis. The procedure of power analysis enables the delimitation of the sample size required in the study population, and also determines the power of a statistical test (Polit & Hungler, 1991).

Because no previous relevant data were available it was necessary to estimate a sample size based on whether the expected effect would be small, medium or large (Cohen, 1977). The convention developed by Cohen (1977) was applied which acknowledges alpha ( $\alpha$ ) values that relate to the significance levels or the accepted error rate of the statistical analysis.

Levels for  $\alpha$  are usually set at 0.05 or 0.01. This level is the probability of a type I error, for example an  $\alpha$  level of 0.05 indicates there is a 5% chance a true null hypothesis would be incorrectly rejected (Polit et al., 2005). The majority of nursing studies cannot expect large effect sizes (0.5 or greater), with the majority of studies found to be in the range of small to medium effect size (0.2 to 0.4) (Cohen, 1977; Polit & Hungler, 1991).

Subsequently, for this study an  $\alpha$  value of 0.05, with a small to medium estimated effect size of 0.30, determined an estimated sample size of  $n = 174 \times 2$  (348), which was rounded up to 400. Therefore, a total of 200 pre-OAC and 200 (x2) post-OAC client records were retrieved and analysed.

## **4.5 Data analysis**

The data analysis conducted in this phase utilised descriptive statistics to describe the sample characteristics, and inferential statistics were used to analyse differences between the pre-OAC and post-OAC samples. Non-parametric tests were used to analyse categorical and ordinal variables and parametric tests were used to analyse normally distributed scale data.

### **4.5.1 Significance**

For the purpose of this study, the statistical significance was set at  $p < 0.05$ . The purpose of the statistical significance test was to decide how big a difference would have to be found between the total population and the study sample to reject 'beyond reasonable doubt' the probability of the differences found being caused by chance alone (Bamberger, Rugh & Mabry, 2006). The normal convention is to state that the null hypothesis will be rejected if there is a less than 5% probability of the difference occurring by chance (Bamberger et al., 2006), therefore this study set the significance level at 0.05 (or 95%) consistent with this convention.

## **4.6 Ethical considerations**

The specific ethical consideration for the first phase of the research study was regarding the accessing of client health records. The National Health and Medical Research Council (2007) state that a Human Research Ethics Committee (HREC) can grant the waiver of client consent to access their health record when involvement in the research is no more than low risk, the benefits of the research justify any risk of harm associated with not seeking consent and whereby it is impracticable to obtain consent, due to the age of the records and access to client contact details. This waiver to obtain client consent was approved for this phase of the study and was justified based upon the before-mentioned principles.

Client confidentiality was maintained throughout this phase through the use of numerical data only, and the subsequent omission of clients' personal details within the content of the thesis.

## 4.7 Study Results

The following section will outline the key findings from phase one, including demographic findings, service usage and referrals, infant nutrition and development, safe sleeping practice and parental supports and services.

### 4.7.1 Demographic information

Demographic data from the sample (table 4.1) indicate that both pre- and post-OAC samples are similar. However, a significant difference was noted in the post-OAC group in attendance by families receiving unemployment benefits. Both pre- and post-OAC, families accessing the clinic were primarily of Australian or New Zealand descent (94.5% overall) and very few indigenous families accessed the service (n = 6; 0.02%). Maternal education level was rarely documented in the pre-OAC group (n = 2; 1%).

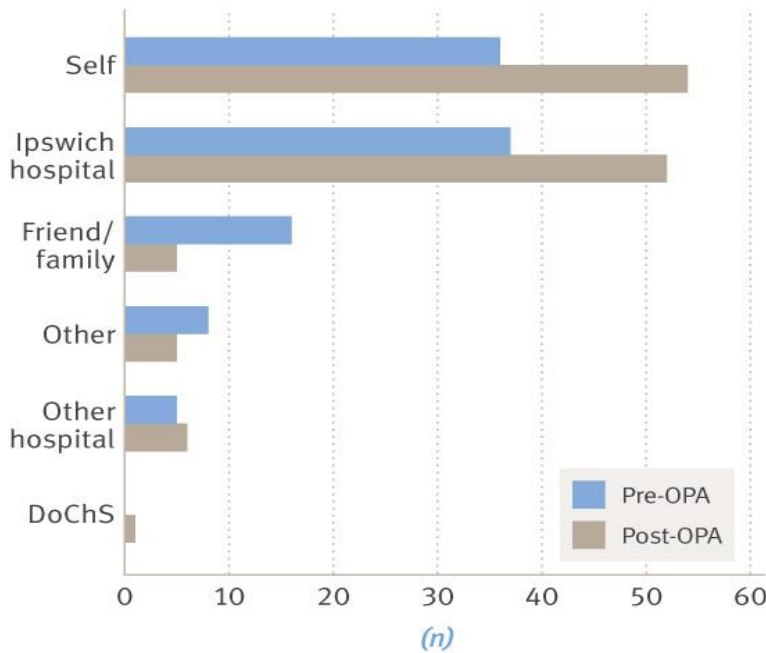
Table 4.1 Demographic information (ns = not significant)

		Pre-OPA: 1999	Post-OPA: 2001	Total (n)	Significance (p)
<i>Maternal age</i>		33.12 (SD 16.81) (n = 199)	31.88 (SD 16.31) (n = 200)	399	ns
<i>Documentation of maternal education level</i>	Yes	n = 2	n = 123	125	< 0.001
	No	n = 198	n = 77	n = 275	
<i>Ethnicity</i>	Australian	n = 192	n = 186	400	ns
	New Zealand	n = 3	n = 5		
	Other	n = 5	n = 9		
<i>Indigenous family attendance</i>		n = 3	n = 3	6	ns
<i>Families receiving unemployment benefits</i>	Yes	n = 45	n = 76	121	0.003
	No	n = 155	n = 124		

### 4.7.2 Referrals to the child health clinic

Primarily, families were referred from the Ipswich hospital (by maternity staff or a visiting child health nurse) or self-referred (see figure 4.1). There was no significant difference in referral source between the two models of care. Many client health records had data missing concerning the referral source (n = 175, 43.7%).

Figure 4.1 Referral source

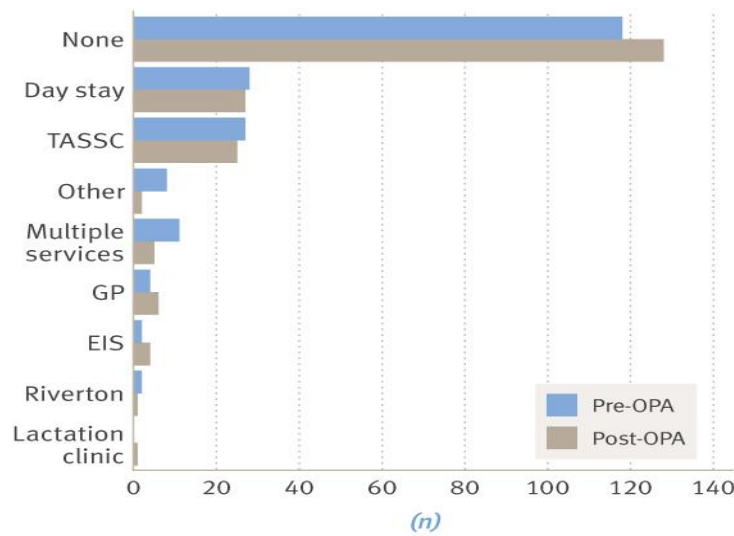


### 4.7.3 Referrals from the child health clinic

Families were sometimes referred to services beyond the standard child

health service (see figure 4.2). There was no significant difference in rates of referral to other services between the two models of care. Across the whole sample, over half of the families were not referred to another service (n = 246; 61.5%).

Figure 4.2 Referrals made by child health to other support services



(Note 'Other' referral option refers to the enuresis clinic, Alcohol Tobacco and Other Drugs Service (ATODS), paediatrician, or the Positive Parenting Programme).

#### 4.7.4 Patterns of attendance

The mean number of visits per person over an eighteen month attendance period was 10.05 visits in the pre-OAC model and 8.9 visits in the OAC model. There was no statistically significant difference between the two models of care on number of visits to the clinic. However, there was a statistically significant difference in the duration of contact (the length of time between the first and last visit) between the two models ( $p = 0.017$ ,  $t = 5.73$ ,  $df = 1$ ). Families who accessed the pre-OAC clinic continued to access the service for a statistically longer period of time (41.91 weeks, SD 24.9) than those who attended the OAC clinic (34.93 weeks, SD 23.6). Furthermore, more families accessed the service for the full eighteen months in the pre-OAC clinic ( $n = 44$ ; 22%) model than in the OAC clinic ( $n = 26$ ; 13%) ( $p = 0.004$ ,  $t = 2.87$ ,  $df = 397$ ).

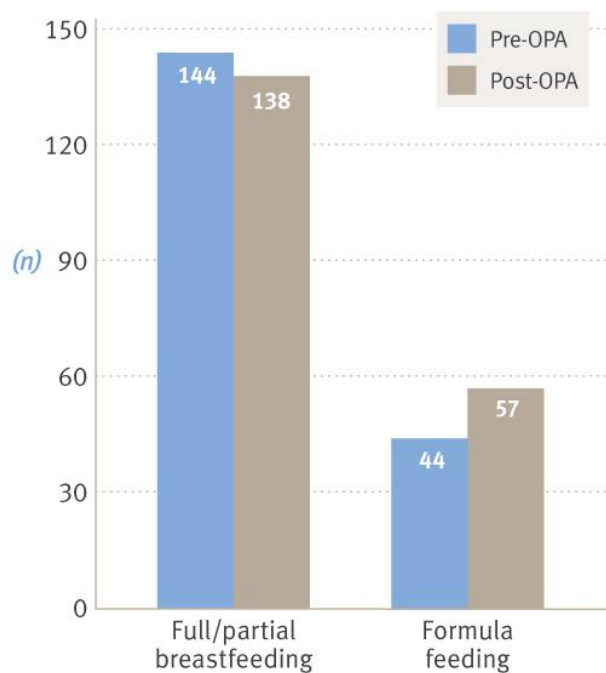
Across both pre- and post-OAC samples, very few families who accessed the service were being monitored for suspected child abuse or neglect by the Department of Child Safety ( $n = 5$ ; 1.25%). There was no significant difference between the individual appointment model (pre-OAC) and OAC model in rates of contact with child protective services. Statistically, across both pre- and post-OAC samples, women with a diagnosis of PND ( $n = 32$ ; 8%, mean 13.06

visits, SD 8.1) accessed the clinic more frequently than those without a diagnosis of PND (n = 367; 92%, mean 9.16 visits, SD 0.3) ( $p = 0.012$ ,  $t = 2.65$ ,  $df = 34.61$ ).

#### 4.7.5 Infant nutrition

Across both pre- and post-OAC samples, most women who accessed the service were either exclusively or partially breastfeeding on their initial consultation with child health (n = 282; 70.5%), as shown in figure 4.3. There was no significance difference between the two groups (pre-OAC n = 144, 72%; post-OAC n = 138, 69%). The number of women who breastfed for the recommended period of at least twelve months was identical in both the pre- and post-OAC groups (n = 111, 55.5%).

Figure 4.3 Infant feeding method on initial consultation



Across both pre- and post-OAC groups, most families (n = 218, 54.5%) introduced solids between the age of four to six months<sup>3</sup>. There was no statistically significant difference

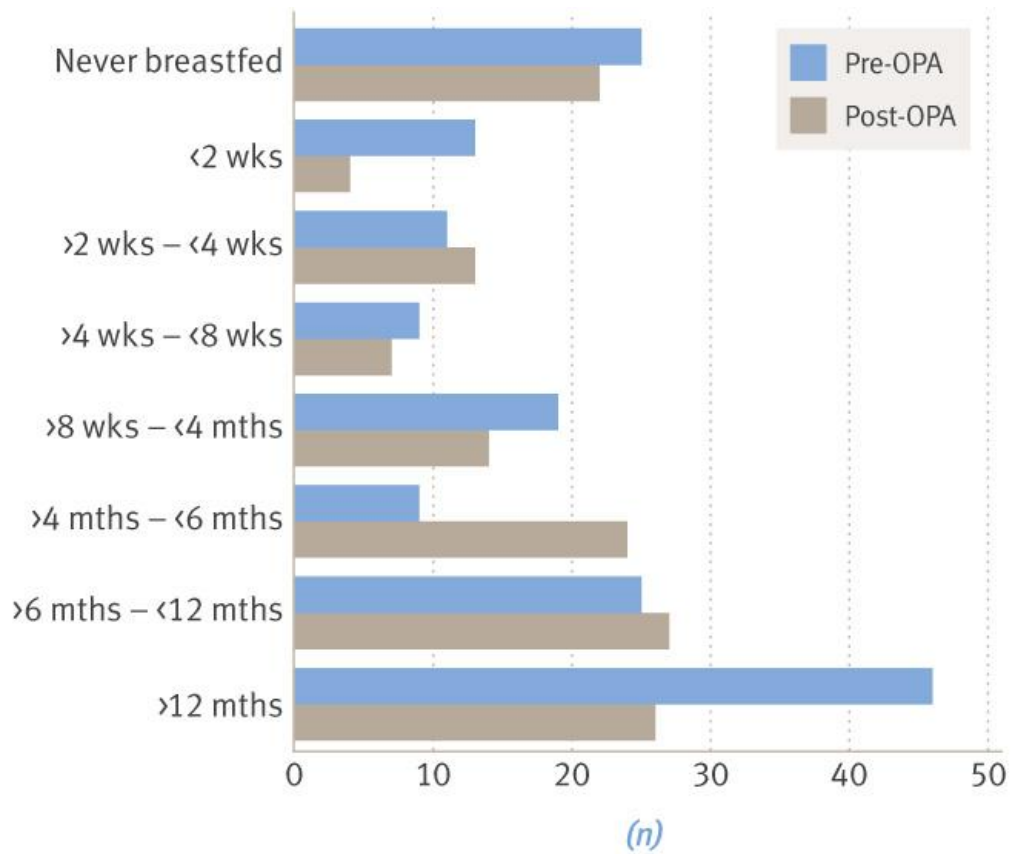
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<sup>3</sup> Although this has since changed, it was the recommended age of introduction of solids during the data sampling periods (WHO, 2001)



between the two models of care with respect to the age of introduction of solids. Rice cereal was the food most frequently introduced first.

Figure 4.4 Age of baby when weaned from breastfeeding



#### 4.7.6 Infant development

Data were analysed to determine the rates of family attendance at routine developmental assessments at specific ages. As seen in table 4.2, significantly fewer children were formally assessed in the post-OAC group at the six to eight week, six month, twelve month, and eighteen month assessments. Across both pre- and post-OAC groups (that is the whole sample) plagiocephaly was very rarely discussed (n = 15, 3.75%).

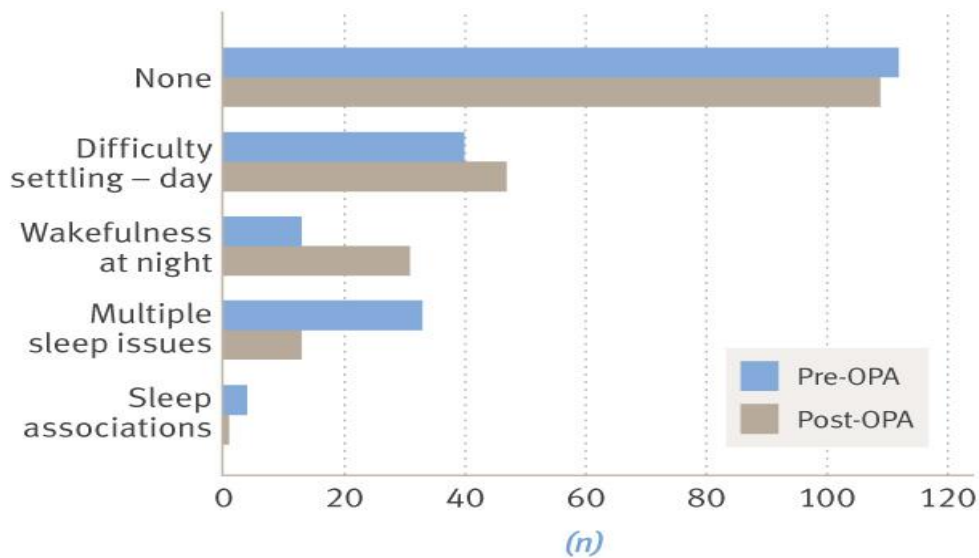
Table 4.2 Developmental assessment attendance

Developmental screen	Attendance pre-OPA (n)	Attendance post-OPA (n)	Total (n)	Significance
<i>0–4 weeks</i>	168	169	337	ns
<i>6–8 weeks</i>	94	121	215	$p < 0.001$ , $df = 2$
<i>4 months</i>	119	114	233	ns
<i>6 months</i>	126	102	228	$p = 0.013$ , $df = 1$
<i>12 months</i>	105	68	173	$p < 0.001$ , $df = 1$
<i>18 months</i>	69	40	109	$p = 0.001$ , $df = 1$

#### 4.7.7 Sleep and settling

As shown in figure 4.5, a variety of sleep issues were discussed across both pre- and post-OAC groups. The most commonly occurring problem was difficulty settling the child during the daytime. Regarding sleep and settling, there were no statistically significant differences between the two groups. However, it was rarely documented in either the pre-OAC group ( $n = 16$ ; 8%) or the post-OAC group ( $n = 6$ ; 3%) that SIDS and its prevention was discussed. It was documented as being discussed more frequently in the pre-OAC group and this difference between the two groups was statistically significant ( $p = 0.027$ ,  $t = 4.91$ ,  $df = 1$ ).

Figure 4.5 Discussion of sleep and settling issues



#### 4.7.8 Immunisation status

Across both pre- and post-OAC groups most infants accessing the services were immunised (n = 320, 80%). There was no statistical difference between the two models of care in the number of children immunised (n = 519; 86.5% (total); n = 2; 3% (not immunised); n = 79; 13.1% (missing data)).

#### 4.7.9 Parenting group attendance and support networks

It was documented rarely that a family was either referred to, encouraged to attend, or was attending a parenting group. Although there was no statistically significant difference between the pre- and post-OAC groups, across both groups most client health records had no documentation of attendance at or reference to a group parenting programme (n = 378; 94.5%).

Across both the pre- and post-OAC groups over half the client health records (n = 217; 54.2%) contained no documentation at all regarding the involvement of support networks to the family. There was no statistically significant difference between the pre- and post-OAC groups. The most common support network identified across both groups was the partner (n = 98; 24.5%).

#### **4.7.10 Postnatal depression**

Women were screened statistically significantly more often for PND using the Edinburgh Postnatal Depression Scale in the post-OAC group (n = 67; 33.5%) than in the pre-OAC group (n = 5; 2.5%) ( $p < 0.001$ ,  $t = 65.1$ ,  $df = 1$ ). However, although more women were screened for PND in the post-OAC group, there was no statistically significant difference between the two groups in the number of women who were identified as having PND. The PND diagnosis rate was 7% in the pre-OAC group and 9% in the post-OAC group.

### **4.8 2005 comparative data**

After the initial pre- and post-OAC comparison (years 1999 and 2001), significant differences between the two models of care were identified in the following areas:

- Length of contact with the service
- Breastfeeding duration
- Developmental assessment attendance
- Discussion of plagiocephaly
- Discussion of SIDS and prevention strategies
- Screening for PND using the Edinburgh Postnatal Depression Scale

Therefore, a second data set was extracted from the year 2005 to determine whether or not these differences were still current.

#### **4.8.1 Length of contact with the service**

A statistically significant increase was noted in the number of clients (n = 40; 20%;  $p = 0.048$ ) accessing the service for the full eighteen months in the 2005 group compared to the immediate post-OAC group (2001).

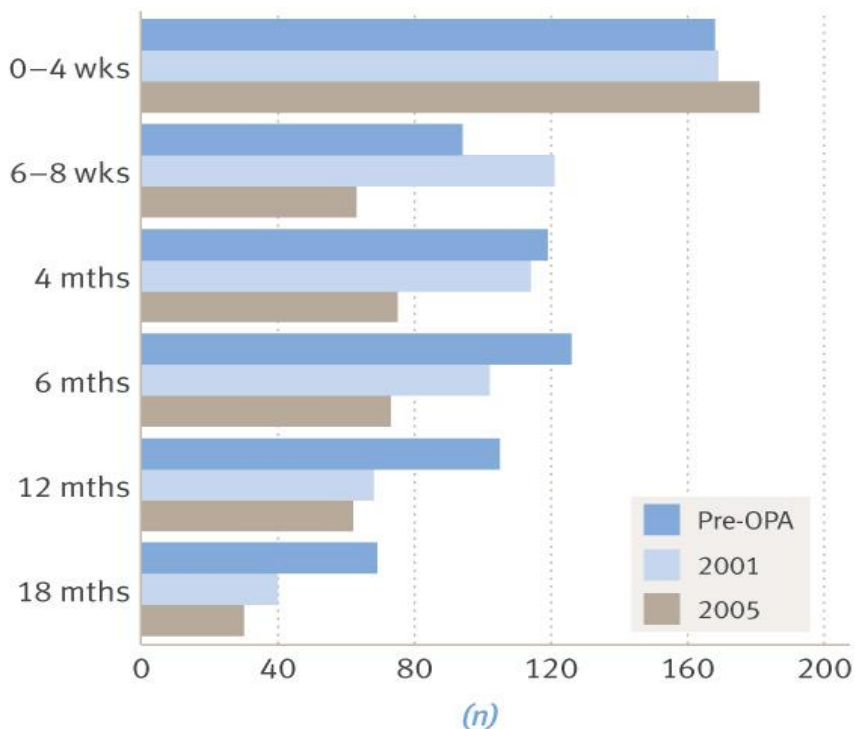
### 4.8.2 Breastfeeding duration

Whilst breastfeeding rates were similar between all three data sets, there was a statistically significant increase in the number of women breastfeeding for more than twelve months in the 2005 group ( $n = 65, 32.5\%; p < 0.001$ ).

### 4.8.3 Developmental assessment attendance

As can be seen in figure 4.6, although slightly fewer women attended for the initial 0-four week screen in the pre-OAC group (1999) than in the immediate post-OAC group (2001) and the second post-OAC group (2005) there is a clear downward trend in attendance for all other developmental assessments in both post-OAC groups.

Figure 4.6 Developmental assessment attendance



#### 4.8.4 Plagiocephaly

In the 2005 group, a statistically significant increase in the discussion and documentation of plagiocephaly occurred in comparison with the pre- and immediate post-OAC groups ( $p < 0.001$ ). In the 2005 group, plagiocephaly was discussed 133 times (66.5%), compared to 5 times (2.5%) in the 2001 group and 10 times (5%) in the 1999 group.

#### 4.8.5 Sudden infant death syndrome

Statistically, the documentation of preventative strategies for SIDS was significantly better in the 2005 group ( $n = 164$ ; 82%) in comparison with the 2001 ( $n = 6$ ; 3%) and 1999 ( $n = 16$ ; 8%) groups ( $p < 0.001$ ).

#### 4.8.6 Screening for postnatal depression using the Edinburgh Postnatal Depression Scale

The pattern of screening for PND using the Edinburgh Postnatal Depression Scale was sustained between the 2001 and 2005 groups. Diagnosis rates of PND were similar across all three groups (see table 4.3), ranging from 6.5% in 2005, 7% in 1999, to 9% in 2001, with an average rate across all three groups of 7.5%.

Table 4.3 Diagnosis of postnatal depression

		Pre- or Post-OPA			Total
		Pre-OPA 1999 (n)	Post-OPA 2001 (n)	Post-OPA 2005 (n)	
PND diagnosis	Yes	14	18	13	45
	No	186	182	187	555
Total		200	200	200	600

## **4.9 Discussion**

The following section will detail the various key findings from the documentary analysis and discuss them in the context of the wider literature. The broad areas for discussion include: cohort demographics; referrals; patterns of attendance; infant nutrition; infant development; infant sleep, settling and safe sleeping; support networks and group participation; and, postnatal depression.

### **4.9.1 Demographics**

Many demographic characteristics were consistent between the pre-OAC and the post-OAC groups. Most families accessing the service were of Australian or New Zealand descent. Across both groups very few families, who identified themselves as indigenous, accessed the service. This pattern, although not included in the results section, continued in the 2005 group. This is consistent with research that affirms that women who identify as indigenous are less likely to access health services during the childbearing period and thereafter (SIGNAL, 2001). This may be due to various reasons, including difficulty in accessing the service, or cultural boundaries. Also important to consider, is that there is an indigenous-specific health service in the district that provides a child health service, which may explain why only small numbers of indigenous families accessed the state government health service.

Indigenous children have lower immunisation rates and a higher rate of failure to thrive and nutritional deficits compared with non-indigenous children (Queensland Public Health Forum, 2002). Therefore, it is essential to review practices and provide effective health services to this population. Recently, Queensland Health has recognised the limited effectiveness of health services in improving health outcomes of indigenous peoples, and indigenous advanced health workers have been appointed to strengthen links between indigenous communities and government health services.

There was a statistically significantly higher number of families who were receiving unemployment benefits who accessed the OAC model in comparison to the individual appointment approach. The exact cause of this increase was unknown. However, some suggested reasons may be a possible preference for a more unstructured method of client consultation or as appointments were not required in the OAC, the service had a less formal atmosphere. This increase is encouraging as low socio-economic status is a determinant of

poorer health outcomes (Hertzman & Wiens, 1996; Hyde, Jakub, Melchoir, Van Oort, & Weyers, 2006). There was a small decrease in the number of clients (who were receiving unemployment benefits) accessing the service in the 2005 group (n = 55; 27.5%), presumably due to the introduction of the Family CARE programme in 2001, which provided for many people from low-socioeconomic backgrounds to be seen via the home visiting service.

Families accessing the service had a variety of educational levels but many of the client health records did not document the maternal educational level. It is unknown why this was not recorded, although one possible reason is the child health nurse's perception of the relevance of this question to providing child health, and the large volume of information gathered in the initial registration process. The data that was collected indicated that those accessing the service were well educated, with the majority having completed secondary school or tertiary study. There was no significant difference in this area between the two models of care. The prospective cohort study (phase three) will investigate further detail regarding the OAC's population educational levels.

## **4.9.2 Referrals**

### **4.9.2.1 Referrals to the child health clinic**

Primarily, families were referred from the Ipswich hospital (staff or visiting child health nurse) or self-referred. A significant amount of data were missing from the client health records outlining referral source (n = 175; 43.7%). During the initial appointment with the nurse, a large amount of data was collected, which may be considered as onerous by many nurses. This may explain why some information was infrequently recorded. However, it would be useful to have a thorough understanding of how families find out about the service for marketing and promotion of services.

### **4.9.2.2 Referrals by the child health clinic**

Families were referred to various services for other healthcare and support services. No statistically significant difference existed between referral rates between the pre-OAC with the post-OAC. Significantly, 61 (15.25%) infants were referred to the Therapy and Support Service (allied health team), for developmental delays or concerns. This identifies a need for



developmental assessment and surveillance of this population. This is consistent with Oberklaid's (2000) finding that an estimated 10-20% of children experience developmental or behavioural problems which are significant enough to interfere with their daily functioning. Likewise, in their study, Williams and Holmes (2004) reported that nearly a third of children referred to paediatricians in Australia have problems that relate to developmental and behavioural problems. However, it has also been noted that despite an apparently comprehensive child health nursing service, delayed detection of children's subtle developmental problems persists in Australia (Hart, Brinkman, & Blackmore, 2003). The analysis of undetected developmental delay was beyond the scope of this study. Yet, early intervention through routine developmental assessments is occurring through the OAC model, and frequency of this surveillance is discussed below.

Our results indicate that clients are most commonly referred to the Day Stay Centre for sleep and settling concerns or infant feeding challenges, and the Therapy and Support Service for Children, for developmental concerns. However, between the two models of care there was no statistically significant difference in referral rates, indicating the method of client consultation did not impact on referral rates or referral choices.

#### **4.9.3 *Patterns of attendance***

The mean number of visits in the pre-OAC model was 10.05 compared to 8.9 visits in the OAC model. There was no statistically significant difference between the two models of care on number of visits to the clinic. However, while not statistically significant, this did represent an average reduction of 1.15 visits per client, which over a year represents a significant workload reduction. Traditionally, individual appointments are half hour duration and there are resource management implications for this difference. Overall, the OAC demonstrated similar family healthcare performance measures (for example, with breastfeeding rates and duration) to the individual appointment model, however in a more time efficient manner. Anecdotal evidence also suggests that often during booked appointments clients do not attend, thus effecting the time allocation and management of the individual child health nurse. This is significant in the current resource conscious (financial and human) Queensland health environment.

There was a statistically significant difference in the duration of contact (the length of time between the first and last visit) between the two models. Families who were offered the pre-OAC model accessed the service for a statistically longer period of time than those seen via the OAC model. Consistent with this, more families accessed the service for the full eighteen months in the pre-OAC model than in the OAC model. This may be due to the child health nurse led appointment scheduling of the individual appointments, where the next appointment was booked by the mother on completion of the previous appointment, as advised by the nurse. The OAC is more informal and the families choose when to attend, and this may account for the decreased length of contact with the service. Interestingly, the decreased length of contact with the service did not affect clients' health behaviours such as breastfeeding duration or immunisation status, which are significant health indicators. Furthermore, it is arguable that the OAC model promotes greater independence in maternal decision-making, and as a consequence more mothers chose selectively whether to attend or not. In this context, it should not be assumed that infants are being deprived of child health care services. It may be that mothers are accessing services elsewhere. Phase three of the research programme provides some information to clarify this area.

#### **4.9.4 Infant nutrition**

Most women accessing the service were breastfeeding on their initial consultation with child health. There was no significant difference in breastfeeding rates or duration between the two models of care. This is important because the promotion and support of breastfeeding is core business to CCHS and the improved healthcare performance measures associated with exclusive breastfeeding are significant (Hector, Webb, & Lymer, 2004).

There were the same number of women breastfeeding for at least twelve months between both models of care ( $n = 111, 55\%$ ), which indicates that the service delivery model does not influence the rates or duration of breastfeeding. However, there was a statistically significant increase in the number of women breastfeeding for a duration of more than twelve months in the 2005 group ( $n = 65, 32.5\% p < 0.001$ ). This may be due to multiple reasons, one of which is the increase in breastfeeding support services that operate alongside the OAC. The National Health and Medical Research Council (2003) recommendation is for all babies to be breastfed for twelve months or longer.

Most families (54.5%) introduced solids between the ages of four-six months. (This was the recommended age of introduction at this time between the years of 1999-2001; the period relating to the data collection.) There was no statistically significant difference between the ages of introduction of solids between both models of care. The current recommendation is for the introduction of solid foods at around six months (National Health and Medical Research Council, 2003). Therefore, further research into this area would be useful, to assess current adherence by parents to the new recommendations and factors that influence their decision to introduce solid foods. This aspect of child health care is also further investigated in the prospective cohort study (phase three).

#### **4.9.5 Infant development**

Regular infant developmental surveillance is offered through Child Health Services. Currently there is insufficient evidence to make clear recommendations for or against routine developmental screening (Child and Youth Health Intergovernmental Partnership for NHMRC, 2003). It is also unclear at what ages these assessments should occur. Currently, routine developmental assessments are recommended in conjunction with immunisation times, according to the Personal Health Record (Queensland Health, 2009). Parents are responsible for attending to these assessments. From the initial visit through to the four month developmental assessment, the rates of attendance were statistically similar between both groups, and were statistically better at the six-eight week assessment in the 2001 OAC group, although this was not sustained in 2005.

From the six month assessment through to the eighteen month assessment significantly fewer infants had documentation of developmental assessment attendance in the OAC group, compared to the pre-OAC group. However, during 2001 (the first operational year of the OAC) developmental assessments remained an appointment based service, while all other consultations were attended via the OAC. The 2005 data indicated that this decrease had been sustained despite the introduction of an OAC-style developmental assessment clinic running alongside the immunisation clinic. A possible explanation for the lower rate of the formal developmental assessments being attended may be the increased autonomy of parents. Some parents may have believed that they did not need to attend to a developmental assessment if a scheduled appointment was required or if no concerns were evident. Also, some parents may have chosen to access other services for developmental assessments,

such as their family general practitioner. Furthermore, it is possible that developmental assessments were not documented, as some child health nurses in the clinic may do a holistic assessment of the infant (including assessing their development) without completing a formal assessment tool. It was not known why there had been a significant change; however this was investigated further in phase three of the research programme.

#### **4.9.6 *Infant sleep, settling, and safe sleeping***

There was a variety of sleep issues discussed between both groups of families accessing the service. There was no statistically significant difference between pre- and post-OAC in the frequency or types of sleep and settling issues discussed. Between the first two groups, discussion of SIDS and its prevention, was rarely documented ( $n = 22$ ; 5.5%), however it was higher in the pre-OAC group. In the 2005 data, a statistically significant increase was noted in the documentation of preventative strategies for SIDS by the child health nurses ( $n = 164$ ; 82%,  $p < 0.001$ ). This may be explained due to the fact that in 2004 the discussion of preventative measures for SIDS was added to the clinical pathway, and may have both increased nurses' awareness of the need to discuss this subject with parents and may also have served as a reminder to document the discussion.

Queensland's mortality rates remain relatively high when compared with other states, and current evidence suggests that some health professionals are not fully aware of the risks and preventive measures for SIDS and these may not be transferred through to parents, resulting in some unsafe infant sleeping practices (Young, Battistutta, & O'Rourke, 2002; Young, Schluter, & Francis, 2002).

#### **4.9.7 *Support networks and group participation***

Over half the client health records in both the pre- and post-OAC samples had no documentation at all regarding the involvement of support networks to the family or referral to group or support programmes. Although this may have been discussed informally (and not noted) by the child health nurse this cannot be assumed as there was no documentation of this in the client record. Without documentation, it is not clear what has been discussed or why. It is essential that nurses make inquiry and assessment into this area, due to the

increase in stress associated with the transition to parenting; a time when stressors are known to be high (Goldfeld, Wright, & Oberklaid, 2003). This could also be a factor in the future when a client may allege that they were not provided with key information about their health care, when in fact they had been. Lack of documentation makes it difficult to provide evidence in the event of litigation.

#### **4.9.8 Postnatal depression**

Women were assessed more often in the OAC model than in the pre-OAC model for PND using the Edinburgh Postnatal Depression Scale. This finding was statistically significant. This may be due to increased awareness of PND and/or increased child health nurse confidence in using the Edinburgh Postnatal Depression Scale. Training was conducted with staff in the two years between the introduction of the OAC and individual appointments, and may explain the increased use of the tool. Yet, whilst women were assessed more frequently for PND, the rates for PND were similar between both groups. This higher assessment rate identified in the post-OAC group, using the Edinburgh Postnatal Depression Scale, was sustained in the 2005 group.

#### **4.10 Conclusions**

Health indicators, such as breastfeeding duration and referral rates, assessed and compared throughout this documentary analysis demonstrate very similar performance measures between the two models of care. Considering the current economic environment in which nursing practice exists, it is promising that the OAC model is competitively comparable with the traditional individual appointment model. As anticipated, the data from 2005, after the OAC had been operational for four years, demonstrated that current practice has improved from that baseline, especially in the area of SIDS preventative care and duration of breastfeeding.

While this study provides useful information regarding the performance of the OAC in meeting key performance indicators, it does not enquire into the satisfaction or experience of the service from those working in and accessing it. Therefore, the second phase of the research programme was designed to explore this dimension further. Additionally, phase three of the

programme was designed to enquire further into the trends discovered in phase one that were unable to be explained by the data, such as developmental assessment attendance.

#### **4.11 Recommendations for practice**

As a result of the findings from this phase, there are significant implications for practice improvement. In some areas of health care, data collected, such as maternal support networks, were not documented in the client health records. This area has both legal and practice implications. Lack of documentation makes litigation a key concern, and does not provide the information that may be required. An analysis of the current clinical pathways may provide the route through which documentation is made simpler and more thorough by the staff. Other areas where there has been a decrease in compliance (such as the developmental assessments) was further investigated in the prospective cohort study (phase three). Interviews with clients and child health nurses also provide richer information as to how they experience the service delivery model (phase two).

#### **4.12 Impact on key performance indicators**

Implications from the study in relation to key performance indicators include:

- Baseline data to compare future healthcare performance indicators to, assessing the effectiveness of the service in meeting Queensland Health policy directives.
- Recognised need for quality improvement in methods of data collection as evidenced by missing data in client health records.
- Provision of evidence to guide practice to modify and improve child health services, where necessary.
- Sudden Infant Death Syndrome documentation has improved in the 2005 group. However, while 82% of the client health records in this group had documentation, the target is 100% and thus a gap remains. Strategies to address this include random client health record audits and information regarding this process fed back at team meetings and electronically via email. Continuous improvement of documentation templates and clinical pathways will also occur.

- Similarly, the lack of documentation of other information (such as maternal education level), could be addressed through conduction of random audits. This would be an anonymous process and could be fed back to staff through the above processes.
- The developmental assessments noticed a significant decrease in the OAC and 2005 group. This will not be addressed immediately as more detailed information is required regarding where families are accessing their assessments (for example, via a general practitioner or pharmacy). Therefore this trend may not be due to the changed method of service delivery, but rather that clients are choosing to access services elsewhere. The prospective cohort study will provide further information in this area.

The key findings from phase one of the OAC evaluation indicate that the open access model is competitively comparable with the traditional individual appointment model. Health indicators such as breastfeeding duration and referral rates, demonstrate very similar performance measures between the two models of care.

## Chapter Five

### Phenomenological inquiry into the Open Access Clinic (phase two)



## **5.1 Introduction**

This chapter will detail the second phase in the overall study which investigated the Open Access Clinic (OAC) according to those directly involved with it. The research question and purpose of this phase will be outlined; phenomenological inquiry will be explored, with a specific focus on North American phenomenology; and the research methods detailed. Then, the key themes and study findings will be discussed and conclusions and recommendations for practice will complete the chapter.

## **5.2 Research Objectives**

In this second phase of the overall project, the research objectives were:

- *To understand what the OAC means to those involved with it*
- *To gain insight into the everyday experience of the OAC*

In order to address these research objectives a qualitative, phenomenological approach was taken.

## **5.3 Research Methodology**

As the primary research objectives were related to the human, subjective experience of the OAC a qualitative approach was most appropriate.

### **5.3.1 Qualitative Research**

Qualitative research is based on the belief that knowledge is socially constructed (Holloway & Wheeler, 2002). This type of investigation emphasises *understanding* the human experience as it is lived, usually through the collection of subjective data (Polit & Beck, 2006). Qualitative research adopts a holistic and person-centred approach and the subjective data gathered provides a rich knowledge and insight into human beings (Holloway & Wheeler, 2002). This method of research focuses on human beings within their social and cultural context, and examines phenomena such as perceptions, actions and emotions (Grbich, 1999). It is based in the interpretive paradigm.

Considering the research objectives as outlined earlier, the most appropriate way to investigate these was via a qualitative methodology. This was due to the subjective nature of the data, which were the participants' everyday personal experiences of the OAC. A qualitative framework provided this phase with the underlying foundation that meaning is grounded in experience. In contrast, a quantitative approach would not be as effective, as it is aligned with a positivist paradigm, thus not valuing the participants' experiences in the sense that there may be multiple realities emerge, making these difficult to quantify and measure. Furthermore, within qualitative inquiry there are multiple road maps, which can be followed to address the research objective. These are known as methodologies, and for the purpose of this phase, an interpretive phenomenological methodology, informed by the North American approach has been chosen.

## **5.4 Phenomenology**

Phenomenology is a both a philosophy and research methodology. It explores the meaning of individuals' lived experience, through their descriptions of those experiences (Holloway & Wheeler, 2002). In recent years, phenomenology has become a foremost approach in the development of nursing knowledge (Dowling, 2007). "The phenomenological approach can be advocated as the most appropriate for studying the richness and complexity of nursing phenomena" (Munhall, 1994, p. 284). "The epistemology of phenomenology focuses on revealing meaning rather than on arguing a point or developing abstract theory" (Flood, 2010, p.7). The epistemological question (how we know) central to phenomenology is the relationship of the person who knows and what can be known (Holloway & Wheeler, 2002). The ontological question (being) is concerned with the nature of reality and people's knowledge about it.

Phenomenology focuses on the meaning of an experience for an individual (Mozingo, Davis, Droppelman, & Merideth, 2000). It does not impose pre-conceived structure on the organisation of research data, and is considered the ideal method for obtaining the fullest possible meaning of the experience (Dinkel, 2005). It asks the question "What is the meaning of the phenomenon to those who experience it?" (Polit & Beck, 2006). This approach involves the description of an experience of the phenomena under study by the participant and the

researcher interprets that description (Annells, 1999). Study in phenomenology involves going to the things themselves, beginning with phenomena, not theories (Cohen, 1987). The concern is with individuals and their views. Also important is studying the *life-world* (Heidegger, 1962) or world of everyday lived experience: individuals are studied in their natural context, not in contrived situations, revealing meaning, rather than developing theory (Flood, 2010). The natural attitude, the everyday unreflected attitude of naïve belief, is studied with phenomenological methods.

Essentially the broad goal of phenomenology is to understand the nature of a phenomenon from the perspective of those directly experiencing it (Connelly, 2010). More specifically it involves the study of lived experience; description of experiential meanings we live, as we live them; and the search for what it means to be human (Connelly, 2010; Wojnar & Swanson, 2007). Essentially each approach within phenomenology advocates intense reflection on the phenomenon, which is the hallmark of phenomenology, to "determine the nature of things themselves" (Caelli, 2000, p.375). Therefore, as the phenomenon of interest is the OAC, the intention of this study was to explore the nature of this, according to the everyday experiences of those involved in its service and provision.

Furthermore, due to the philosophical nature of phenomenology, evolutions have occurred resulting in significantly different approaches emerging within phenomenological inquiry. Broadly, these can be categorised between two approaches: descriptive phenomenology and interpretive phenomenology, and these are discussed in further detail later in the chapter.

#### **5.4.1 Phenomenological movement**

While the term phenomenology is utilised often in the nursing literature, there remains significant confusion around the various approaches within phenomenology (Dowling, 2007). This is primarily due to the fact that phenomenology is a philosophy, within which multiple schools, phenomenologists, approaches and styles exist. In order to understand which phenomenological approach was most suited to this study, it was essential to reflect back into the history and movement of both phenomenological philosophy and subsequent methodology.

Phenomenology is not a stationary philosophy. "Indeed part of the difficulty in describing Phenomenological Movement is that the philosophy has changed considerably both across

different philosophers and within each philosopher” (Cohen, 1987, p.31). Furthermore, there are multiple paradigms which exist within phenomenology. These are: positivist (after Husserl); post-positivist (after Merleau-Ponty); interpretivist (after Heidegger); and constructivist (after Gadamer) (Dowling, 2007). Phenomenological research originated in the 20<sup>th</sup> Century during the European philosophical movement (Donalek, 2004). It has been categorised into three key phases: the Preparatory phase; the German phase; and the French phase (Munhall, 1994).

The Preparatory phase involved philosophers (specifically Brentano and Stumpf) seeking to find answers to questions that religion could not find, and discussed the notions of personal perspective and intentionality (Dinkel, 2005). These concepts centred on the interpretation of an experience by the person involved (Dinkel, 2005). Brentano (1838-1917) coined the phrase *descriptive psychology or descriptive phenomenology* (Dowling, 2007), thus providing Husserl 'intellectual motivation' to further develop the philosophy (p.132).

Heidegger (1889-1976) and Husserl (1859-1938) dominated the German phase of phenomenology. Husserl primarily focused his philosophy on the nature and origin of all knowledge (Dinkel, 2005). The key components of Husserl's approach were essences, intuiting and phenomenological reduction also known as bracketing (Crotty, 1996). At that time, Husserl challenged many dominant views, firmly found in the empirical paradigm of natural science.

Conversely Heidegger rejected many of the philosophical underpinnings and saw phenomenology as a means for a solution. Heidegger agreed with Husserl's declaration *to the things themselves* however, placed the dominant value on understanding, not pure description (Racher, 2003). Significantly Heidegger developed phenomenology into interpretive or hermeneutical methods of inquiry (Koch, 1999). This involved interpreting (not purely describing) the messages for the recipients to aid understanding, that is hermeneutics – the interpretation of meaning (Koch, 1999). Furthermore, the notion of the *hermeneutic circle* illustrates the reciprocal activity between understanding and pre-understanding (Koch, 1996). Heidegger termed the phrase *being-in-the-world* which describes the existence of human beings within a larger context where they act and live (van Manen, 1990).

The third phase was the French phase. The key philosophers during this phase were Marcel, Sartre and Merleau-Ponty. During this time, Merleau-Ponty specifically, wanted to reveal that a science of human beings was possible and that through phenomenological approaches

positivistic understanding was enhanced (Dinkel, 2005). Each of these philosophers further explored phenomenology as philosophy and this phase of the movement influenced psychology and psychiatry, as the phenomenological descriptions were used to aid in understanding patients' realities and experiences (Dinkel, 2005).

Finally, the constructivist paradigm proposes the concept of co-constitutionality, whereby interpreted meanings of the phenomenon are a blend of those articulated by the researcher and the participants which Gadamer (1976) names the 'fusion of horizons'. This horizon is the foundation for numerous assumptions, ideas and experiences which remain fluid and open to change (Flood, 2010). Therefore, it is clear that throughout the past century European phenomenology (both as a philosophy and research methodology) has been strongly influenced by the differing perspectives of significant individuals.

#### **5.4.2 *Present day phenomenological inquiry***

As a result of this philosophical movement, two primary phenomenological research methodologies have emerged: descriptive and interpretive phenomenology.

#### **5.4.3 *Descriptive phenomenology***

Descriptive phenomenology is based on the work of the German philosopher Husserl. "Husserl believed that subjective information should be important to scientists seeking to understand human motivation because human actions are influenced by what people perceive to be real" (Lopez & Willis, 2004, p.727). Husserl concentrates on experience, and emphasizes questions of knowing, 'How do we know what we know?' (Koch, 1995). An important element of pure descriptive phenomenology is the notion of bracketing (or phenomenological reduction). This process is where the researcher actively removes their consciousness of all prior knowledge, personal beliefs and biases of the phenomena under investigation (Koch, 1995; Lopez & Willis, 2004). The purpose of this process is to defend the 'objectivity' of the data against the opinions of the researcher (Koch, 1995), and allow the data to speak for itself, without interpretation by the researcher.

This very notion of bracketing was challenged by Husserl's student, Heidegger, which led to the development of interpretive phenomenology.

#### **5.4.4 Interpretive phenomenology**

Heidegger argued that the researcher inevitably brings certain background experiences into the investigation, and these cannot be ignored, put aside - bracketed (Koch, 1995).

Interpretive phenomenology is also concerned with *human experience as it is lived* (Dowling, 2007). Furthermore, Heidegger differs from Husserl in that he holds the belief that lived experience is an interpretive process, rather than just pure description (Racher & Robinson, 2003). Interpretive phenomenology asks for the nature or the meaning of the experience of the phenomenon under study (van Manen, 1990). Heidegger's approach involves the 'taken for granted' practices – common meanings, and involves the interpretation of phenomena (Koch, 1999). Human actions and interactions are meaningful and the focus is on the researcher grasping the intent of the actions and interactions, rather than describing them as the participant perceived them (Dinkel, 2005). Within the interpretive approach, a new development has occurred within the nursing literature of recent years: North American Phenomenology.

#### **5.4.5 North American phenomenology**

Due to the increasing use of phenomenology as a research method, especially in nursing, the emergence of a new approach, known as North American (or new) phenomenology has changed and adapted aspects of traditional phenomenology (Caelli, 2000). North American phenomenological questions often do not seek pre-reflective experience, but rather the focus is on the exploration and description of everyday experience (Dinkel, 2005). This is consistent with the traditional interpretive approach. North American phenomenological research does not insist on the researcher's objective scrutiny of the phenomenon and includes the researcher's subjective thoughts and interpretations of the researcher in the data collection and analysis (Dinkel, 2005). The search is for the reality of phenomena in human experience as persons engage with the phenomena. North American phenomenological analysis also focuses on describing lived experiences within the context of a participant's culture rather than searching for universal meaning, negating the need to conduct an extensive analysis of the impact culture may have had on this experience. This is in sharp contrast with traditional European phenomenology which uses interviews and subjective descriptions of phenomena in a search for objective reality (Dinkel, 2005).

There are two distinct differences between North American Phenomenology and traditional interpretive European Phenomenology. First, North American Phenomenology questions do not usually seek pre-reflective experiences, but rather include thoughts and interpretations of everyday experiences in the data collection and analysis (Caelli, 2000). Crotty (1996) criticised this lack of phenomenological reduction (bracketing), stating that without this process it is difficult to draw out true essences. Dowling (2007) suggests that the adoption of an interpretive approach, with the emphasis of reflexivity, is the solution to this dilemma, as it embraces the human science perspective of intersubjectivity methodologically as well as philosophically. Thus North American phenomenology is strongly influenced by Heideggerian interpretive phenomenology.

However, the issue of culture is considered differently between North American phenomenology and traditional interpretive European phenomenology. Husserl and Heidegger were both thoroughly critical of the influence culture may have on the examination of pure phenomena (Caelli, 2000). However, recent philosophical thinking recognises that it is impossible for individuals to think 'aculturally' (Caelli, 2000, p.371), thus analysis is focused upon describing the everyday experience of the participants within the cultural context, as opposed to gaining a universal meaning of it. This issue of how culture is considered is the key differentiating factor between traditional European (interpretive phenomenology) and the North American approach.

In the North American school of phenomenology the demonstrated focus has been on the exploration and description of every-day experience itself (Caelli, 2000). Furthermore, these descriptions are considered integral regardless of whether they are for immediate experience, or about experience that has already been pre-reflected upon and interpreted (Caelli, 2000). This is congruent with this study: to understand the everyday experience of those involved with the OAC. Unlike traditional interpretive phenomenology, this may also include the thoughts and interpretations of the experience that occurred after the immediate experience was over (Caelli, 2000). Therefore, the participants were requested to share an already interpreted experience rather than one described in its primordial form.

Traditional European phenomenology seeks to describe the universal aspects of a phenomenon as free as possible from the cultural context (Caelli, 2000). Following the recent philosophical thinking about the role of culture and the recognition that it is impossible for humans to think a-culturally, American phenomenology will very rarely ask participants to

make a determined effort to undo their habitual patterns of thought (Caelli, 2000). Therefore, this approach seeks to understand the situated meanings of the phenomena within the specific environment of the participant (Caelli, 2000). "In reasoning within the context of the worlds or cultures in which people live and have their being, this approach to phenomenology places within the reach of nursing the means to understanding the life-worlds of the people for whom nursing exists" (Caelli, 2000, p.371).

Furthermore, the North American approach allows for fuller investigation of the experience itself, not only the use of 'lived experience' as a tool to merely understand the phenomena. Therefore, such research can uncover the meaning of everyday experience from the perspectives of the people who participate. Thus, it clearly addresses the needs of a discipline such as nursing, given that a requirement of nursing is to understand the human condition, not just phenomena as such (Caelli, 2000).

As the goal of this research study was to gain a subjective understanding of the experience of involvement with the OAC (phenomenon), from the participants' directly, without the in-depth review of the impact which culture has on the phenomenon, this approach aptly provides a path to the answer.

*From a phenomenological point of view, to do research is always to question the way we experience the world, to want to know the world in which we live as human beings. And since to know the world is profoundly to be in the world in a certain way, the act of researching - questioning - theorizing is the intentional act of attaching ourselves to the world, to become more fully part of it.. (van Manen, 1990, p.5).*

Therefore this phase aimed to question, enquire and understand what the OAC meant to those who directly experienced it.

#### **5.4.6 Criticisms of North American phenomenology**

There are a number of key criticisms of North American phenomenology. The first criticism is the frequent neglect of nurse researchers to describe the justification for their choice of phenomenological research approach (Crotty, 1996). As noted above, North American Phenomenology was selected for this phase because it enabled a research approach which facilitated the development of meaning, focused upon individual's everyday experiences of the



OAC, without an in-depth exploration of the impact that culture may have had on those experiences.

Crotty (1996) is also critical of the lack of detail around how issues such as bracketing are conducted. He asserts that the subjective or situated focus of North American phenomenology eliminates phenomenological reduction entirely. This argument has been strengthened by the fact that many nursing authors in phenomenology fail to state their epistemological stance, while emphasising the subjective nature of their data and analysis (Caelli, 2000). Giorgi (2000) argues that Crotty's assertion that scientific phenomenology seeks to establish the subjective experiences of people is misplaced as when nurses are asking for the so-called subjective experiences, they are asking human subjects to describe those situations as they experienced them.

The overall aim of phenomenological research is to ask 'What is the nature of this phenomenon as essentially a human experience?' (van Manen, 1990), therefore an inquiry into human subjects' lived experience is consistent with this aim. As North American phenomenological inquiry is aligned with interpretive phenomenology, the notion of bracketing is held redundant, as the researcher cannot completely abandon their own thoughts, beliefs and practices. Rather to ensure rigour, reflexivity and reflective journaling are utilised to maintain researcher transparency. This is the approach taken within this phase and is detailed later in the chapter.

The second concern with North American phenomenology is regarding the epistemological foundation of the approach. Constructionism holds that nursing knowledge is constructed out of human engagement with objects that are already in the world, rather than meaning being discovered anew by each person (which is the subjectivist stance) (Crotty, 1996). Looking at the reality of phenomena in human experience does not automatically mean that those phenomena cannot be known and understood in subjectivist ways. "Indeed, experience shows us that it is rare for humans to challenge the status quo of the meanings already given to objects in the world" (Caelli, 2000, p.372). It can therefore, be reasonably argued that North American phenomenology, although not as precise as traditional European, does hold a constructivist epistemological stance.

Furthermore, the movement of the phenomenological *philosophy* has significantly impacted on phenomenology as a research methodology. Critics of North American phenomenology may do well to reflect on the fact that these changes to the methodology may well have

resulted from the reality that phenomenology is being used for research, not purely for philosophy (Caelli, 2000).

If a more traditional approach to phenomenological inquiry had been chosen (for example, descriptive phenomenology), there would also be criticisms to this approach. For example, descriptive phenomenology requires the process of bracketing. The technique of bracketing has been described as holding prior knowledge or belief about the phenomena under study in suspension in order to perceive it more clearly (LeVasseur, 2003). Husserl implied that this process could occur, and pre-conceptions are able to be set aside so fresh impressions could be formed of the phenomenon (LeVasseur, 2003). Salsberry (1989), observed that all knowledge of the external and internal world is mediated by conceptual frameworks. This gives rise to the question that even if we as researchers can bracket our own viewpoints, does the fact that participants do not bracket their own preconceived notions in the telling of experience, mean that our knowledge is based on a flawed understanding, already skewed from the things themselves? (LeVasseur, 2003).

Also, significant questions about the researcher's ability to participate effectively in this process have been raised, such as 'How does one put out of play one's assumptions about the phenomena under investigation?' (Paley, 2005). First, this process appears to be about objectivity (Drew, 2001). Objectivity is not a word associated with phenomenology, which is involved and subjective (Paley, 2005). Second, the notion of actually *how* a nurse brackets their presuppositions about a phenomenon is unclear (Paley, 2005). Corben (1999) also identifies that nurse researchers often briefly state that they had set aside their own judgement and preconceptions as if it was a simple and easy process. Clearly this is not an easy process. As this phase is aligned with interpretive phenomenology, bracketing is neither relevant nor required. Rather, as informed by van Manen's (1990) work in interpretive phenomenology, reflexivity was utilised to ensure the researcher's values, thoughts and beliefs were transparent.

## **5.5 Decision trail**

The decision trail within qualitative research provides the reader with an honest pathway as to how decisions were made regarding the development of meaning from the raw data. This

next section will discuss reflexivity, who I am as the researcher, and reflective journaling in the context of enhancing truth value and believability of the study.

### **5.5.1 Reflexivity**

Reflexivity relates to the degree to which the researcher has influence (either intentionally or not) over the research findings (Jootun, McGhee, & Marland, 2009). The process of reflexivity involves continuous reflection by the researcher, examining their own values; beliefs; and, presence and those of the participants which may affect the interpretation of the responses and thus data (Jootun et al., 2009; Parahoo, 2006). This process adds rigour to the qualitative research study, through reflecting on one's own self and seeking to understand the influence he or she may have on the interpretation of findings and the affect we as researchers have over each stage of the research study (Jootun et al., 2009; Primeau, 2003). It assumes the researcher will engage in a process of continuous self-appraisal and critique, and consider how their own experience has influenced interpretations and the research process (Dowling, 2006). This process of reflexivity is usually achieved through researcher transparency, that is knowing who the researcher is and keeping a reflective journal throughout the research study.

### **5.5.2 Use of the first person**

At this point is essential to provide clarity as the use of the first person writing style throughout the remainder of the chapter. In qualitative research the relationship between the researcher and the researched is close and is based on a position of equality as human beings (Grbich, 1999). This is the justification for writing, where appropriate, in the first person (Holloway & Wheeler, 2002). Furthermore, "recognising the critical nature of the observer's role and the influence of his or her subjective assessments in qualitative research make it all the more important to have readers remain aware of that role, that presence. Writing in the first person helps authors achieve those purposes" (Wolcott, 2001, p. 21). Thus, during the specific sections of the study, where it is essential for research rigour for the reader to be provided insight into the researcher's role or influence the first person writing style will be employed.

### **5.5.3 Reflexivity and reflective journaling in qualitative research**

One important way to facilitate researcher reflexivity is by keeping a reflective journal throughout the research process (Jootun et al., 2009). This journal includes a written account of my ideas, thoughts, beliefs and expectations throughout the research study. Excerpts of this journal have been included at various points throughout the discussion section in this chapter to give light to my own beliefs and thoughts during particular stages of the study. The writing of this journal aimed to assist my own self-appraisal and critique and also helped process feelings and reactions to the discussion generated during the data collection stage.

### **5.5.4 The researcher: Who am I?**

In order to understand what my relationship was with the research and its participants, I have now revealed certain aspects of myself, the researcher, which will help to enlighten the reader as to who I am as a clinician and what my own thoughts were regarding the OAC.

Firstly, I am a 30 year-old wife and mother of one beautiful baby, who is just entering toddlerhood. While I was not pregnant or parenting at the time of data collection and analysis, now upon reflection of my own experiences, many of the participants' experiences of early parenthood ring a familiar chord with me. The cracked nipples and sheer exhaustion of those early weeks are no longer a story, but a reality.

Secondly, I am a clinician. Whilst I have been completing my PhD, I have remained working predominantly as a clinical nurse within the CCHS in the district where the study was undertaken. All of the child health nurses were known to me and were my colleagues at the time of the study. I was a peer, and not in a superior position to any of the participants interviewed. I did not actively work in either of the urban OAC service centres, but rather in other aspects of the service which were not included in this study (that is the breastfeeding clinics and Family CARE home visiting service). Thus none of the clients were known to myself prior to their being interviewed. Of the other health workers interviewed regarding the OAC, only the early intervention parenting specialists and allied health professionals were known to me, with the other participants only being met after they agreed to participate.

Being a novice nurse researcher I have enjoyed being stretched in this area of health care research, a territory which appeared difficult, foreign and overwhelming to me at the conception of the project. I have developed and grown throughout this process and many of my ideas regarding the OAC, child health surveillance, parent and family health care needs and research have been challenged.

Previous to the commencement of the study I had worked in a number of OAC service centres. I found the work stimulating and rewarding, however felt that parents (mostly first-timers) were often rushed due to the sheer number of parents holding their often restless babies while I worked through this constant stream of families. At the commencement of the study, I had a positive regard for the OAC. I liked that it was popular with parents, busy and well utilised by the community. I appreciated its relative immediacy and lack of structure at times, leaving the ball in the parent's court as to access frequency and topic discussions. Throughout the focus groups and interviews I was aware of these preferences and consciously tried to be mindful of these and seek out what the participants were experiencing and their perceptions of the service. I felt a concurrent frustration at the limited availability of resources for child and family health services throughout Queensland, and the pressure on nurses in trying to meet the demand. I admired many of my nursing colleagues who genuinely cared about the quality of the OAC and the accessibility of effective community services.

My own hopes for this study were to fuel momentum for change, or at least a questioning of the status quo. Traditions in nursing run deep, and sometimes these are not questioned or challenged. It is my desire that this research study would ask more questions and strive to understand what parents want and how services can fundamentally improve the health of children.

## **5.6 Methodological data analysis**

Due to the recent emergence of the North American approach within phenomenological inquiry, very limited literature exists to guide nurse researchers in the detailed 'how to' of the approach. This is not unique to North American Phenomenology, but has also been noted in other phenomenological paradigms (Flood, 2010). This unfortunately has practical implications for nurse researchers. "Nurses are sometimes required to invent methodology

and design in order to manage unexpected events or issues on which the textbooks are silent or unhelpful and this has created a number of difficulties. Some of these nurse researchers have shown considerable insight into what they are doing and the discipline is richer for it" (Lawler, 1998, p.105).

It is important to consider here Max van Manen, a Canadian phenomenologist, who has become increasingly influential in current health care research. His approach to phenomenology is located in the Dutch school as it is a combination of descriptive and interpretive (Dowling, 2007). He uses the word description to include both hermeneutic and descriptive elements of the experience, and states his work is influenced by the "spirit of the European movements" as well as North American developments (van Manen, 1990, p.iv). Van Manen (1990) also disputes the notion of bracketing stating it is difficult to forget what we already know, as these ideas, values and beliefs will likely continue to influence our reflections. Van Manen (1990) provides some guidelines to assist in the data analysis when taking a phenomenological approach (appendix D), and these guidelines provided the framework for the data analysis in this phase of the study.

## **5.7 Research methods**

The research methods used in this study were consistent with the North American approach to phenomenology. This section will provide a summary of these specific methods, including: a discussion of the selection of participants for the study; the criteria necessary for acceptance in the study; data collection methods; data analysis methods; and ethical considerations.

### **5.7.1 Participant selection**

The aim of qualitative inquiry is *greater understanding* (Lincoln & Denzin, 2005). Therefore, there was no need for randomised selection of participants, as generalisation of the findings was not intended. Consequently, purposive sampling was used to select participants. Purposive sampling always involves participants with a first-hand experience with the phenomenon of interest (Streubert Speziale & Carpenter, 2007). This is consistent with phenomenological inquiry. Therefore, only those who had actually experienced the

phenomenon (the OAC), and were willing and able to share their experience, were invited to participate.

Various individuals were invited to participate, based on their having a significant association with the Community Child Health Service OAC. These ranged from clients accessing the service, child health nurses providing the service, and other significant health workers with whom the OAC was associated. Various recruitment strategies were used to invite individuals to participate in the study, depending on their background. During a two month participant recruitment period, various strategies were used to recruit participants based on a number of variables.

#### **5.7.1.1 Clients**

Clients currently accessing the OAC for child health surveillance were chosen as a key group to participate, as the service was designed to meet their health care needs, and they would have recent and vivid experiences of the OAC. Clients were initially approached by the child health nurse working in the OAC during a health visit, and invited to speak with myself, if they were interested in participating in the study. It is unknown how many in exact number were invited to participate, but of the 16 who agreed to take part in a focus group 12 attended. As anticipated, based on current patterns of attendance, all of the client participants were women aged between 18-40 years old with at least one child under the age of 12 months. No fathers were available for participation during the recruitment period. As the focus of the study was on the urban population accessing the OAC, clients accessing the rural OAC service centres and clients being visited in their homes were not invited to participate.

#### **5.7.1.2 Child health nurses**

The child health nurses working within the CCHS under investigation were all invited to participate, to which all agreed, providing a good representation of this group. Each nurse was registered, and held post-graduate qualifications in child, youth and family health care. The age range of the nurses was 26-70 years old, working on a full-time, part-time, or casual basis.

#### **5.7.1.3 Other health workers**

All other research participants were recruited through a written invitation, followed by a telephone call by myself the researcher. If they agreed to participate, a time which was convenient for them was arranged to conduct the interview or focus group. Each of these

health/ support worker groups was chosen as they had a significant involvement in supporting the well-being of infants and their families in the area under study.

Around 20 general practitioners were invited to participate, and only two responded and agreed. Two of the three local paediatricians agreed to take part. The general practitioners and paediatricians were all working in the local area, and were reasonably well informed regarding the OAC. A midwife focus group was arranged by the hospital clinical educator and was composed of those midwives available and willing during a set shift to participate, and represented about a third of the overall maternity unit staff. A large number of the allied health professionals team (TASSC), comprised of paediatric physiotherapists, speech therapists and occupational therapists working alongside the Child Health Service, agreed to participate in a focus group. The Child Safety Officers both worked in the local area office and had also had involvement with Community Child Health Services, as too had the local Australian Breastfeeding Association members. The three Early Intervention Parenting Specialists interviewed worked directly with the child health nurses, in the same team providing child health care, however did not work specifically in the OAC, and all agreed to participate.

The final sample comprised of 59 participants:

- Clients (four focus groups: n = 4; n = 4; n = 2; n = 2)
- Child health nurses (three focus groups: n = 7; n = 3; n = 4)
- Midwives (focus group: n = 9)
- Allied health professionals (focus group: n = 9)
- Australian Breastfeeding Association members (focus group: n = 4)
- General practitioners (interviews: n = 2)
- Paediatricians (interviews: n = 2)
- Early intervention specialists (interviews: n = 3)
- Pharmacy baby clinic nurses (interviews: n = 2)
- Department of Child Safety officers (interviews: n = 2)



### **5.7.2 Participant interviewing and data collection methods**

Consistent with the phenomenological approach (Holloway & Wheeler, 2002), the participants were asked open ended questions. The aim of these questions was to gain a rich understanding of the everyday experience of the OAC according to those who had direct involvement with it. Both focus groups and individual interviews (both telephone and face to face) were used for data collection, with the particular method dependent on, a) anticipated number of participants in a particular group, and b) the convenience of the research participant. For instance, paediatricians have a very busy schedule and arranging multiple doctors to attend one focus group would have been very difficult. Whereas, for the child health nurses a large number volunteered to participate in the study and it was timelier, for both me and the nurses, to conduct a focus group.

### **5.7.3 Individual interviews and focus groups**

Phenomenological inquiry predominantly uses individual interviews to collect data (Connelly, 2010; Ellett, Appleton, & Sloan, 2009; Spichiger, 2009). Historically phenomenological inquiry only used semi-structured interviews for data collection and focus groups were very rarely (if ever) used as it was believed to conflict with the philosophy of phenomenology. However, in more recent years focus groups have also been used in phenomenological research inquiry (Bradbury-Jones, Sambrook, & Irvine, 2009; Conneeley, 2005; McDonald & Brown, 2008), and this is due to some particular strengths focus groups bring to data collection. In this phase, the data collection method was chosen based on the convenience of the participant and number of particular research group members who were willing to participate.

Advantages of the individual interview method included in-depth, rich description by the participants of their experience, without the distraction of other participants (Holloway & Wheeler, 2002). Semi-structured interviewing was utilised, to gain the most detailed information regarding the OAC from the individual. On the other hand, focus groups use group discussion to generate a rich understanding of the participants' beliefs and experiences (Morgan, 1998). Furthermore they are designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment (Harvey-Jordan & Long, 2002).

Frequently, focus groups provide a *sharing and comparing* style of conversation (Morgan, 1998) generating rich data.

The key characteristics of focus groups include participants chosen for their knowledge and experience of the topic; prearranged questions and loose structure to the group; and discussion planned to encourage spontaneous dynamic interaction between participants to generate exploration of themes and ideas (Hollis, Openshaw, & Goble, 2002). Focus groups have a number of strengths, including the provision of an opportunity to obtain different individual perspectives in a relatively short space of time. They also give participants the opportunity to interact, reflect and react to other's opinions immediately (Harvey-Jordan & Long, 2002). For example, during the focus group it was found that one participant would raise a new idea, and then another two participants commented on that idea when previously they would not have thought of that perspective. This dynamic participant interaction was a strong attribute of the focus groups.

There is some debate in current literature, as to the use of focus groups with phenomenology (Bradbury-Jones, Sambrook, & Irvine, 2009; Webb & Kevern, 2001). This conflict however, is more concerned with Husserlian or descriptive phenomenology, which aims to collect 'uncontaminated' data (Bradbury-Jones et al., 2009, p.666). Alternatively, with interpretive phenomenology, focus groups do not stand in contradiction to its philosophy, as the researcher is not trying to arrive at a pure objective description of the phenomenon, but rather an interpreted one (Bradbury-Jones et al., 2009). There have been some limitations identified with the use of focus groups. The main criticism is that some participants may feel uncomfortable in expressing their views (especially if they differ), in front of the other participants (Harvey-Jordan & Long, 2002). This may worsen if there are particularly dominant personalities within the group (Krueger, 1998). Similarly, there is the risk of 'group think' producing censored and conformed information (Hollis et al., 2002). These disadvantages were planned for and thus limited throughout the focus groups in this study, through careful pre-planning.

## **5.8 The interview process**

The research aim was to gain understanding into the participants' everyday experience of the OAC, therefore, a lightly structured approach to questioning was used with a number of

broadly focused questions (Morgan, 1998). Questions invited participants to explore the topic and were therefore open-ended. Questions such as “tell us about a time when you have used the Open Access Clinic?” were asked. As the researcher, my role was to encourage dialogue between group participants yielding rich descriptions of their experience with the OAC. I explained my role, for example as wanting to ‘listen to all the different things you have to say’ and ‘helping to make sure that we hear from each of you.’ (Morgan, 1998). I also used reflective statements such as “You mentioned... could you tell me some more about that?” to gain deeper experiential knowledge from the participant. The group was given the freedom to pursue its own interests in relation to the OAC, and was encouraged to share their thoughts, feelings and most importantly experiences (Morgan, 1998). Coercion of the participant’s interpretation of the events did not occur, rather a process of inquiry to allow the participants to fully describe their experiences was utilised.

Deciding on group size was also an important consideration in preparing for the focus groups. The aim was for a balance between having enough people to generate a discussion and not having too many people, so that some participants felt crowded out or overwhelmed (Morgan, 1998). A group size of 6-10 usually achieves this (Hurworth, 1996; Morgan, 1998). However, whilst planning occurred to ensure each focus group consisted of this many participants due to various reasons (such as inability to attend at the last minute) the focus group sizes in the phase varied between 2-9 participants.

Furthermore, careful planning occurred to effectively moderate the focus group. Considered interest was shown to each of the participants comments and positive regard shown. I had mentally prepared myself to hear unpleasant views and withhold my own opinion (Krueger, 1998). Adequate time was also allowed to set up and disassemble the equipment required to run the group (for example, tape recorders, snacks and seating arrangement).

## **5.9 Data management**

Once the data had been collected it was managed in a methodical manner, consistent with qualitative research. This section will provide an outline of the way in which the data were managed and organised.

Each of the focus groups was dual audio-recorded. This was a safety mechanism to avoid possible loss of the data and to pick up quieter voices on the record. Each of these

recordings was then electronically downloaded into a secure file, and transcribed verbatim. The transcriptions were then printed out, analysed, returned to and checked by the participant to give an opportunity to rectify any words or comments misquoted through the interpretation of the transcription, and returned to the researcher with any comments or alterations. This process enhances the trustworthiness of the data. Some participants did not return the themed transcripts; therefore it was unknown whether there were any discrepancies. However, of those returned no inconsistencies were noted by the participants.

The data were then analysed searching for significant comments and emerging themes. Intensive engagement with the data (for example, listening to audio-recorded interviews; reading and re-reading verbatim transcripts) was performed. This process involved highlighting significant statements which were then grouped together under themes using the NVivo 7 software programme to assist in the management of the data. Concurrent to the data collection and analysis reflective journaling occurred, to ensure that all my pre-conceived beliefs and values were acknowledged and transparent.

## **5.10 Data analysis process**

For the purpose of this research project, interpretive-based data analysis was used (van Manen, 1990). This analytical process involved the extraction of key statements from the data, which were then grouped into themes which described the everyday experience of the OAC. "Phenomenological research consists of reflectively bringing into nearness that which tends to be obscure, that which tends to evade the intelligibility of our natural attitude of everyday life." (van Manen, 1990, p.32) This involved a step-by-step process of analysing the data and extracting key themes around the phenomenon under study (the OAC). The process commenced with the transcription of the data from the audiotapes, followed by reading, and re-reading of the transcripts, acquiring a feeling for them, extracting phrases or sentences that are meaningful regarding the experience of the OAC. The phrases were then transformed into sentences, resulting in a list of 'meaning' or 'significant' statements (Priest, 2002). These formulated meanings were then clustered into themes including reference back to the original protocols and noting discrepancies among or between the various clusters, being mindful not to ignore data or themes that do not easily fit into the developed themes (Polit & Beck, 2006). This then produced further reduction of the data.

Integration of the results then formed an exhaustive description of the phenomenon under study, the OAC. The final, and significant step was the returning of this description to the participants, to ascertain validity of the description according to their perception, and to revise the description, if necessary (Priest, 2002). This final step strengthened the trustworthiness of the data, and was an important process to demonstrate the importance of providing an accurate description of the phenomenon as experienced by the participants.

## **5.11 Ethical considerations**

As stated in chapter three, ethical approval was granted for the entire study. The following section will detail a number of key ethical considerations relevant to phase two. These were informed consent, issues of malpractice, non-maleficence and confidentiality.

In order to recruit research participants in phase two, a clear consent procedure was adhered to. The requirements to give consent to participate were consistent with the NHMRC guidelines (2007) that "consent should be a voluntary choice, and should be based on sufficient information and adequate understanding of both the proposed research and the implications of participation in it" (p.19).

Firstly, the parents who participated were invited to participate by the child health nurse when they attended the OAC. The child health nurse provided a brief explanation of the study and obtained verbal consent for them to meet with the researcher. If they agreed to meet with the researcher, a participant information flyer was given to them (appendix A) and written consent form (appendix C) completed. It was explained that all information collected would be de-identified through coding and all information kept confidential. Second, the child health nurses working in the OAC were invited directly by the researcher to participate via an email sent to the whole child health team. Again the information sheet was provided (appendix A), and the written consent (Appendix C) completed in the same process as with the parents. Other health workers were approached in a variety of ways, including phone calls, letters, emails and 'word-of-mouth', depending on the best means to approach them. For example, the early intervention specialists worked in the same office as the researcher were invited directly (face-to-face) whereas general practitioners were invited via a written letter.

All participants were advised that they could withdraw their consent to participate at any time however none did so throughout the project. If an individual choose not to participate or, if

they choose to withdraw from the study part way through their decision did not affect services provided to them (parents) or their employment conditions (child health nurses; early intervention specialists; midwives).

Any questions / issues raised during focus groups or individual interviews which caused participants to become distressed, would have resulted in the data collection being ceased and the interests of the participant placed before the interests of the study, however this did not occur. Specifically if this situation had occurred the focus group or interview would have been terminated and the client referred to the appropriate personnel / services. Similarly if a staff member had become distressed during the research process a referral was available to the Employee Assistance Service, which was a confidential service providing free counselling staff of the organisation where the project was conducted. This service was not required either throughout the project.

All participants were briefed as to what involvement in the study would entail, and the risks and benefits of participation. Participants were advised that they could withdraw their consent to participate at any time (however, none of the participants throughout the study choose to do so). The participants were informed that if they chose not to participate or, if they chose to withdraw from the study part way through their decision would not affect services provided to them (clients) or their employment conditions (nurses).

When interviewing health care professionals, there is the potential for malpractice issues to be disclosed. To address this, a plan was developed: if any issue was raised during the focus group or interview which reflected malpractice, it was planned that the researcher would wait until the completion of the group and speak to the individual separately or cease the group if required, take a short break and speak to the individual privately. If this was substantiated, then the clinical nurse consultant / team leader would have been notified and due process would have followed. A clinical supervisor had also agreed to assist if an issue arose that required discussion and a discussion with this clinical supervisor would have occurred before any action was taken. Depending on the particular issue, the normal course of action would be followed. For example, if it was a disclosure of suspected child abuse or neglect a notification would have been made to the Department of Child Safety. All participants had this explained to them during the consent process; however no malpractice issues were disclosed during the focus groups or interviews.

The third key ethical area to consider in this study was the issue of non-maleficence - do no harm. This is more specific to the focus groups than the individual interviews. This is when there is a risk of a participant sharing incorrect or harmful advice. When something is said which was known by the researcher to be incorrect (for example, that immunisation causes autism), then the researcher first considered whether the information was harmful. This was based on the principle of non-maleficence. "Not harmful means that no one is injured directly or indirectly" (Krueger, 1998, p.63). Krueger (1998) further outlines a guide to managing this issue in a focus group. If the comment is not harmful, then no action is taken. However, if the comment is harmful, then the plan was to wait till the end of the group and then bring up the topic again. This time however, the researcher would have presented the topic as a matter of 'fact' rather than 'opinion' as shared previously (Krueger, 1998). The topic would have been described and the answer provided with the cited source. It has also been suggested that the participants could be provided with further information on the topic once the group was finished, if required (Krueger, 1998). Again this issue did not arise during the focus groups.

To maintain participant confidentiality throughout the research project, the identity of each participant was known only known to the researcher. This identity was protected through ensuring that no identifying personal details regarding the participant were made known in any way, for example pseudonyms and codes have been used for names of participants throughout the thesis. Names of significant places and key events were also with-held to further ensure the confidentiality of the participants. Particular characteristics which also may identify an individual participant were omitted from publications and records.

Throughout the duration of the study, the printed data were kept in a locked filing cabinet. In keeping with National Health and Medical Research Council guidelines (2007), the completed transcriptions will be kept for five years and stored in a locked filing cabinet, after which they will be destroyed. All the electronic voice recordings from the focus groups and interviews have been saved on the computer, with a username and password known only to the researcher. This electronic data will be stored for a period of five years from the completion of the research project, in conjunction with national guidelines (NH&MRC, 2007).

**Overall every effort was made throughout the duration of the research project to maintain a high level of ethical standard. With preventative action plans in place and mindfulness of the principles of ethical conduct**

## **into human research, many potential issues were avoided. 5.12 Findings and discussion**

### ***5.12.1 Introduction***

The following section presents and discusses the findings from phase two. These findings emerged from the direct experiences of the research participants, and elements of these experiences have been analysed to create meaningful themes which provide a rich description of the everyday experience of those who use, work in and work alongside the OAC. To illustrate that the findings are rooted in the personal experiences of participants, their verbatim quotes are used throughout this chapter. The themes are discussed in light of the wider literature and interpretations made as to their effect on health care delivery within Community Child Health Services.

The interviews and focus groups yielded significant insight into the OAC as experienced by the participants. Thirteen themes emerged from the data, including: OAC's purpose; adjusting to parenting; nurse-client relationship; complex situations; working in the OAC; time; social aspects of parenting; groups; environment; confidentiality; documentation; information; and peer support. The themes and their associated categories are shown schematically in Table 5.1. Furthermore, within each theme reside multiple categories, which combine to reflect the fundamental experiences which developed the theme. The findings are presented below, within each of the thirteen themes.



Table 5.1 Thematic model of key themes and categories

<p style="text-align: center;">Open Access Clinic (OAC)</p>	<i>Open Plan's Purpose</i>	<ul style="list-style-type: none"> <li>• A kind of triage process</li> <li>• Supporting well babies</li> <li>• More than just weighing babies</li> <li>• Reduce individual appointments</li> </ul>
	<i>Adjusting to Parenting</i>	<ul style="list-style-type: none"> <li>• I can't do this</li> <li>• I don't feel judged in here</li> <li>• I just needed that reassurance</li> <li>• Our relationships</li> </ul>
	<i>Nurse-Client Relationship</i>	<ul style="list-style-type: none"> <li>• Support and reassurance</li> <li>• Seeing the same nurse</li> <li>• Relationships with other service providers</li> <li>• Continuity for health professionals</li> </ul>
	<i>Complex Situations</i>	<ul style="list-style-type: none"> <li>• It's not always the well ones</li> <li>• We take them out the back</li> <li>• Ideally they could have been family CARE clients</li> </ul>
	<i>Working in the Open Plan</i>	<ul style="list-style-type: none"> <li>• It can be hard work</li> <li>• We can't get people</li> </ul>
	<i>Time</i>	<ul style="list-style-type: none"> <li>• Ten minutes is enough</li> <li>• Waiting...</li> <li>• I feel too busy to give my best</li> <li>• Effects of busyness on staff</li> <li>• In the beginning, more time would be good</li> </ul>
	<i>Social Aspects of Parenting</i>	<ul style="list-style-type: none"> <li>• It can be very lonely</li> </ul>
	<i>Groups</i>	<ul style="list-style-type: none"> <li>• The Open Plan Group</li> <li>• Other groups</li> </ul>
	<i>Environment</i>	<ul style="list-style-type: none"> <li>• A positive environment</li> <li>• The waiting area</li> <li>• The back room</li> </ul>
	<i>Confidentiality</i>	<ul style="list-style-type: none"> <li>• I overheard you say...</li> <li>• The sensitive stuff</li> <li>• I'd see my GP for that</li> </ul>
	<i>Documentation</i>	<ul style="list-style-type: none"> <li>• Having the whole chart</li> <li>• When somebody else comes in</li> <li>• I had no recollection of saying that</li> </ul>
	<i>Information</i>	<ul style="list-style-type: none"> <li>• A key role of child health is information sharing</li> <li>• Inconsistent advice</li> <li>• Misinterpretation of information</li> <li>• Too much information</li> </ul>
	<i>Peer Support</i>	<ul style="list-style-type: none"> <li>• Act as a unified team</li> <li>• Jane rescued me that day</li> </ul>

### **5.12.2 OAC's purpose**

This theme describes the perceived purpose of the OAC, according to the participants. Numerous experiences were explored by the various participants relating to the purpose of the OAC. These varied according to each participant and their individual background and experience. The four categories within this theme were: A kind of triage process; Supporting well babies; More than just weighing babies; and, Reduction of individual appointments.

#### **5.12.2.1 A kind of triage process**

The first category - 'A kind of triage process' - infers that the OAC was designed for relatively quick, straight forward consultations, and if more than this was required by a family, then it was their first 'port-of-call' to link with another appropriate service, if that was needed. This view was summarised in the following description of an experienced early intervention specialist (EIS), who worked alongside the child health nurses at the clinic:

*So if there was something that the nurse was concerned about regarding the child's development, then there could be going onto either a longer appointment ... with a child health nurse to do an assessment ... or it could be a referral to another part of the service, such as lactation clinic or Day Stay...So it could be essentially a kind of triage process or focused around mum or dad...But I think it's a very good first base (EIS 1).*

In fact, one child health nurse (working in both government and private practice) stated that in her experience the OAC simply would not work in isolation:

*I have a greater range at [the government Child Health Service] of being able to refer immediately as in we have a lactation clinic on site [compared with the pharmacy baby clinic] ... you can't do it in isolation without having referral sources... (PBC Nurse 2).*

Therefore, these experiences suggest that the OAC's purpose was not for lengthy, detailed consultations, rather relatively brief, simple issues for discussion between the family and nurse, which could be referred on for more specific support (such as the breastfeeding clinic) if that was required.

This finding was similar to the study conducted by Flowers (2008), which found that parents valued accessible child health support to 'touch base' for brief consultations with a trusted carer. While Flowers' (2008) study explored child health nursing practice in pharmacy baby clinics, rather than Community Child Health Clinics, this similarity confirms that this 'drop-in' informal style may be sufficient to meet the health support needs of some parents. However, the advantage of the OAC, in comparison to the pharmacy baby clinic was the immediate and well-linked referral options. Many pharmacy baby clinic nurses identified this referral process as difficult and limited, due to the non-government setting of their work (Flowers, 2008), and a lack of understanding and trust between the services. Stronger links with pharmacy baby clinics and Community Child Health Services would assist parents to find the appropriate support which they required for their family.

#### **5.12.2.2      *Supporting families***

Another important role of the OAC, which the participants identified, was supporting well babies and their parents with general parenting needs. Multiple health professionals and clients identified this role. For example, one of the participants stated:

*...they do very well, is supporting the well babies, to ensure that they pick up early signs ... make referrals early ... I guess helping parents to get a good start with their parenting (EIS 2).*

This early parenting support, which was seen as invaluable by many participants, has attracted minimal resource allocation, reflecting a lack of recognition by funding sources. This reduction in resources for this role, has led some child health nurses to feel devalued, and this supportive and fostering role eroded by health departments (Barnes, Courtney, Pratt, & Walsh, 2003). While the past ten years have seen a strong focus on targeted services to families at-risk, and subsequently limited resources for the universal population, recent Australian government reports reflect a shift, now recommending universal child and family health services "provide a schedule of core contacts to allow for engagement with parents, advice and support, and periodic health monitoring (with contacts weighted towards the first three years of life)...and support for parenting" (Australian Government, 2009, p.20). This paradigm shift appears to be supportive of the important role which child health services play in supporting families to achieve the best start possible.

Again, many parents expressed the importance of this support, a 19 year-old first time mother described her experience, reflecting the high value of this parenting support:

*...they give me regular checkups on him. You know the weigh in and that, and you can sort of keep an eye on things...And they helped me through... that helped me a lot (Client B1).*

The mothers shared experiences of the nurses enquiring about their needs, thus demonstrating that the purpose of the OAC was not just for the baby's needs, but the family within which the baby was cared for. One mother shared her pleasant surprise when asked about her own well-being:

*And that was another good experience that I had here. Was that they asked me how I was. Um, I think I was shocked the first time I got asked how I was. 'cause, I was so, I came in here for him, I wanted to get him looked after, and then when they asked me, I was a bit fumbly and she looked at me and said, 'And how are you?' and she said 'how are you?' And I thought 'shit, I can't answer that question' I don't think I know how I am...because I hadn't thought about me for a long time...It took a little while. And I think you do that so much, you know 'cause you're thinking about your baby, you don't think to really even think, 'well how am I coping really?' (Client D1).*

Furthermore, the representatives from the Department of Child Safety valued the rapport the nurse may have with the family, and the importance of this relationship.

*...At least we know there's someone from somewhere supporting the family (CSO 1).*

Supporting families was therefore a frequently emerging theme, reflected by the experiences of all groups of participants (parents, health professionals and support workers). This vital role experienced by many participants seems to suggest the importance of parental support in the early years, and subsequently health departments should recognise this valuable nursing role within CCHS. Thus not only was the role of the OAC to support families in caring for their infants, providing growth, development and well-being monitoring of babies; and advice around normal infant behaviours and issues, but through this to support and reassure parents.

### **5.12.2.3      *More than just weighing babies***

Whilst growth and weight monitoring was seen as a key role of the OAC, it was often not as simple as that according to the participants. This category of *more than just weighing babies* means that the OAC was not simply a baby weigh service, but rather a holistic CCHS through which effective health care was enabled. This was reflected by an EIS who frequently received postnatal depression referrals from the nurses working in the OAC:

*I know that we've identified that the Open Plan [previous name for OAC] population is a low risk population but, ah, given that we still get referrals [for Postnatal Depression] from there these mums could still have fairly significant issues happening ... the importance of being thorough in finding ways to check that out with mums so that it is still a bit more than just coming in and getting weighed (EIS 3).*

The current recommendations by the National Health and Medical Research Council (NHMRC) (2002) are that infants receive routine weight monitoring at birth, at 6-8 weeks, and at 8-12 months, as part of standard clinical care. At present, there is a lack of strong evidence supporting or negating the validity of routine weight monitoring outside these times (NHMRC, 2002). Similarly, the literature has demonstrated that uninformed weight monitoring, without any targeted support, could have detrimental effects, both on population and individual breastfeeding rates (McKie, Young, & MacDonald, 2006). Weight monitoring (particularly if conducted frequently) can lead to parent anxiety if a baby is seen not to be gaining weight fast enough or too fast (Garner, Panpanich, & Logan, 2000). This is compounded by a possible parental lack of knowledge regarding 'growth spurts', potentially resulting in force-feeding. This is where it is essential to have health professional supported growth monitoring clinics, to assist parents in the *interpretation* of the infant's growth and development. Yet, what the participants in this study were stating was that 'getting the baby weighed' was often simply an avenue for parents to seek more holistic parenting support, reassurance and referrals to other services, for more specific needs, such as psychosocial support or developmental concerns.

This avenue was further described by another EIS, with a background in community development:

*You need to provide a service, you need to get the people through but I guess there's the question of what's the core reason, is it just to get baby*

*weighed? I mean that's only one aspect of their lives, the social aspect of the environment that they live in is also critical, if that's not good, then they could provide reasons why babies' not thriving or not settling or all those other things so ... certainly something like the drop-in clinic, ... if you were trained and were looking for that, by observation, would be able to pick up that there were issues with babies and certainly if they bring their toddlers that's often a really good indicator of what the family culture is (EIS 2).*

Thus, the OAC was not perceived by the participants as a service 'just to weigh babies.' In fact, if a 'weigh' was all the clients wanted, it was likely that other alternatives which are more convenient than a government clinic would be considered, for example using the scales at home. These experiences of both the parents and health professionals indicate that it was not just simple measurements that clients came for, but rather holistic support with their parenting.

#### **5.12.2.4      *Reduce the number of individual appointments***

One of the driving factors for the initial introduction of the OAC was lengthy waiting times for individual child health nurse appointments (average waiting time was 4-8 weeks). The child health nurses and parents found this wait problematic as the infant / parent health concerns often required more urgent attention. Therefore, once the OAC was introduced parents could be seen very quickly, subsequently leading to a dramatic reduction in the need for individual appointments. This has led to increased efficiency in the service. The participants did not discuss the comparison between individual appointments and the OAC at great length. However, it is significant that this was raised:

*I guess the usefulness ... was to reduce the number of one-on-one appointments with parents were there were not really anything significant there, um so if you're wanting to monitor and pick up early the problems and then perhaps refer on with support. So it's reducing the one-on-one appointments for something that can be picked up fairly quickly... (EIS 1).*

Whilst individual appointments were still available to parents, if they chose, within the Community Child Health Service, not all participants were aware of this, as reflected by a local paediatrician:

*...they don't feel as if their individual needs are being met (Paed 2).*

None of the mothers who participated in the focus groups identified feeling this way; however it was an important reflection upon the OAC. Similarly, another Australian study found that for some mothers privacy and individual care are highly valued with regards to child health surveillance and parenting support (Kruske, Schmied, Sutton, & O'Hare, 2004).

In summary, the OAC was one part of the overall service, which Community Child Health Services offer to support families with young infants and children. In Queensland, Community Child Health Services were (and still are) offered by the state government and are delivered at no cost to the client. It has been reported that up to 98% of first-time parents make some contact with a Maternal and Child Health Nurse in Victoria (Goldfeld et al., 2003). Attendance and attrition rates in Queensland Child Health Services are limited, and the population benefits of the service are unclear. There is also very limited literature investigating which services are effective or if there is a mismatch between services offered and services required (Oberklaid et al., 2003). In light of this, it was important to understand what meaning the OAC service has to those accessing it. Therefore, this theme has highlighted the value mothers in this study placed on the accessibility of qualified child health nurses, to whom they could “just drop in” and consult with regarding their infant's growth and developmental needs. However, parents deemed the service just as valuable in terms of their own care, appreciating the support and reassurance they received from the child health nurses. It was also important to note that individual services were still valued by the health professionals interviewed in this study and the wider literature has supported that some parents also value this individual care. Thus, while the OAC has reduced lengthy waiting times for individual consultations, consideration for varying needs and parental preferences for more private or individualised care remain important.

### **5.12.3 Adjusting to parenting**

Many everyday experiences of the research participants reflected a difficult and often overwhelming adjustment to parenting. Thus the second theme emerging from the data was the adjustment to parenting. Within this theme, four categories were present: *I can't do this; I don't feel judged in here; I just needed reassurance; and Our relationships.*

### 5.12.3.1 *I can't do this*

The category *I can't do this* reflected predominantly first-time mother's lack of confidence in their ability to effectively parent. One first-time mother, who experienced significant postnatal depression, shared her experience of being discharged home with her new baby, and having difficulty with breastfeeding:

*...he would not stop crying at all. So first I thought, well, maybe it's, I need help with breast feeding, he's hungry, and like, by the time he was two days old in the hospital, I had to just say, give him a bottle. So, all those thoughts of 'I can't do this' ... and had reflux and kept crying. And just tried to breast feed in here, and after five weeks he got the bottle. And someone else could do it (Client C1).*

The early weeks of parenting have been the topic of previously published literature, and identifies this time as high risk and stressful. Mothers with infants under six weeks of age describe that they felt unprepared for the unrelenting demands of infant care, the high level of fatigue and the loss of personal time and space (McVeigh, 1997). The significant tiredness and fatigue is also a concern, which has been noted in the literature and mothers have identified not feeling well prepared for this aspect of their new role (McQueen & Mander, 2003; McVeigh, 2000). Another new mother was very expressive when she shared her experience of coming home, and conveyed some of the stress that comes home too:

*It was overwhelming to just go home and go 'holy mackerel!' ... I was thinking, it was like I'm going to have a baby, this is going to be great, and I got home and went 'holy mackerel!' And you do expect that. I had no idea!! ... I mean everyone said are you worried about the birth, hell bent on not having an epidural. I said I'm not worried about the birth, I know that's going to happen one way or another, she's coming out, you know. But it's when I get home. And I'm glad that I was worried because you know you get home, and like I'm breastfeeding and you see all these mothers and it looks so natural, yeah and pain free. I didn't shed one tear in labour, but all the tears with cracked nipples and all those sort of things... (Client A1).*

From the everyday experiences of these two mothers it is clear that the early weeks of parenting are emotionally and physically difficult, and can be interpreted as reflecting a lack of



parental confidence in their own resource and ability. This adjustment to parenting is a crucial time for health professionals to offer accessible, meaningful and helpful support. A recent Queensland study (Barnes, Pratt, Finlayson, Courtney, Pitt, & Knight, 2008), found that few first-time mothers felt well prepared for the demands of parenting, thus suggesting that current approaches to parenting preparedness are not meeting maternal needs. The authors suggest a move away from content driven antenatal education to mother-to-mother support, in an environment which places the woman as the expert (Barnes et al., 2008), and subsequently would see the health professional as a partner in the learning process. This parent - nurse relationship is discussed in more depth further on in the chapter.

However, once the early weeks are over, mothers described a *new adjustment* which often involved frustration with boredom, after having had a full, busy career to being at home with her new baby:

*Yeah, and there's nothing much to do. I mean house work doesn't really take that long, to clean my house anyway... And yeah there's only so many things you can do with a baby when they're just lying on the floor, and then they get moving and there's still only so many things that you can do with them (Client A2).*

McVeigh's (1997) study investigated 79 first-time mothers' perspectives around motherhood, and found that mothers described feelings of boredom and loss of control compared to the paid employment environment. This study has produced similar findings, especially as shared by the participants who were first-time parents.

### **5.12.3.2      *I don't feel judged in here***

The second category reflected in the mothers' experiences of the OAC, was the non-judgemental approach of the child health nurses. Linked to societal pressure and a lack of confidence as expressed earlier, particularly young mothers expressed the importance of non-judgemental support with their parenting. The feeling of being judged was evident in a 23 year old first time mother's words as she shared her experience of trying to meet other mothers through playgroups:

*... I don't want to go to a playgroup, I know it sounds terrible, but I don't want to go to a playgroup with older mums, I want to go to one with*

*younger mums. Because you know you sort of feel judged... I'm 23 this year, I still get judged. 'oh you have a baby, are you married?' you know all of that, and I don't like to be judged like that. I just like to come in [to OAC] and have a chat and you know talk to some adults 'cause like I don't have anybody that has babies (Client B1).*

In the literature, young parents have often described a perception of negative community attitude directed toward them, wherever they went (Hanna, 2001). However, in contrast, the young women participating in this study did not feel judged by the child health nurses in the OAC. Similarly an older mother (who had three children) also appreciated non-judgemental care by the nursing staff in the OAC, demonstrated by their support of her own parenting choices:

*I didn't get 40 questions about why I didn't do it [breastfeed], and I wasn't pressured about or, it was ok ... cause they say, what do you want to do? What are you comfortable with? Let's go, we'll talk formula... There was no pressure (Client D1).*

The mothers strongly valued and appreciated the non-judgemental environment of the OAC, and the support the nurses offered with their parenting.

### **5.12.3.3 *I just needed that reassurance***

Thirdly, many of the mothers identified a strong need for reassurance that they were doing the right thing with their infants and children, and often came to the OAC for this support. This common theme may mean that many parents doubt their parenting competence and choices, reflecting insecurity. As one mother described, with her first child:

*I needed that reassurance...when they're younger, that was good for me, just to walk through the door and go okay, that, you know, that's really great, weights ok, you're doing fine (Client D1).*

The clients also described why they chose the child health nurses to talk with about their parenting, in preference to discussing issues with their family members. In some cases, mothers did not want their family to think they were naive or stupid because they may have been asking obvious questions. As one teenage mother said:

*Like some questions seem silly to ask your family, like I had problems with Will, like breastfeeding him. He wasn't sucking, he was getting the first bit of milk, but not getting the hind milk. So, wasn't putting on weight. So I asked my family, and they were like 'he's right, he'll do it if he, it's natural.' And like there's nothing wrong with my milk. But then when I came in here, they were like some babies don't want it, like they have a lazy suck so I had problems talking to my family about that, you know 'cause like they said it was all just natural. But when they said that some babies need to learn it, or are lazy, I felt so much better because I was getting really depressed about it, everyone saying your baby should do this. And like that was really, really good (Client B2).*

This sense of reassurance was not only offered via the nurses in the OAC, but also by the other parents. Another mother stated:

*It was just nice to come here and know that she wasn't totally abnormal, you know. Um, she wasn't like all the others, but just to know she was somewhere on the plane, and that there's another parent out there (Client D2).*

These feelings of reassurance were significantly valued by parents. Warren's (2005) study exploring first-time mothers and their confidence in infant care practices, interviewed a convenience sample of 135 participants. The study concluded that appraisal support is significantly related to confidence in infant care practices. The mothers in this study also significantly valued appraisal support, again suggesting a lack of confidence in their own ability.

#### **5.12.3.4      *Our relationships***

The mothers in this study described the effect their relationships, especially with their partners, had on their parenting confidence and stressors. Key relationships, particularly with partners and parents, have been identified in other studies as crucial to increasing mothers' confidence and competence in parenting (Nystrom & Ohrling, 2004; Warren, 2005). The mothers in this study primarily identified their partners as their key support, but also some of the tensions a new baby can have on their relationships. One mother stated an advantage of

both parents attending the OAC was that it relieved the pressure of one parent's opinion over the other, and became a team approach in seeking information from a health professional.

*And also because he [father of the baby] is such a big part in Zoe's life... I felt that he was looking at me, saying 'ooh, can't do it'. But it was my hormones going, why is he looking at me like that? .... And so it wasn't him going 'mm you're a bad mother' but it was my brain going...But if he came down with me, and nurse was saying you should try blah, blah, blah then it was both of us and hearing it from a professional (Client A1).*

Several mothers identified the benefits of their partners also accessing the OAC:

*And when it's just the two of you like with the breastfeeding and the emotional stuff around gaining the weight and stuff like that. And then I said well this, this and this, and he said 'well, what about this?' ... It can be less overwhelming when he can come as well (Client A1).*

And,

*My partner works long hours, and he like misses out on a lot of things with Will, yeah he misses out on a lot of things. He goes to day care one day a week, to play with other kids; he misses out on dropping him off and picking him up because he works long hours. And the weighs, like he doesn't see how he's weighed, he would be interested (Client B1).*

The child health nurses also described their interaction with fathers through the OAC, although they stated only a "few dads" come in. Occasionally, it was the father who attended the clinic and seemed to know more about their child's welfare than the mother:

*In fact they [the fathers] may know more sometimes, I had a specific thing happen at XXX [name of clinic location]. I had a Mum come in whose baby wasn't doing anything it should have been doing um anyways and then the physio rang to follow up the referral, and Dad said no, no, no we don't need that. I thought here we go. Then Dad came in, and Dad is full time carer and he knew exactly what this child was doing and what it was up to and everything else, 'cause mum worked full time and had very little contact as such with bubby, and didn't realise it was actually doing all that*

*stuff...So, Dad could tell me right down to the last pea what this child was eating (CHN C1).*

Similarly, in Nystrom and Ohrlings' (2004) literature review on parenthood experiences in the first year, fathers expressed feelings of deep engagement and attachment to their children, the frequent strain parenting places on marital relationships, and that sometimes their partners prevented them from achieving closeness to their child resulting in hurt. Therefore, the mothers valued the support their partners gave them and would enjoy their joint participation in the OAC. This also has implications for the accessibility of the OAC, as it is currently only offered in working hours, when many fathers may be employed and unable to attend.

In summary, there exists a significant body of literature which describes the often difficult and challenging transition to parenthood that many mothers experience (Nystrom & Ohrling, 2004). It has been described as 'living in a new and overwhelming world' (Nystrom & Ohrling, 2004, p.327). This can lead to mothers reporting feelings of powerlessness, insufficiency, guilt, exhaustion and ambivalence (Mercer & Walker, 2006). The mothers participating in this study shared similar experiences. They discussed this overwhelming feeling, the importance of non-judgemental support, a need for reassurance, and the importance of relationships in supporting their new parenting role, all reflecting a common theme of insecurity and a lack of confidence in their parenting choices and competence. These findings are important for health services to consider when preparing men and women for the demands of parenting.

#### **5.12.4 Nurse-client relationship**

The third key theme emerging from the interviews and focus groups was the relationship between the child health nurses and the mothers. The various elements of the nurse-client relationship and its importance in the OAC setting was explored and shared at length by many of the participants. Four categories emerged within this theme: Support and reassurance; Seeing the same nurse; and, Relationships with other service providers.

#### **5.12.4.1 Support and reassurance**

The clients shared many everyday experiences of the impact that nurses' comments, advice, listening and availability had on their parenting. This support and reassurance was a key reason for attending the service, especially for first-time mothers, as it relieved much of their anxiety and/or stress concerning their parenting choices and ability. One mother, with a particularly high-needs infant shared the significance of her relationship with one particular nurse:

*... Olivia [Child Health Nurse] was my life saver... literally with [my daughter] Alice, it was really good just to come here and go, yep everything's good, but...I don't think I could have got through the first twelve months, literally without you (Client A3).*

This reassurance was especially important in some women's experience because it genuinely built up their confidence in their parenting:

*Like the confidence I gained between the first child and the next one, yeah so it's good to be able to come here and somebody saying that's good, yep keep doing that. So that was good (Client A3).*

Parental self-confidence has been associated with improved health status, for example in increased breastfeeding initiation and duration rates (Dennis, 2006). Therefore if parents' confidence is enhanced through attendance at the OAC, an expected link would be seen in improved health status of the infant and family as a consequence.

As discussed earlier, not all of the OAC clientele were without significant risk factors, or issues which would make parenting more difficult. Two of the women who participated in the focus groups identified that they had been diagnosed with postnatal depression after the birth of their baby. They commented on the value of the support they received from the nurses within the OAC.

*Well I know I suffered postnatal depression for the first four months with Toby. But it was really supportive here (Client B4).*

This support should not be undervalued. As displayed by a recent study conducted in Scandinavia (Tammentie, Paavilainen, Tarkka, & Astedt-Kurki, 2009), when parents were not well supported or treated as equal partners in care within child health clinics, parents were

not provided with effective support. The study found support for postnatal depression inadequate by child health nurses if there was a lack of individuality with care, a lack of a continuing relationship with the nurse, a lack of confidentiality and that the individual child health nurses' personality was the crucial factor in obtaining good nursing care. This affirms the value of having consistent staffing within the clinic, to ensure a continuing helpful relationship is established between parent and nurse. While mothers with postnatal depression highly valued the good support they received, so too did the vast majority of well mothers who participated in the focus groups.

Similarly, the child health nurses also identified that this was a core value in their role in the OAC. A very experienced child health nurse, who was also a qualified midwife and lactation consultant also identified the meaning this support has for parents in their ability:

*I do think we have to support the parents - that's part of our role. Support; tell them they're doing ok, because I think they do get a lot of negative things said to them. And ah, and they hear a lot of information and they don't know what's right. I always try to say to a mother, you're doing well (CHN C3).*

Furthermore, these everyday experiences shared by the mothers confirm that this supportive role is very difficult to achieve if the nurses are not rostered to a regular clinic and unable to build up a good relationship with the clients accessing. As described by this nurse, this supportive role is achieved through the therapeutic relationship:

*I've also found that having the same people, you know I can tell when someone is not quite themselves, that something is going on with them because you've had so many visits and I feel that you do create a good relationship, so you can say 'Hey, you're not yourself today, what's going on?' and often they will tell you (CHN A3).*

And,

*If I'd missed the cue, she started talking at the beginning about the baby, ra ra ra ... And then I touched her, and said 'how are you feeling?' And that just leads in. And I think somehow we get a lot of training in how to deal with parents and not just build 'rapport', but to take those cues (CHN B1).*

The child health nurses thus had confidence in their intuitive ability to identify subtle cues which mothers may demonstrate that struggles may be lingering under the surface, especially when they knew the family well through regular contact in the OAC. Forrest and Starfield (1998) identified that the benefits of continuity with a source of primary care are consistent with improved satisfaction and enhanced child health nurses' recognition of clients' health needs. However, not all experiences were as positive as those described above, especially when the nurse and client had a different perception of the situation. For example, one nurse shared a difficult situation where the client had a very different perception of the health of their infant to the nurse:

*... and I was trying to build a rapport with her and come to some compromise, but there was none, it was a 'stale mate' (CHN A2).*

This is one of key challenges in delivery of the service. Without a good relationship with the client, it is unlikely any health information or advice will be taken on, parental confidence may not be enhanced and subsequent health status not improved. Nurses require creativity when dealing with these situations. As mentioned earlier, all Queensland Health employed child health nurses are offered training in the Partnerships Parent Advisor Model (Davis, Day, & Bidmead, 2002), which aims to equip nurses with effective skills and qualities which enable a therapeutic relationship to develop, and subsequently improvements in health to occur.

#### **5.12.4.2      *Seeing the same nurse***

This therapeutic relationship was enhanced when the client had the opportunity to see the same nurse each visit to the OAC, as this category discusses the value and importance of this regular contact.

The clients in this context often experienced regular contact with a particular nurse. Not only was this highly valued by the mothers, but also the nurses, as one nurse said:

*I do think that clients like consistency with staff. I've often had clients tell me that they don't like telling their story to different people (CHN A2).*

There is significant evidence in the current literature on the benefits of continuity of care, including improved patient satisfaction, immunisation attendance, reductions in emergency room attendance and hospitalisation (Benson, Cohn, & Kaelber, 2009; Christakis, Koepsell,



Zimmermann, & Connell, 2001; Jee & Cabana, 2006). Further, a recent Cochrane review of maternity services, found that midwife-led care (where the mother and baby have one primary, continuous midwife for antenatal, birthing and postnatal care) has been associated with lower instrumental births, increased confidence in the mother and improved breastfeeding rates (Hatem, Sandall, Devane, Soltani, & Gates, 2009). This study found continuity of care consistently important amongst the participants, similar to the wider literature in this area.

Continuity of care was affected by staff change over, and nurses identified that when a new group of nurses took over the care of the client group attendance at the OAC was affected:

*I do notice that when a new person starts there will be a bit of a drop for a couple of weeks and then it will pick up again (CHN 1A3).*

Arguably, the more often that a nurse sees a particular client then the more likely it is that the client will feel comfortable in talking to the nurse. Furthermore, the better a nurse gets to know a client the more likely it is that they will be sensitive to non-verbal cues and signs given by the client that indicate they need help. One nurse discussed the impact that the OAC may have on a mother “opening up” and her intuition telling her there was more to it:

*...but she hasn't been able to talk to me about it. In the Open ... situation she hasn't told me anything and I know that there's something there...I can't really force it (CHN A4).*

In response to describing this experience another nurse within the focus group commented that it was not likely that the OAC had inhibited the mother. It was more to do with timing:

*But I don't think that that situation would have been different out of open plan either though. She won't talk to you, even if you had all appointments, she won't talk 'til she's ready (CHN A3).*

This suggestion was confirmed by one of the mothers who identified that it was not the OAC setting that inhibited openness; rather it was the perceived quality of the relationship with the nurse:

*And like you were saying when you see someone on a regular basis they would pick up 'oh Sally looks a bit down' and make a note of that and pick up next week ... I think it is important to have the same person, especially*

*when you don't have a lot of family support. We're lucky 'cause we all do, but some mums, not even single mums, different guys out there all the time they wouldn't pick up on it (Client A1).*

However, from the clients' point of view, this was not always the case. For example, one mother identified that seeing a different nurse each time could be an advantage:

*I don't think it really has an impact, 'cause yeah, like you say, everyone has a different opinion, one thing doesn't work, someone else may know, so I think it's better to have different (Client C1).*

These experiences suggest that while the environment and nurse-client relationship have some impact on parent disclosure of important health care issues, sometimes parents are not confident or assured enough in themselves to disclose, and it's simply a matter of timing.

Some participants did not see a regular nurse when attending the OAC and this was perceived as undesirable and affected the quality of care they received. One member of the Australian Breastfeeding Association described her own experience. This incident had occurred four years previous to her participating in the focus group:

*I suppose the thing was I knew the ladies in the Territory, all not personally, but I worked with them, so I knew them before I had the baby, so that made it much more an approachable kind of place, whereas here I found it a bit funny seeing different people every time (ABA 1).*

Similarly, some allied health staff described their experiences of parents sharing their frustrations at seeing different staff at each consultation:

*The Mum may not really know who that nurse was...And on that point, I've had a Mum recently that ... was seen a drop-in [OAC] and came in and was unhappy with the fact that every time she's been back there's another, it's not the same ... she hasn't been able to build any kind of rapport and because of that they've actually been going to the chemist for the weighs and stuff (TASS C1).*

This sentiment was reinforced by several mothers who shared the importance of the nurse knowing them. In the words of one first-time mother, who confided that she had little confidence initially in her own parenting ability:

*They're all very, very good in fact when you come in. It's nice that they remember you from week to week, that's one of the things...Yep. They know you, they know your child. They know what happened last week (Client A1).*

Another mother described how this relationship also portrayed a sense of safety and security with the service:

*And you could trust them and you wouldn't have to make an appointment for the doctors...how long it take to get in these days and you could just go 'oh that's a bit funny I might check on that' and just pop in and see somebody, that you know... (Client A3).*

Similarly, an early intervention specialist, with more than ten years' experience commented on the critical nature of this relationship:

*Yeah and I think if they keep coming and see the same nurse, then I think that that's a valuable thing as they have a relationship with that person, then they are much more willing to ask when it's the same nurse there every week, rather than a rotating thing then they may get the babies weighed and ticked off... It's with all the nursing staff there's a bit of a struggle to get that time, that time to do those other things, it's hard to justify spending time chatting, but you have to do the chatting to get to that other space (EIS 2).*

Furthermore, the mothers identified that they often had a special connection with one or two nurses and would prefer to see them, if they were available. These themes which the parents discussed were also independently identified by the nurses who described part of their philosophy within their work was to help the mother's feel secure, good and confident in their own ability as a mother.

However, due to the appointment-free structure of the OAC, there were occasions when nurses may only see clients for a 'one-off' visit because (for whatever reason) the client may choose not attend again. Some of the key stakeholders commented on their experiences in this regard:

*Oh, you get to know the family better, I think there's nothing worse than working in a clinic where you're just seeing people for ... one off*

*consultations, and there's no follow-up, you don't know what's become of them, whether you did the right thing or wrong thing... (GP 1).*

*I think that's a bit of a tricky one... in the sense that with drop-in I suppose you've got the family there, you don't know if they're going to drop in again (TASSC 2).*

In summary, both health care service providers and clients agreed that seeing the same nurse was of utmost importance to the client and the nurse, as it builds a therapeutic relationship where care can be provided effectively and securely. This is substantiated by the significant body of literature which describes the clear health benefits of this continuity.

### **5.12.4.3 Relationships with other service providers**

As described earlier, the OAC did not (and could not) operate in isolation. This next category reflects the importance of collegial, co-ordinated working relationships with other child health service providers. These connections with other services, and service providers, affected client care. Experiences shared by participants of working with other services emerged as a clear theme within the data. As shared by this Child Safety Officer, who had a good relationship with the nurse seeing their shared client:

*I think it helps. And even with Jane, I've never met her in person, but because we were speaking a lot around the time that there were all these concerns um, I think we sort of started to have a relationship, because we knew who we were. And a lot of the time when I do contact down there to follow up a referral or something I'm speaking to someone different, that I haven't spoken to before really. But it does help when they know who I am, because you're speaking on a regular basis. Always keeping each other informed with what's happening. Then that was good, 'cause I felt that there was some sort of connection there, between the services. Because a lot of the time, like there isn't really 'cause you're speaking to someone you don't know and they're probably feeling exactly the same way when they speak to us, that it's just another child safety worker... (CSO 2).*

A breakdown in communication between service providers is difficult for clients and providers alike. Specifically between Community Child Health Services, General Practitioners,

Paediatric Allied Health staff and the Department of Child Safety, clear communication and a working relationship would enhance smooth transitions and care pathways for families. Unfortunately, in current practice this has not always occurred. When clear communication is shared between the various service providers clients have expressed feeling secure and appreciate the consistency of information and support (Lefebvre, Midmer, Boyd, Ordean, Graves, Kahan & Pantea, 2010). Not only do clients benefit from clear communication between service providers, but effective nurse-doctor communication has been shown to improve job satisfaction and subsequently staff retention rates (Wanzer, Wojtaszczyk, & Kelly, 2009).

Overall, the importance of a therapeutic relationship between nurses and their clients is well documented across many spheres of nursing practice (Hawes, 2005). This means that an engaging, interactive, trusting relationship between a nurse and client provides a therapeutic environment, in which effective nursing care can occur, that is parent confidence is enhanced with subsequent improved health status achieved. Furthermore, a sustained partnership between clients and child health nurses can address the majority of a population's health needs (Forrest & Starfield, 1998). Clients, child health nurses and other health workers identified this relationship as crucial if therapeutic care was to be provided through the OAC.

#### **5.12.5 Complex situations**

The fourth key theme within the data was 'complex situations'. Whilst the OAC had been described as a 'well baby service,' specifically designed for families without identified child abuse and neglect risk factors, the nurses shared experiences of client presentations where "more than low risk" was the case. They described frequent presentations of clients with more complex needs and issues, which means that high-risk services were not capturing all the health needs of this population. What these presentations involved and how the nurses managed these situations have been organised into three categories: *It's not always the well ones that present; We take them out the back;* and, *Ideally they could have been Family CARE clients.*

### **5.12.5.1      *It's not always the well ones that present***

The category *it's not always the well ones that present* discusses the type of client and population group accessing the OAC and why. When the history of the OAC was explored prior to commencement of this study, it was identified that initially the OAC was designed for relatively straightforward client consultations, with a duration of around 5-15 minutes depending on parental-infant need. However, due to the drop-in style of the service, a range of parents, with varying degrees of needs presented with their infants. The child health nurses described complex and challenging situations, with client situations not always being simple. One very experienced nurse relayed this story, and the difficulty in managing the situation on her own in a rural setting:

*I was working in a rural centre when um, a young mum, who appeared to be quite timid... came... I really had to encourage her to engage because she really held back in the room and... when I um, saw the baby and weighed it, it was grossly underweight for age, it was 300g under its birth weight at eleven weeks ... and it looked sick ...I spent over an hour with her, because the seriousness of the case, luckily, she came towards the end of the open-plan clinic and I was able to devote my time to her. I don't know what I would have done if other clients had come... I think that's one of the risks, of getting those kinds of cases, especially in the rural clinic, um, because often, out in the rurals, they, they come when there's a problem, but they don't come when things are going well. So, you know, when there's a problem, it's a big problem, often (CHN A2).*

Whilst this situation occurred in a rural clinic, the nurses in the focus group empathised that similar situations had occurred while they had been working in the urban OAC:

*And it's surprising how, what it did teach me, that if a mother is stressed beyond belief, if the father had just beaten her up or if the baby was at risk, and this baby and mother was at risk, she was at risk and she had huge suicidal issues on her Edinburgh um and self-harming. She was just at that point, where she just sat down. Her whole demeanour was like this, with the baby like this and she couldn't look at the pram and your instinct immediately is oh my goodness, you've got a problem – we need to deal with it (CHN B2).*

These are serious family infant and parent health issues, and ideally would be better managed in an individual appointment (where more time could be allocated) or through a nurse home visit. However, the reality was that the relative immediacy of the OAC, lends itself to parents attending when there is a pressing issue. This was an advantage of the style of the service, however without backup the nurses found these cases difficult to manage. This occurrence may mean that current at-risk services are not meeting the needs of this population group, and families may be 'slipping through the cracks'.

Furthermore, it could be assumed that these difficult client situations may have a negative effect on the other parents waiting to be seen in the clinic, as it was an open consultation environment, and potentially deter them from future attendance with the service. Yet, this perception was not shared by any of the participants. On the contrary, it appears that the environment is more supportive, collegial and accepting of the needs of differing families, as demonstrated by this nurse's story:

*... I had a mother once come in and she sort of sided in and brought in the baby, she didn't turn around the other way and I didn't see her other side. And as she went to walk away, this other mother jumped up to me, she said 'did you look at the other side of that mother? She's black and blue, she'd been beaten!' All down the right side of her body, and if that other mother hadn't have told me that that mother had been beaten, I never would have picked it up, 'cause she sided into see me and I never realised that ... and I left the other mothers waiting and I chased after that mother. And they were all happy to wait, 'cause they were all gobsmacked because of what had happened to this mother and that she was trying to hide all of the bruises...I'd given her the DV[domestic violence] services card and just by that prompting, it actually gave her the courage to go... get help, but if I didn't have the other mothers beside me, I probably wouldn't have picked it up... (CHN A1).*

A very interesting aspect of this story was the empathy and awareness shown by the other mothers waiting to be seen. Concerns had been raised about the confidentiality of the OAC, (which is discussed later in this chapter), yet the understanding shown by the other mothers demonstrated a supportive environment where mothers at risk can be seen, if the need arises. A specific programme for families at risk also operated through the Community Child Health Service, so if a family presented to the OAC with extended issues then a triage process (as discussed earlier) could be implemented to refer a family for the most appropriate nursing

care. The important notion here is the *easy accessibility* of the service. Quite a number of nurses described stories such as this, which they stated were not by and large the everyday norm of the clinic, yet were significant and memorable to them, due to their challenging nature.

#### **5.12.5.2      *We take them out the back***

Of interest for this study was how the nurses managed these unpredictable situations, which occur in many general areas of nursing also. The experiences shared by the child health nurses illustrated how they managed these delicate situations with competence and grace. Privacy was valued by the nurses. As the urban clinics were always staffed with two child health nurses, the nurses detailed how they worked together to manage the other clients in the waiting room:

*But now we've got the two nurses there, so if someone's upset we can, we're lucky 'cause we've got the three rooms there, we can take them into the breastfeeding room and close the door and talk to them while the other person deals with open plan ...That's really valuable. Because I have been in that situation where I've got twenty mums waiting and one mum that's crying and um can't deal with that there. Most mums are pretty good (CHN A3).*

The nurses also commented on the other mothers' reactions when this situation arose.

*On the odd time when I've had a crisis they were happy to sit and have a talk and make a cuppa (CHN A6).*

This further reinforced the value of mother-to-mother support. An environment where clients feel valued and important will facilitate good health care. Over the past 25 years it has been clear in the literature that peer support (especially with regards to parenting) has been demonstrated to be effective, encouraging and supportive specifically in breastfeeding rates and parenting confidence (Kruske et al., 2004; Wade, Haining & Day, 2009; Zachariah, 1994). This is further discussed later in the chapter.



### **5.12.5.3**      ***Ideally they could have been Family CARE clients***

The nurses shared that some families they cared for through the OAC ideally would have been on the at-risk home visiting programme, but were not for resourcing reasons. The nurses working in both the urban clinics, had clients attend more frequently than others, for multiple reasons:

*Last year ... I had about four. They come a bit more than they need to. They don't come weekly, but they come more often than they need to. And they probably ideally would have been Family CARE clients as well...That's like individuals though. It's not like the whole group. (CHN A3).*

The Family CARE programme offered an intensive nurse home visiting support service to 'high risk' families. This service was resource intensive and had very clear inclusion criteria, which were adhered to carefully by community child health services. As a result, some parents had significant health needs, however were not quite eligible for home visiting support. Consequently, these parents, who may have found parenting more challenging accessed alternative services (such as the OAC) more frequently than others.

This increase in frequency of attendance by mothers with heightened stressors has been investigated in recent times (Ellis, Chang, Bhandari, Ball, Geden, Everett & Bullock, 2008). For example, women with a new infant, who were experiencing intimate partner violence, had higher health care service utilisation than non-abused women (Ellis et al., 2008). This increase in health consultations for their infants may have been influenced by the increased stress, depression and lack of support experienced by these women (Ellis et al., 2008). Whilst the OAC was not specifically designed to service this particular group of parents (as the Family CARE programme is), mothers may not be identified with risk factors during pregnancy and consequently not receive the home visiting support. Furthermore, some mothers may not disclose domestic violence, or refuse home visiting support. As women were assessed during the antenatal period for Family CARE, a gap existed between that assessment point and the infant's birth, so if domestic violence began after the birth of the baby, or the screening point during pregnancy, they would not be identified at higher risk. It is therefore essential that an easily accessible infant – parent health care service is available for these parents, where stressors are already known to be high.

Overall, it could be argued that these complex and sometimes difficult to manage situations, may lead to workload issues for the child health nurses. However, while there were two nurses present to see the clients, the nurses demonstrated effective management of these complex situations. This theme also suggested that the current at-risk service does not capture all the needs of this population group, and some families are not identified for increased support during pregnancy. This requires consideration as the OAC was not designed to service this group. Yet, as identified earlier it may provide a triage point for at-risk families to access help and be referred on to more specialised services. Overall the presentation of clients with complex needs was managed professionally and effectively by the nurses in the urban clinics, through collaboration with each other and other referral services.

#### **5.12.6 Working in the Open Plan**

Child health nurses described their experiences of working in the OAC. This theme reflected feelings of busyness, hard work and the lack of experienced staff available to deliver CCHS. Due to the large number of clients who were seen and the often complex nature of parenting, the nurses shared their experiences of feeling under pressure and the implications this may have on the quality of the service. There are two categories, which capture the work pressures they felt: *It can be hard work*; and, *We can't get people*.

##### **5.12.6.1 It can be hard work**

The nurses working within the OAC described workplace stressors, stating that working in the OAC was tiring and can put pressure on them. This reflects the strenuous demands of many areas of nursing, especially when complex issues arise, as this nurse stated:

*I think that there is a lot of pressure when you try and see a lot of mothers and they've got complex problems arise (CHN 1A5).*

The nurses identified that having the help of another nurse was absolutely essential. Both the clinics being explored in this study were always staffed with two nurses, and this was significant in the nurses coping with the high workloads.

Some of the nurses described that they feel quite exhausted at the end of the day, but for some nurses that was acceptable:

*It doesn't worry me too much, but I think day in day out, when it's really pressurised and you don't stop to get morning tea and you just go, go, go. Um, I think that it does have an impact on you (CHN B3).*

*...it's good, we like being busy, it's good...Do I think oh, I'm going to be rushed off my feet – yes. But yes, it's a good environment (CHN C2).*

In a recently published article, Clancy and Hughes (2009, p.753), state 'nursing is hard work. It is physically, psychologically, and psychosocially taxing. The hours are long, and the environment is not usually luxurious.' Significant research has been conducted internationally looking at nursing and the stressors involved (Chang, Hancock, Johnson, Daly, & Jackson, 2005). In a current literature review the authors surmised that the key factors which lead to stress in nursing were that it's a highly demanding job, with limited support, rapidly changing environment and work circumstances and a shortage of human and fiscal resources (Chang et al., 2005).

One nurse, who had been working in child health care for over fifteen years, shared her experience of working in a setting similar to the OAC, several years ago:

*And because I've been in Child Health a long time and we did drop-in and we saw double the amount yeah, in local church halls and things for years. And it become such a pressure on the staff that they changed it to having the appointment system...I think that you're going to start to have a burn out of staff because of the constant pressure. Because you have heavy caseloads in home visiting, heavy loads in breastfeeding clinic and also in the drop-in [OAC] clinic (CHN A5).*

This comment suggests some concern by the child health nurses that the stressors may become too high and lead to staff resignations, burn out and a reduction in the quality of services. The nurses demonstrated that they managed their workload, not only in the OAC, but across all aspects of their role in child health care. State-wide, Queensland nurses have identified heavy workloads, high work-stress and difficulty completing their work in the available time (Hegney, Eley, Plank, Buikstra, & Parker, 2006). Similar issues have been identified by the child health nurses in this study, not only relating to their work in the OAC, but across the spectrum of their roles within community child health nursing.

### **5.12.6.2 We can't get people**

The *We can't get people* category suggests that the workloads were also heightened by the lack of qualified child health nurses, and this affected the everyday experience of working in the OAC for the nurses. There was also no staff sick relief staffing provided within the community child health team.

*But I know when I've worked at Goodna I have found it very difficult to keep up because like that experience, where my back up nurse was sick and the lactation clinic nurse was sick and yeah, it was pretty full on (CHN A6).*

The nurses discussed the impact of the limited child health nursing staff available to fill vacant positions, and the impact this had on those nurses still working and ultimately the way services were delivered through the OAC:

*There's just not enough of us! There's a shortage of nurses state-wide, not just here (CHN C2).*

Overall, the nurses stated that they enjoyed working in the OAC. During the focus group a collegial spirit was apparent as the nurses described these sometimes stressful experiences. As one nurse aptly said "*Well, there's an old saying, 'nurses can do anything'*". Therefore, despite the often busy nature of their work and the high case loads overall the nurses enjoyed working in the OAC. However it is also important to consider the impact of continuing high stressors at work, and ways in which this may be effectively managed to improve both service and workplace quality.

### **5.12.7 Time**

The sixth key theme which emerged from the participants descriptions of the OAC was centred on the notion of time. Within this theme five categories were present: *10 minutes is enough, Waiting..., I feel too busy to give my best, Effects of busyness on staff, and In the beginning more time would be good.*

The OAC did not allocate a specific time to each client and the time spent with each parent was primarily dependent on the time it takes to address their concerns.

### **5.12.7.1 Ten minutes is enough**

The *Ten minutes in enough* category suggests that for many clients the expected ten minute consultation was sufficient to meet their needs. As there had been no previous published research undertaken investigating open access child health clinics, qualitative data which described the everyday detail of the service was valuable to assist in service planning and provision. On average the nurses stated that generally ten minutes was enough, however the quality of this time varied from nurse-to-nurse and client-to-client. This description was made with a level of sarcasm, as this nurse described the rudimentary process of the OAC.

*It is hard to pick up in ten minutes and it can be less than ten minutes quite often. In ten minutes you've got to make 'chit-chat' to make them feel at ease, you've got to do the actual weigh in, talk to them, find out how they are, write it in their book, ... in your book you've got to write your record in what 2cm x 1cm, rectangle for feeding um and keep good records, and then you've got to see them off (CHN B3).*

As very little published research exists on service usage and needs of parents, this finding will contribute to service planning and staffing as it describes a rough time-frame for child health surveillance consultations.

Further, one nurse shared how the busyness nurses' experienced put pressure on the staff, especially when the client shared complex issues:

*I myself feel, I sometimes feel pressured like yesterday, we had twenty-nine mothers come in – twelve of them were new born babies and every one of them had problems...And with like that drop-in yesterday too, even though that was a lot of pressure on us, that was still good for the mother, to be able to drop-in fairly quickly, and got all the full attention, at least she could get a bit of a guideline to see how things were going (CHN A5).*

To add context and transparency to my own thoughts regarding these experiences, I would like to share a segment from the journal noted directly after this focus group.

*... I have worked in very busy drop-in clinics in the areas under investigation in the past, and didn't feel that it was unmanageable, especially compared with working in*

*the acute setting! I believe that this is due to the age and personality of the nurses sharing these experiences. The two nurses who shared this are in their mid 60's – early 70's. This does not negate the value of their feelings, however maybe does indicate the need to place staff where they flourish and where they are suited, rather than consist solely with organisational convenience.*

Time is one of our most valuable resources, and as such much literature has been published on time-management in nursing (Ashurst, 2008; Litchfield & Chater, 2008), and waiting times to see health professionals and the effects of a lack of it (Chang et al., 2005). Bowers, Lauring and Jacobson (2001) assert that time (or lack of it) is integral to how nurses' work, feel about their work and the outcomes this work has for patients. Similarly, the nurses working experiences of the OAC reflected many of these elements of time, with a lack of it effecting the quality of the service provided through the OAC according to their perception.

The perception of how busy the clinic was, and the subsequent pressure this caused the individual nurses varied immensely. In Australia between 2003-2007, the average age of registered nurses increased, and the average age of those working within Child and Family Health, was higher again (average age 46.3 years) (AIHW, 2007). Whilst the experience which is gained through years of nursing is highly valuable, the pressure of reduced time frames and high client-nurse ratios need to be carefully considered when allocating staff to particular clinical areas. Similarly, newly graduated nurses also find time-management in busy nursing settings one of their more difficult hurdles to cross (Litchfield & Chater, 2008). Recently, the United Kingdom has introduced new systems to assess what community health nurses spend their time doing, and solutions to reduce time spent on unnecessary tasks (Duffin, 2009). It has been reported that this process has saved around 5 hours a week of community health nurses time, which can then be used to enhance the quality of client care (Duffin, 2009).

While the nurses clearly felt the pressures of workloads within limited time frames, remarkably the clients did not directly perceive their stress or pressure:

*I think that you're aware of it, but I'd ask it anyway. I mean I waited my turn so I think I just ask, and sometimes you think that the clinic nurse might give you a short answer because there are five people waiting but they don't (Client A1).*

*...they don't feel the pressure...Yeah, so at least they're doing the right thing. And if you've still got more questions they will continue on offering more solutions so I think that that's really good (Client A3).*

Therefore, whilst the nurses may have felt pressured by the time available, the mothers did not perceive that this impacted on their care. This suggests that the nurses managed their time excellently and this did not negatively affect the perceived quality of the service for the parents.

#### **5.12.7.2 Busyness**

Further to this notion of time constraints, two nurses shared their concerns regarding the quality of the service they could provide, within the OAC environment, and felt “too busy to give their best”:

*I felt that was really unfair to those mums who are coming in and open up and wanting to share a lot of information about, but we did not have the time and we had to do the best we could with them and encourage them to make an appointment and that appointment may not be till March [one month away] (CHN A5).*

This was further substantiated by another nurse's experience:

*I did have one mum who presented at Esk one day and she'd moved from Ipswich up to the country and um I think that her baby was about seven months old. And um she'd said that she'd never really enjoyed her baby and I asked her where she'd been going and she'd been coming into Ipswich to clinic...but she said she just felt she couldn't talk because the nurse was always busy (CHN A6).*

In addition to this, several nurses drew attention to the fact that time constraints in the OAC may affect the quality of the rapport with clients. As one nurse explained, when there were many clients waiting to see her:

*And that's where you've really got to be open and friendly and hopefully not too rushed and pushed to get that rapport instantly with the client. And if you don't, well you don't. And you just have to learn to next time do it*

*better, try again, explore issues. And a lot of it depends on how busy we are, whether we've got the time or the energy...you know you've got 30 others you've got to see quickly and then all of a sudden they say 'no, I don't like doing that' and you grind to a halt and oh that was the wrong way to handle that (CHN B2).*

Or, in which questions the nurse may choose to ask the client. This statement by one of the early intervention specialists perceived that the nurses may be reluctant to ask questions if they are unable to deal with the consequences of the question due to the other parents waiting. However, this issue was not discussed by either the nurses or the clients:

*I think that sometimes people are reluctant to ask the questions. Because ... if I go there this may open a can of worms, that I'm not able to deal with right now. I've got another ten people coming through or how do I talk about this in this open space? (EIS 1).*

The impact of limited resources, both human and fiscal, will inevitably have an impact upon the quality of services provided, for instance in taking time to be intuitive to client cues and asking meaningful questions as to their well-being.

However, the clients did not always perceive that nurses felt pressurised. In fact, it was often the opposite. One client described how:

*She [the nurse] makes you feel like you're the only person to see, and there might be ten people around. She may say 'your hair looks great today' and you're like 'oh, thanks!' Just those little things make you feel like someone's taking an interest in you (Client A1).*

Nurses have an incredible ability to manage difficult situations with humour and kindness. This mother's experience is a credit to the nurses working in the OAC.

Overall, the nurses were concerned that the mothers and babies alike were affected by the busyness of the OAC and they were specifically worried that they might miss detecting a developmental delay or some other issue with the baby. It has been reported that around 25% of children in developed countries are vulnerable to developmental problems (Oberklaid, 2000). Oberklaid (2000) discussed the multiple issues around developmental assessment of children and infants. Difficulties with developmental screening have been identified, and the



preference now is for surveillance through partnership with the parents. This has been demonstrated to be the most effective form of developmental assessment (Oberklaid, 2000). This process of partnership with parents was employed within the OAC. No literature was found on the impact of child health nurse time and developmental assessment of infants and children, reflecting the need to conduct further research to evaluate this area of child and family health work.

Additionally, the nurses discussed their experiences of how they had managed the increased attendance, and theorised as to why it was getting so busy:

*I think that it's got bigger because of the early discharge. From the hospital, because the mothers are going home very early, and they might have one or two visits from the early discharge nurse and then they're encouraged to come in, aren't they? (CHN A6).*

Over recent years, the length of stay in hospital for mothers with newborn infants has decreased dramatically. While a recent Cochrane review found that early discharge does not have negative effects on breastfeeding rates or maternal depression (Brown, Small, Argus, Davis, & Krastev, 2009), there remains a lack of good quality evidence around understanding the actual impact this has on adjustment to parenting. Furthermore, how this early discharge then effects postnatal services, namely community child health, to manage the subsequent dramatic workload increase has not been fully investigated.

Therefore, when the OAC clinic was busy, the nurses voiced concerns that the family did not receive adequate care. However, the mothers did not identify this as a significant issue for them or perceive a decrease in the quality of the service.

### **5.12.7.3      *Waiting . . .***

As the OAC was an appointment-free service, parents had to wait to be seen by the child health nurse. Many of the participants shared their perceptions of this waiting experience. Therefore this category demonstrates what the waiting process meant to both nurses and clients. One nurse, who ran a very busy baby clinic within a pharmacy, commented on the waiting process:

*...but it didn't seem to worry them... I think that they are used to waiting for doctors, hospital appointment um and things like that. They also know that they might be in and out in a couple of minutes which isn't a long time but they also know like one mum has been coming to me for a long time and if we need to spend time we will (PBC 2).*

One mother did share however, her frustration at having to wait, especially with a toddler:

*I s'pose I found waiting around frustrating, 'cause I'd have him weighed, I found it very frustrating 'cause to wait an hour, and obviously the nurses are working their behinds off trying to get there, but um they'd open the latch and run away or whatever (ABA 1).*

Conversely:

*I actually get quite a comfortable feeling, like I think it's a really nice set up, it feels relaxed and um from what I've observed mums, like even if we've got two nurses out there seeing mums there are mums waiting. The mums waiting feel quite comfortable to wait like I think it really is a really nice space. It can be, I guess it can be a bit crowded sometimes um just because of the physical set up um but mums seem quite happy to kind of be able to wait, and I've seen mums sitting waiting chatting to each other um and I guess even the toddlers, I guess the toddlers can get in and have a bit of a play with the toys out there (EIS 3).*

Similarly, the nurses described some of their observations of mothers waiting. A nurse, who regularly worked in the busy Ipswich clinic, did not perceive a problem with waiting times, but rather has observed an advantageous use for that time:

*...I'm averaging about 80 mothers a week in the drop-in in XXX [clinic location]. And I have never had that experience where somebody was agitated because they had to wait. Because they're so familiar with the routine of the clinic and they actually do enjoy speaking and talking and interacting with the other mothers (CHN A1).*

Another nurse described how she gave the parents an option of booking a scheduled appointment if they preferred not to wait in the OAC:

*And the ones that do wait in Open Plan, are usually quite happy to wait, because they do like that interaction and socially. Yeah, and the ones that don't like waiting then they have the option of making an appointment (CHN A3).*

In general, clients do not perceive waiting to be problematic:

*When I'm sitting in the chair I don't feel that, not feeling c'mon hurry up (Client A3).*

*You're usually having a chat with someone anyway. I've had one day where I've come in and I was strapped for time, but I knew when I came in, I thought well if there's too many people well I'll just go. And that didn't worry me. So, it wasn't because, I didn't go out in a huff or anything like that I didn't have enough time, so I'll come back another day (Client A2).*

Therefore, the clients attended with an expectation that they may have a short wait to see the child health nurse. Due to the value they placed on this consultation, the wait was generally not perceived to be a problem unless they had a toddler also with them. In fact, the wait was seen by many mothers and nurses as positive opportunity for socialisation. To ensure clients who found the wait undesirable, it is important that the child health nurses inform all mothers that they have a choice, to attend a scheduled individual appointment or the OAC.

#### **5.12.7.4      *In the beginning, more time would be good***

This category suggests that the OAC did not provide adequate time for some first-time mothers to have all their questions addressed or needs met. One mother shared her experience of accessing an appointment service for child health care (private, fee-paying). First-time mothers identified that more time during the early weeks would have been beneficial:

*Yep. I really don't, I mean now that he's a bit older I don't mind that there's half a dozen other people in the room. But to start with I wouldn't have been confident to ask, he's not feeding properly, he's crying and all the rest of it, and with half a dozen other mums here with bubs at various stages and that sort of thing (Client A2).*

One nurse also identified that it was the new mothers with new babies that often took more time:

*It's the new ones that take the time (CHN B3).*

The early weeks of parenting (especially for first-time parents), is a time when support has been widely identified as invaluable and necessary (Mercer & Walker, 2006). This raises fundamental questions about the quality of the OAC in supporting first-time parents in the early weeks of their infant's life. As the primary purpose of the OAC is group-based child health surveillance, the OAC has limited capacity to provide effective support also for all the psychosocial needs of parents. Specially designed new parent groups have been researched within Australia and found to play an important role in child and family health services, specifically in the areas of mother-to-mother support and psychosocial support (Guest & Keatinge, 2009; Kruske et al., 2004). Furthermore, the development of an early parenting group to run alongside the OAC would enable more time to be spent with first-time mothers, and an opportunity provided for the mothers to develop more meaningful relationships with each other. This would also relieve a significant proportion of the workload from the child health nurses working in the OAC. The proposal of a specific group-based service for first-time parents is discussed further in the recommendations of this study.

### **5.12.8 The social aspects of parenting**

The participants from all three groups (nurses, clients and other key stakeholders) shared experiences around the social aspects of parenting. They experienced significant loneliness as a mother, and this has repercussions for their enjoyment and satisfaction with parenting. What this social aspect reflects is the importance of health care providers facilitating connectedness between mothers to foster the development of meaningful peer relationships. This mother reflected upon feelings of loneliness which she felt during her early parenting months:

*It can be very lonely. You look at the phone waiting for it to ring, well for me it was like that anyway (Client A1).*

For many mothers a key benefit of attending the OAC was that they maintained some 'adult contact', had a reason to get out of the house and meet new people. Furthermore, the current social patterns in Australia, especially south-east Queensland are quite transient, with many

families living away from extended family and support networks (Barnes & Rowe, 2007). As this mother described:

*I know initially, I'd stopped full time work, I was used to going out every day, because it's the time lag I don't know. I mean I really wanted contact and being fairly new to XXX [town where study conducted] as well, um yeah I also wanted to meet other mothers (ABA 2).*

As mentioned, many of the mothers identified that a real benefit of accessing the OAC was to get out of the house and meet other mothers:

*You come in here and you meet new people, which means you get new friends and they at least share some of the experiences that you've gone through. And you can actually share those experiences and help each other through them (Client B2).*

However, whilst this was identified as helpful, the mothers mostly stated that their conversations with other parents during OAC were light and general:

*You might ask more about development stuff, like observe what they're doing there on the floor, yeah but not deep and meaningful with them (Client A2).*

Some mothers identified that they did not engage with other parents whilst attending the OAC:

*No, not really when you're here to drop-in and weigh (Client C2).*

During one of the early parent focus groups, one mother commented on the actual focus group itself, and how something similar to it, with a consistent group of mothers, would have helped her as a new parent:

*I would LOVE this sort of thing when bub, straight after, I would have loved it. Like you were saying going to a playgroup at a young age, that would help...And like you were saying, picking who you want to socialise with, I don't socialise with a lot of people and I tried doing the mothers group but I can't stand the women that all they did was bitch about their husbands (Client A1).*

Another group also commented on the benefits of having a consistent group of parents:

*I think it would be good to see the same people and you'd get to know the different child, and you wouldn't be asking the question of how old they are because you already know (Client A3).*

One paediatrician had also noted, within his practice, that many young women were socially isolated:

*...frequently some of these young mothers in particular don't have any networking, like family back up... yeah, they can be quite isolated even though they're in the community...With the social issues, just social issues... I think the if they're young and their friends are still out enjoying themselves, so just maybe more work going into developing networks (Paed 2).*

Similarly, the pharmacy baby clinic nurse also observed this:

*I just feel that uh in this day and age a lot of mum's don't have people that will actually listen to them and they become very confused. Sometimes all they need is somebody to spend ten minutes just listening to them and uh giving them a bit of support rather than um negativity support that they get (PBCN 1).*

Some health professionals working in child health care had initiated this contact on behalf of parents, either through a phone call, linking them to another group, or through the New Parent's Group:

*When I started out with the mothers group we actually all connected, and turned it into a playgroup. Now there are two ladies that I see every week and I would die without them. You know comparing, you don't mean to compare, but mums with kids the same age, always wondering how, you know how they're going (Client B3).*

However, one paediatrician would have liked to see it taken one step further, in an informal way:

*At least we're getting to a proportion of the population, but um maybe a bit more time just to sit down and have a cup of tea with someone, doesn't have to be a social worker, just the time to sort of have a chat...Because I*

*think that, at present its just a fairly official sort of visit, you know, to weigh and measure, what problems do you have, you may not find the real issues*  
(Paed 2).

One mother also shared that once she had ceased breastfeeding, her choice had minimised her support networks:

*...because I chose to stop breast feeding, I couldn't go there [lactation clinic] anymore. So it was more of, they were more a social support as well*  
(Client C2).

Overall, these descriptions suggest that social isolation is a common theme amongst mothers, and is significant because it can affect their mood, support networks and potentially reassurance with their parenting. The key emotion which many mothers reflected upon during the focus groups was loneliness. Loneliness is generally considered a negative emotion, usually associated with social isolation and sadness (Playfair, 2010). Many mothers participating in the focus groups shared their feelings regarding the immense lifestyle change associated with new motherhood, compared to paid employment. The OAC provided mothers with some adult contact and social experience. However, a more structured, consistent group might be helpful at the beginning for some mothers, as it would facilitate the development of more meaningful relationships and consequently address social isolation and the loneliness experienced by many mothers.

### **5.12.9 Groups**

The OAC was a group method of child health surveillance. It was informal and dynamic, with different families accessing the service each day. The *Groups* theme discusses the OAC group as described by the participants, and the effects of group care.

#### **5.12.9.1 The OAC group**

The OAC group is not a traditionally structured new parent group. Rather it is more informal, with the flow of parents varying from day to day, depending on client needs. The dynamics of this group were described at length, particularly by the child health nurses. As this nurse stated:

*...there was ten ladies already waiting in the room with me and I walked in and say, well they were more than happy, even though there was already ten there, they just spoke amongst themselves, lovely. Like a get together... I found it a very pleasant environment because I could hear their small talk going on and I thought that was lovely. Even after their baby had been weighed, I heard them asking how's your baby going? Very nice. A mother would come in, and they're 'Oh, you're baby's grown' and they just happily talked, they were a lovely group of mothers no concerns. There was fathers there as well. And I worked through that group (CHN A8).*

Another nurse, with more than twenty years' experience in Child Health gave this lively description:

*They can actually see that mums are sitting down and playing with their babies, so they can see that sort of relationship that they may not have been brought up with in their family. And I think it's light and airy. I think at both clinics we're always talking and hopefully it's a fun time with all the mums there, with babies and reacting. And it's also education sharing... (CHN B2).*

Therefore, the key purpose of the OAC is child health surveillance, yet as it is a group approach many participants experienced the benefits of group care also through attending the OAC. The OAC was described as a place where the parents could meet, and the consequence of this is the opportunity to network, build meaningful relationships and share experiences of parenting with peers. One nurse, stated that this was especially evident in the newer areas of the geographical location where the study was conducted, which many young families were moving into:

*...especially at XXX and now XXX [location of OAC], because they're new developments, they're often younger people and um, they'll realise that someone lives close to them, or something, they form a group (CHN C2).*

There are several studies supporting the use of group programmes with families to improve health outcomes (Barlow & Coren, 2005; Barlow & Parsons, 2003). Rice and Slater's (1997) study demonstrated that group methods of child health surveillance delivery were as effective as individual care in low risk, middle class families. Similarly, in supporting maternal psycho-



social health, a review of the literature suggests that group programmes are very effective in the short-term, however there is limited evidence evaluating the effectiveness of programmes long-term (Barlow & Coren, 2005).

Therefore, the OAC was described as an informal group of parents, which varies day to day, where social contact does occur between the parents and their families, however is not structured as a traditional new parenting group. This everyday experience of the OAC suggests that many families feel socially isolated and enjoy the group approach due to the adult interaction and benefits of peer support they receive when attending the OAC.

#### **5.12.10 Environment**

The environment within which health care occurs plays a significant role in the way clients interact with and accept a service. For instance, a noisy and chaotic environment may distract from the interaction between the nurse and parent when exchanging important information. The theme of *environment* entails the physical space within which the OAC was conducted, and includes three categories: a positive environment; the waiting area; and, the back room.

##### **5.12.10.1 A positive environment**

Lively descriptions of what the OAC (at both the urban centres) looked like were provided by many of the participants. A child health nurse, whose primary role within the community child health service is to work in the OAC stated "It's a positive environment". This description means that the environment itself added to the positive experience that many parents shared. Similarly, other nurses gave descriptions of the OAC environment which painted it as an open, light space:

*At Ipswich it's more diverse, so you've got a group of ladies chatting, having fun, da da da, about the babies, and the normal stuff that we want them to talk about. Yeah, and Jamie might be talking there, and somebody's talking over there... (CHN B2).*

This perhaps is in contrast to other health care environments where the atmosphere may be more solemn, intense or negative. As Community Child Health Services are a voluntary

service and parents attend of their own accord, fostering a welcoming, warm environment was perceived as important. As discussed earlier, the OAC may be a client's first contact with CCHS therefore a good first impression may encourage continued engagement with CCHS and then ultimately improved support and health care.

#### **5.12.10.2 The waiting area**

More specifically some participants (namely the child health nurses) discussed the actual layout of the OAC and how this affected the operation of the clinic. Comparison was made between the three of the urban OAC centres. Whilst one of the centres was not specifically explored in this study, it was of interest in terms of comparison between the centres under study. This category was explored only by the nursing staff, and did not emerge from the other participants' focus groups or interviews. As this nurse stated:

*Plus the waiting area at XXX's [clinic location] not conducive to people talking in that area, whereas at XXX [another clinic location] the chairs are in an open room and in a circle (CHN A3).*

The nurses commented on the benefits of an open space, with distance between the parents' waiting area and the consultation area to maximise privacy and encourage socialisation amongst the mothers:

*The space down there isn't conducive to having a lot of parents. Which is what I've, I've only worked there a couple of times, but that's what I've found, you can't have a lot of parents in there (CHN C3).*

The experience of these nurses reflects the importance of service providers investing in a clinic building or space which will foster interaction and information sharing. The aspects of this space that were identified as able to enhance the OAC environment according to the nursing staff were: an adequate distance between the client waiting area and the consultation station; the room to place the seats where the parents were waiting in a semi-circular fashion; good air-flow and light; and a safe area so toddlers and more mobile infants were enclosed. This information is important if services chose to replicate the OAC.

### **5.12.10.3 The back room**

As the OAC was conducted in an open-plan space where information was shared in a communal setting, the nurses who participated in this study identified that this was not always the best area to conduct a consultation. They described the value of having a private consultation area, known as 'the back room', where the nurse may take a client and continue the consultation if required. As this nurse stated:

*That's really valuable. Because I have been in that situation where I've got twenty mums waiting and one mum that's crying and um can't deal with that there...But now we've got the two nurses there, so if someone's upset we can, we're lucky 'cause we've got the three rooms there, we can take them into the breastfeeding room and close the door and talk to them while the other person deals with open plan [OAC] (CHN A3).*

Therefore, based on the nurses' actual experiences with clients, the value of having a private consultation room within short distance to the OAC was valued and important. Clients were taken to the back room for a variety of reasons including; parental distress; parental request to discuss something in private; or discussion of a sensitive issue such as cracked nipples or haemorrhoids.

As discussed earlier, the average length of consultation with a client in the OAC was around 5-15 minutes. However, if a parent-nurse consultation occurred in the back room, it appears this consultation became longer, simply due to the environment, as this nurse described:

*...whereas ... if you're in that back room, the mums do seem to divulge a lot more because you're sitting down with them. And often you do spend a little more time with them, rather than when you're out in the lounge area (CHN B1).*

This increased privacy, and not being able to see the other mothers waiting, may impact on the amount of information the mother discusses. However, the mothers interviewed did not explore this issue in their focus groups, therefore it is unknown if this extra time was of value or not to clients.

### **5.12.11 Confidentiality**

Due to the open group setting within which the OAC was provided, information discussed between the clients and the nurse was not completely private. Each client was aware of this, and the mothers participating in the focus groups explored this context. Three key categories were identified: I overheard you say; the sensitive stuff; and, I'd see my GP for that.

#### **5.12.11.1 I overheard you say ...**

The category *I overheard you say ...* reflects the experience of participants overhearing and then contributing to one-another's consultations. Due to the group-based and open setting of the OAC, the conversations held between nurse and parent during a consultation were heard by other parents waiting to be seen. This 'open information' setting generated discussion between the focus group members at length and generally was not considered to be a negative aspect of the OAC, but rather positive:

*I think it's actually good. I mean I've had cases where mothers have been asking me, say about sleep issues and I've given them some advice and another mum's been listening and she goes "I did that and it worked!!" Yeah, and I'll try and use peer support to try and encourage each other (CHN A3).*

As discussed earlier in the chapter, peer support has been identified as highly valuable to parents. The nurses perceived that by another mother affirming their advice, the information was more credible and more likely to be accepted and used. Therefore the group environment lent itself to other group members participating in the consultation, not only the nurse, but also the other parents:

*When it comes from another mother, that's really interesting. Like I had a consultation once, seriously I was actually giving some advice to this mother and another mother came up to and she said to this mum exactly the same thing has happened to my baby and I fed her prunes and she was fine after that, or whatever it was, ah, so you could tell that the mother actually liked getting that back up from the other mother (CHN A7).*

Whilst these two nurses had a positive comment made by another mother during the consultation, this was not always the case. One nurse shared an experience where she was trying to discuss a concern about the infant's health and another mother interrupted the consultation stating that her infant had also done that and not to worry:

*But people are listening to you ... And you're trying to give advice and you've got someone saying 'Oh, my kid did that, that's fine!' You know, and they won't stop (CHN B3).*

This group sharing can certainly challenge the containment skills of the nurse! However, this was not identified as the norm and according to the nurses happened only on seldom occasions. Thus one advantage of open information was that other parents sometimes supported the advice of the nurse, confirming the perceived validity of the information for the mother.

Whilst many of the child health nurses participating in the study enjoyed the OAC shared information environment, some did not. They identified that for routine information the OAC was fine, yet when more complex or sensitive issues arose the OAC was not the best environment for this consultation:

*I know with just routine things, constipation – they hear the management that's given and they ah, they say yeah I heard you talking to the other mother about that and um I do that, or I can do that but there are some other issues when it comes to confidentiality, I think that the open plan is not the best way to go (CHN A5).*

Due to a variety of population groups accessing the OAC, clients were often exposed to different parenting styles, as this nurse stated:

*... but sometimes it works very well for some of the middle class mothers and they see what goes on in the other side of the world (CHN B2).*

This "other side of the world" was further described by this mother who re-told a story she overheard in the OAC about a mother currently living in a caravan while waiting for more permanent accommodation:

*...a woman who, [said] we don't have a house at the moment cause we're waiting to move into a house, and we're living in a caravan and we have*

*three children and my husband wants another one but I think his relatives are abusing them, her children, her own children. And oh, it came up before, the police have been involved, and it's just like, full on! (Client C2).*

It is unlikely that in this situation any health benefit would arise in overhearing another's difficulties, but as discussed earlier in the chapter the collegial support offered by the parents between each other has been identified as most helpful. This mother's experience was in isolation, and neither she nor any other mothers who participated in the study had experienced this type of situation. Rather, another mother in that focus group, who had attended the OAC with three children, responded:

*I've never heard anything like that, like most of the time, someone comes up to say, hey I've got this problem and it's like 'hey, I've got that problem too!' oh yeah, that's a good idea, like constipation, it's like 'oh I should try that' (Client C1).*

The mothers also identified that if they overheard something, it could be of real benefit to them, as this mother explained:

*And usually there's one thing that's been hassling you...someone else mentions them or you forget all about them, cause I've done that a few time, go in for one thing that really, you want to focus on, and something else you need to know too but you don't remember it, and someone else mentions it, and you remember it (Client C1).*

Thus, the meaning that these experiences may hold is the value (rather than the concern) of shared and open information. The Australian Nursing and Midwifery Council (ANMC) code of professional conduct for nurses in Australia (2008) outlines the value of ethical management of client data and information. This involves respecting individual's confidentiality and privacy and that personal information may only be shared with permission from the client (ANMC, 2008). Whilst the parents and nurses both described their experience of overhearing information shared in the OAC, this was most often perceived as a good thing, although sometimes could be problematic for the nursing staff, if parents offered a contrary opinion.

### 5.12.11.2 *The sensitive stuff*

The experiences of the participants revealed interesting perceptions of the parents' ability to raise sensitive issues with the nurse in the OAC. The first issue was the environment of the OAC. Two early intervention specialists expressed concern during their interviews about the noise levels in the clinic, specifically from the air-conditioning system in the building.

*I guess the thing is at XXX [location of the OAC] is that there is a lot of noise, it's quite a noisy area and that I wonder about that sometimes 'cause I wonder I guess for mums expressing some of those more sensitive issues confidentiality, 'cause with the air-conditioning / mechanical noise, whether that means that they've got to talk more loudly and therefore feel not quite as comfortable (EIS 3).*

The fact that parents would need to ask their question in a loud voice at times is certainly concerning, especially if they desire some discretion. Much of this 'permission to share' is likely based on the relationship the parent has with the nurse. For example, if the parent feels secure enough in their relationship with the nurse they may ask speak with them in the back room, yet if this relationship is not established the environment may impair openness and thus parental needs may not be addressed. As stated by this early intervention specialist with many years' experience of working with families:

*I think it's a really difficult one, because I think there would be lots of clients, quite a number of clients who come in where the nurse would be concerned ... is open plan giving them permission? Is this environment giving them permission to go there? Um, you can ask the question, and the parent is no I just want my baby weighed you know, no, no, no it's not an issue it would be quite different / difficult to engage in that environment. Um and I guess a lot depends on whether the families that come in have a relationship with the nurse (EIS 1).*

Therefore, the relationship between the nurse and the client may impact on parents' feeling they are able to disclose information. Interestingly, when this relationship is established the nurses demonstrated an intuitive ability when a parent presented, as described by one nurse:

*If I'd missed the cue, she started talking at the beginning about the baby, ra ra ra ... And then I touched her (pause), and said 'how are you feeling?'*

*And that just leads in. And I think somehow we get a lot of training in how to deal with parents and not just build 'rapport', but to take those cues....*  
(CHN B2).

Multiple participants, from the various groups identified this nurse-parent relationship as crucial to the effectiveness of the OAC and the consultation process within such. If this relationship was not secure, it was hypothesized by multiple health professionals interviewed that the OAC consultation would become more routine, and perhaps miss the "real issues" as this paediatrician commented:

*Because I think that, at present it's just a fairly official sort of visit, you know, to weigh and measure, what problems do you have, you may not find the real issues* (Paed 2).

Interestingly, when the parents discussed the issue of sensitive information sharing in the OAC many stated they had not experienced that situation. Yet, one mother supposed this:

*Well I haven't felt that way, but if I did I might wait so I could go into the room. So whoever's in the room, and say there's a couple of issues I'd like to talk to you about* (Client C1)

This is likely reflective of the purpose of the OAC as described by the participants - a good 'first-base', a place to get parental support and check on the baby. Many parents did not perceive the purpose to divulge sensitive issues and alternately chose another service if this was what was required. Similarly, a mother commented:

*... and I'm here for him [the baby] not for me* (Client C2).

Whilst the health professionals managed sensitive information with discretion and privacy, the parents did not often identify the OAC as a place where they would disclose such information, and this did not appear to be a problem for them. While it was theorised by some health care workers that the OAC did not provide permission to explore sensitive issues, parents did not perceive this to be the purpose of their visit to this service and subsequently not a disadvantage to this style of child health surveillance.



### **5.12.11.3     *I'd see my GP for that***

The mothers identified that they understood that the consultation was in the open, and would therefore seek an alternate service provider to discuss more private issues, such as their GP.

*I suppose if you really needed to, you could ask to talk outside you know, but I feel more stuff like that I'd go to the doctor (Client C1).*

And,

*Yeah, if I did have a problem I probably wouldn't bring it up here I'd see my GP. I don't think I would have thought about bringing up something like that here (Client A3).*

These mothers identified that they were 'keepers' of their own information and understood the appropriateness of disclosure in an open environment. They clearly understood that the information was shared. This was demonstrated through their choice to see an alternate service provider to meet that need, if required. Another mother shared her experience of overhearing a mother with a sensitive and difficult parenting issue:

*And I find like being a mum, if someone had a problem, you would never judge or ... it's their own business (Client B4).*

Traditionally, nurses have perceived clients as passive care recipients (Baytun-Lees cited in Sahlsten & Lindencrona, 2005). However, a *partnership* model (Davis et al., 2002) is now promoted, with the client a participant and decision maker in their own care. Thus, the clients participating in this study did not have significant concerns about confidentiality or open information sharing. Rather, through use of their own decision making ability, they would choose to access an alternate service for privacy, if that was what they required. Overall the element of the OAC and its group nature is more about clinical discretion and ethical management of client information than the blanket idea of confidentiality, and that all nurse-client interactions must be private and confidential in the traditional sense.

### **5.12.12     *Documentation***

The twelfth theme which became clear specifically from the child health nurses experiences was the documentary aspect of the OAC. The child health nurses working in the OAC shared some of their experiences of working with the current documentation, procedures and forms.

Considering the theme of documentation, nurses described three categories: *having the chart available; when somebody else comes in; and, I had no recollection of saying that.*

#### **5.12.12.1 Having the chart available**

During the operation of the OAC, the nurses stated that they utilised a standardised clinical pathway to document the baby's weight, feeding, development, output, sleeping and other general child health issues. This OAC clinical pathway document was kept outside the rest of the client chart, in a filing cabinet located in the OAC during the opening hours of the clinic. The whole chart was generally unavailable to the nurses, as they did not know in advance which families would attend the OAC. Therefore, if the nurse did not know the family and infant well, then the OAC clinical pathway was the only source of documented information available to them. If this documentation was not completed thoroughly by the previous nurse, the parent was often asked to "re-tell their story" so the nurse could make a current assessment of the baby's health. Naturally, this process was problematic for both the nursing staff and their clients. Furthermore, the nurses stated the document itself was not well designed, and "only one line" was provided to document each consultation with the family. One nurse stated this limited space prevented her from becoming "too verbose" in her documentation, however participants generally agreed the space was insufficient.

Subsequently, this limited documentation space on the OAC clinical pathway appeared to impact on the quality of information provided from nurse to nurse, or perhaps another health professional seeing the family:

*I've filled in a couple of times down at Goodna and so they'll have, or you'll just have to go on is a note, like a little tiny box, where you're not quite sure what's gone on before and I think that's a bit hard sometimes. Because you might go, oh something should have been done about this, and it probably has been done but it's not written (CHN C1).*

*...you need it [that is being able to read it], because you're not the only one, you've got the person before you, and you need to know what she wrote. You need to know, because you don't want to go against someone else's advice. You know it alerts you to a problem (CHN B2).*

In contrast to this, when the OAC first commenced, the whole chart for each family was available to each nurse. It was retrieved by the administrative staff when a parent presented. One nurse was working in the OAC at this time and shared her preference for that system:

*...it was really good having the whole chart...Especially when I hadn't seen them before, because you get them up, even when you haven't seen them before, you've got it all there (CHN B3).*

The nurses' experiences with the current documentation were a significant barrier which may have affected the quality care within the OAC. Clear, precise and honest documentation is essential within nursing practice. It provides an avenue for communication between service providers regarding the client's health status, progress and current care plans (Westrick & Dempski, 2009). Furthermore, it serves as a reminder and account of actions that were taken, and is essential if legal issues arise.

The nurses identified a need to review the current documentation procedures in the OAC, with concerns around ability to document effectively in the limited space available on the OAC clinical pathway.

#### **5.12.12.2      *When somebody else comes in***

Nurses expressed concern regarding the limited documentation pathways available to write client care plans and client histories. It was expressed as a potential difficulty when a different nurse saw a client without an adequate background or family history being available:

*...sometimes you can get that conflict, when somebody else comes in and doesn't know all that background and you know it does put a bit of pressure on the mother ah what's wrong with this baby, when you know the background to the family (CHN A5).*

This nurse believed that *time* was what prevented accurate documentation:

*And then if you do identify a problem then you're dealing with that problem, furthermore and then you should really be documenting that problem. 'cause, if you don't write it down then someone else comes along, and sees that problem and ask and that's a bit awkward. So you leave it till*

*later, but that's not very good, and if you do it you keep a mother waiting*  
(CHN B3).

This lack of communication between the nursing staff was not unique to this service. Nursing literature has explored the impact of nursing communication and the effect this has in the areas of professionalism, client care and outcomes (Apker, Propp, Zabara Ford, & Hofmeister, 2006). When nurses clearly communicate, provide timely information for clients and to other health care team members, and coordinate care effectively, client outcomes are significantly improved (Apker et al., 2006; Wade, 1995). The participants in this study identified the documentation as the essential link in the communication lines, and due to the poor layout of the clinical pathway, communication was impaired. According to the nurses the time to document also had a significant impact on the quality of client information written down and transferred between staff.

### ***5.12.12.3 I had no recollection of saying that***

During the focus groups in this study, the nurses shared experiences of 'Chinese Whispers' and how often the information or advice they provided to a family could be misconstrued. Clear documentation was identified as effective in managing this situation:

*And I'd said something which I have no recollection of saying and when I pulled the chart and the woman had complained that something that I was quite pushy. And when I pulled the chart it was written* (CHN C3).

To address this, the nurses shared that in the breastfeeding clinic (which also operates 'drop-in' style similar to the OAC) they provided both themselves and the mother a copy of the documentation around that consultation:

*It will be interesting, as one thing we are starting to do in breastfeeding clinic is to write things down and get the mothers to sign and give them a copy. So, um we could see that that's helping, that it helps the mother...but I look and think, it gives something for the mother to refer to. I think it's good* (CHN C3).

Therefore, the nurses had experienced a decrease in conflict between themselves and the perception the parent may have of the information through documentation of the discussion.

This documentation was then provided to the family to refer back to and discuss at future consultations. This documentation could also be shared with other health care providers (such as the family GP) informing everyone of the health care plan, with the parent remaining the 'owner' of the information. This process does not yet occur within the OAC. The Personal Health Record Book (Queensland Health, 2009) could provide this 'information trail', where nursing staff could potentially document more thorough information and enhance client participation in their health care. These hand-held records have been shown to be very effective in other areas of nursing care, such as pregnancy care (Queensland Health, 2010). Furthermore, there is great potential to improve record keeping efficiency through the transfer of client records to electronic versions and databases (Waton, 2005). Electronic client records are frequently utilised in other areas of health care for a number of years now, and community child health services in one state in Australia (namely Victoria) has embraced this new technology with good results.

A key role of child health nurses, both in the OAC and in general care is to provide information and anticipatory advice in infant health and wellbeing (Barnes & Rowe, 2007). When such large bodies of information are shared with clients it is inevitable that miscommunication will occur. Client perceptions of the advice may also vary between individuals. Thus, the child health nurses experience of the OAC documentation was reported to be problematic due to the limited writing space available on the clinical pathway, a lack of time to complete documentation and inefficient 'paper trail' which could potentially be improved through client 'owned' records and / or electronic means.

### **5.12.13      *Information***

The giving and receiving of information is an important aspect of nursing practice. Participants in this study discussed at length their experiences of giving and receiving health care advice and knowledge, and thus the theme of *information* is grounded in these accounts. Subsequently four categories have been formed to describe these experiences: Inconsistent advice; Misinterpretation of information; and, Too much information.

### **5.12.13.1 Inconsistent advice**

The experience of this support the mothers' received through the OAC however was not always consistent or helpful. The participants shared stories about receiving inconsistent information from various child health nurses through the OAC, resulting in a reduction in the quality of the service. Parents found this problematic and confusing. An early intervention specialist shared a story of a mother whom she had been working with, and this mother's experience receiving information in the OAC:

*...she expressed concerns um, about getting inconsistent advice from different staff when she's come and seen people. But also this was a fairly well educated mum that um that knew a lot of information herself and um and had some issues about some of the advice being a bit outdated um and not in line with information that she read and accessed ...she felt quite angry...frustrated that, it wasn't consistent and that it was giving her mixed signals and she was trying to the best for her baby... because yeah, if you're kind of able to access the information off the internet, that's where she'd gotten the information from then she, her feeling was, that you should be able to come into a clinic and get the up to date advice (EIS 2).*

This experience was not presented in isolation throughout the focus groups and interviews. Within CCHS a key aspect of their role is informational support (Barnes & Rowe, 2007). Various participants stated that the information they read, either on the internet or other media (for example, television), was different to what the nurses stated. In a recent UK study, the authors found that health visitors (equivalent to Australian CHNs), also expressed difficulty in assisting parents with information support when messages which conflict current practice guidelines are published in the media (Hilton, Bedford, Calnan & Hunt, 2009). The study found that the nurses perceived that the various research studies conflicted themselves (in this particular study the information was around childhood immunisation), and this became a barrier to using evidence in practice.

Due to the dynamic nature of health care, new knowledge is evolving constantly, and health care professionals are expected to remain current in their practice. However, the experiences of some of the participants in this study reflect a concern that the practice in the OAC was not always evidence-based or current. As this mother described:

*I think what I found overwhelming was coming here and there would be a different nurse on and they had a different opinion, and you're just like oh, what am I meant to do? (Client B1).*

Not only did the mothers identify this, but so too did the child health nurses:

*So many different practitioners see one mother and because we're not using evidence based information – a lot of people use anecdotal and experience based rather than sticking to our evidence based World Health Organisation guidelines (CHN A8).*

Further, this comment was substantiated by another nurse's comment:

*You use the guidelines, but you also go by your own experience. We go with our own experience...you go with what's best for the baby. I mean the baby is our main priority (CHN B3).*

Thus, the parents found information was different between different practitioners, and often based on opinion or personal experience rather than evidence. It also highlights the gap between research and practice. Studies have found that research knowledge transfer could be enhanced through bridging the gap between skills and knowledge; designing readable research findings which are time efficient and clear; and, the provision of specific time for nurses to maintain up-to-date knowledge (Cranley, Doran, Tourangeau, Kushniruk, & Nagle, 2009; Thompson, McCaughan, Cullum, Sheldon, & Raynor, 2005). Furthermore, in some clinical areas nurses have been found to be unfamiliar with particular aspects of client care and tend to rely more heavily on heuristics or other colleagues knowledge and expertise, rather than evidence or research (Cranley et al., 2009). It is important to acknowledge that nurses use multiple sources of knowledge in clinical decision making (Welsh & Lyons, 2001), and that each form of knowledge is valuable. However, when the effects of this knowledge cause confusion, conflict and frustration for parents this is not effective, helpful or supportive nursing care.

While most parents participating in the study agreed that they had experienced differing health care information and that this was problematic and confusing, one mother had a positive experience of this:

*Well, in the beginning I was just like, trying to do what I was told to do because I knew- I didn't know anything better, it was just yeah, they've all*

*got their own opinion, I'll give it a go, nah, that didn't work. I don't think it really has an impact, cause yeah, like you say, everyone has a different opinion, one thing doesn't work, someone else may know, so I think it's better to have different (Client C2).*

This mother appeared to have a very relaxed attitude about the different nursing opinions, perhaps due to the fact that she had three young children, and was experienced and confident enough to discard unhelpful information. This self-efficacy or confidence has been found to be a vital factor in overcoming difficulties to persist with a preferred health choice, especially in the area of breastfeeding (Hahn, 2005). However, the concern remains that within the OAC many participants experienced conflicting, confusing and opinionated information, which they perceived as unhelpful and added stress to their parenting.

Therefore, when inconsistent and out-of-date information was provided to parents, the result was frustration and confusion. However, some parents were familiar with differing ideas about parenting, and employed a process of 'sifting' to use the advice that was helpful, and ignore what was not.

### **5.12.13.2 Misinterpretation of information**

Whilst some of the information provided to clients was indeed inconsistent, the nurses also shared experiences of when the information they provided was misinterpreted by the parent. This story typifies this experience:

*...it was absolutely a misinterpretation. It was a very good learning experience, because the mother hadn't, I'll just tell you, it was a mother who had bottle fed and now was breastfeeding, I was trying to like give her some information. But I think I'd given her too much. And like, she decided to bottle, and then three days later decided to breastfeed, and I was trying to explain to her what was normal, so maybe I hadn't given her much information. But I had not said what she had said...it was good for me to get that feedback. You're trying to help them, but maybe just a bit too much, and they misinterpret it. They do (CHN C3).*

This nurse had described her desire to help this mother breastfeed, yet found the information she shared was misinterpreted by the parent, and she reflected that this was a valuable



learning experience. The nurses in this focus group discussed how this misinterpretation can sometimes be disclosed to other health care providers by the parent, adding to distrust and unwillingness to make referrals. This breakdown in communication can cause adverse health outcomes. Specifically, it has been found that "language and cultural barriers can have adverse effects on the accessibility of care, the quality of care, patient satisfaction, and health outcomes" (Pottie, 2007, p.1899). As discussed earlier, nurses working in the OAC could implement a 'check process' whereby they ascertain what a parent's understanding was of the information they received and the nurse also ensure that they interpreted the parents question appropriately (Davis et al., 2002).

This "misinterpretation" however, was also discussed as being a normal phenomenon, common to all of humanity, not just in health matters:

*I think it's normal for people to interpret things quite differently 'cause, I've been to something where five people were asked to present on a particular thing issues, and we were all given a sheet on how we were to present and we all presented that information that was required but a different way. So we all saw it differently, so it showed me that someone can talk to the same people all at once and we all perceive it differently (CHN C4).*

While different perceptions are to be expected, the key aims of particular health messages must be clear and unambiguous. For instance, the Sudden Infant Death Syndrome (SIDS) preventative message of placing babies on their back to sleep (SIDS & KIDS, 2010), is clear and simple. When an aspect of infant care is confusing or vague, open to misinterpretation, care quality is negatively affected with poorer health outcomes the result.

### **5.12.13.3 Too much information**

Parents have long been offered myriads of advice and this is now discussed in the *too much information* category. Mothers participating in this study described the wide variety of 'experts' who offered free opinions on the way to raise their children. The nurses shared this concern:

*...they might get some different info and they say, I'll check that with the Child Health Nurse... or unfortunately sometimes the internet! (CHN B1).*

With the popular use of the internet it is now possible for clients and their families to access vast amounts of information, which previously were only available to health care practitioners (Hanif, Read, Goodacre, Chaudhry, & Gibbs, 2009), yet the health care websites are not always reliable and do not always provide evidence-based, accurate information (Hanif et al., 2009; Wangberg, Andreassen, Kummervold; Wynn & Sørensen, 2009).

Mindful of this, parents' experiences of the OAC was that it was a good 'checking point.' They accepted the family and friend advice, yet the OAC appeared to be like an 'advice haven' for some parents where tips, support and encouragement were offered, rather than authoritative advice:

*I think I could say on behalf of all mothers, is that you love to come here [OAC], but the last thing [you want] is hear someone telling you what to do. And your mother-in-law, you hate mother-in-laws that tell you what to do, you want the one that will support you, give you a bit of a tip, away, and they love you no matter what (Client D1).*

Further to this, the nurses speculated regarding how the advice and information they provided the parents was actioned.

*That's right. We're the information people. So they take that information home, they judge it, and make their own decisions around that (PBC 2).*

This judging process may be likened to panning for gold. Parents sift through the riverbeds of information and advice, looking for the golden nuggets to assist their parenting journey.

These nuggets appear differently to different parents and once found enhance the value in parenting knowledge and confidence. How nurses engage with the research and evidence, and then communicate this to parents is certainly a fine art form, and the OAC is one avenue for this central process.

Whilst diverging slightly, an interesting point was discussed by the final child health nurse focus group, which explored their feelings and beliefs regarding the information they were 'required' to give. They shared that this sometimes conflicted with their own values.

*So sometimes we have to be careful to make sure we're giving the information, not what they should do, but something that goes against everything we believe (CHN C4).*

Similarly,

*We know what we would do it was our baby but you've got to give them all the information that's available. For all choices and options (CHN C3).*

Ethically, the nurses were required to provide the clients with all their options, yet occasionally this was different to their own values and beliefs.

Child health nurses working within CCHS were presented with multiple opportunities daily to provide anticipatory advice and information to families regarding their infant's health care. However, it has been well documented in the literature that the information provided to parents is not always consistent. For example, inconsistent advice has been shown to undermine women's ability to successfully breastfeed (Hailes & Wellard, 2000; Hauck, Hall, & Jones, 2007). Furthermore, women have been found to react negatively to advice overload, inappropriate information, or help based on personal opinion rather than evidence (Hauck et al., 2002). Also, studies have found that health promotion messages can be confusing and ambiguous at times, leading to inappropriate use of health care options (Lindsay, Smith, & Rosenthal, 1999).

While the OAC was a key place for parents to receive health care information regarding their infant and parenting, this information was not always consistent, evidence based or appropriate for their needs. Furthermore, misinterpretation of information was also experienced by the participants potentially negatively effecting health outcomes. To optimise the quality of the OAC service, thoughtful attention aimed at devising creative pathways to overcome research - practice gaps and boundaries will be required.

#### **5.12.14      *Peer support in the OAC***

The nursing participants, in particular, described the OAC as a service which required a team approach. They shared experiences of working together and the benefit of supporting one another hence emerged the *peer support* theme.

Firstly, the nurses shared experiences of the value in working as a 'unified team', especially when a difficult situation arose with parents. One nurse held a perception that the parents may sometimes 'play off' one nurse against another, seeking the answer they were looking for, even if it was not consistent with best practice, which further highlights the need for all nurses to be consistent in providing evidence-based information to the parents.

*And I think that it's really relevant if people are to work in Open Plan, it is important in your own mind to reassure that that mum may not have heard that advice and not go against what that staff member said, to act as a unified team (CHN B2).*

*And I think sometimes, its best not to give into it...I just think that its best not to find out exactly what was said, and because we weren't there, we don't know what our colleague said, we don't know how the mother took it, and sometimes I think it's best not to ignore it but to acknowledge it, but then to move on (CHN C1).*

Therefore, the nurses valued supporting each other and providing consistent information to the parents, rather than entering 'blame games' about the information other nurses may or may not have given to the clients.

The second key point regarding peer support in the OAC is the support each nurse gave the others if a staff member was on leave. The nurses stated the OAC was very difficult to cancel if a child health nurse was on sick leave, as they were unable to contact parents as they do not know in advance who will attend. Therefore, the nurses shared experiences of their gratitude when a home visiting nurse would reschedule her workload to assist in the OAC.

*Well, with that situation I had to reschedule my clients, so that actually puts pressure then on us later on to do catch-up with our clients but it was a situation where Rhonda could not see all those clients on her own (CHN A5).*

Whilst this nurse did assist in the OAC, it added extra pressure to her already high workload as she would need to recoup the time to home visit her clients another day.

Within the literature, there are various studies investigating the effects of nursing peer support. Amongst a variety of health care workers peer support has been shown to be valuable, especially in the areas of staff morale and retention (Chenot, Benton, & Kim, 2009). Furthermore, there is evidence suggesting that peer support is highly valued by newly graduated and novice nurses (Brooks & Moriarty, 2009), and it has also been shown as a valuable tool to assist nurses in dealing with adverse or stressful events within the workplace, contributing to improved safety and quality (van Pelt, 2008).

Hence peer support was valued immensely by the nurses working within the OAC, yet when other nurses needed to reschedule their own workloads to assist in the OAC higher pressure and work stress resulted.

### **5.12.15      *Summary of findings***

This second phase of the overall research study has generated rich new qualitative knowledge regarding the OAC. The stories and experiences shared by each of the participants enabled the generation of new meaning and understanding regarding the phenomenon of interest – the OAC. The key findings within each of the thirteen themes described the OAC as a useful method of parent support and child health surveillance, with perceived areas for quality improvement also identified.

### **5.13    Key clinical implications**

Overall the participants in this study experienced the OAC with positive regard and perceived it as a helpful and supportive way to deliver child health surveillance and parental support to families with infants aged 0-18 months, without identified child protection risk factors. Within this study the perspectives of multiple parents, nurses and other health workers were thematically analysed, based on their actual experiences of the service and found that it was experienced as being effective, flexible and parent-directed, which may be in contrast to some traditional individual appointment child health surveillance methods. This finding is especially important with respect to resources available for Community Child Health Nursing Services in Queensland (both fiscal and human) because the OAC model provides an economically advantageous alternative to traditional individual services, whilst maintaining a high standard of service delivery. Further, this may also have national and international clinical implications, although due to the context specific, qualitative nature of this inquiry, it is not intended that the findings display generalised meaning regarding Open Access care delivery methods, and as such cannot be universally adopted. However, the study does generate important insight into the health needs and values of parents with young infants, which may inform thoughtful examination of appropriateness of current service models within contemporary child health care.

In terms of development for the service, the findings from the study suggest that strong links between child health service providers are essential, and that improved systems of client-feedback and involvement would be beneficial.

This research contributes to the body of knowledge available to assist child health nurses and service providers to develop their own systems of child health practice. A number of recommendations are made (see Recommendations for practice, 5.5), which are directly related to the findings from this study. These recommendations are available for consideration by both the local health service district and other child health service providers and can help providers to formulate and evaluate their own service delivery models for universal child health surveillance approaches to families with infants aged 0-18 months. It is important to note that this study provides a qualitative analysis of the OAC, and thus the findings are not generalisable in the traditional sense. However, they provide a powerful portrayal of a contemporary child health practice and may be used to inform the future direction of Child Health Services in Queensland and beyond.

Principles of best practice demand that health services are reviewed regularly on the basis of current evidence so that optimal approaches to service delivery are achieved that result in the best outcomes for clients. In this context, the findings from this study suggest that it is timely to review the traditional methods by which CCHNS deliver universal child health surveillance programmes to families without identified child protection risk factors, throughout Queensland, with a view to adopting a more evidence-based group model of care, such as the OAC.

Throughout Australia there is a paucity of good quality evidence to guide best practice in the provision of universal child health services: this research study makes a useful contribution. However, this study was based in an urban setting serving a population of predominantly white Australians and further research is needed within rural child health settings. Further research is also recommended to evaluate the effectiveness of the OAC in improving specific health issues such as breastfeeding.

## 5.14 Recommendations for practice

Based on the findings from this study, several recommendations for consideration have arisen regarding the OAC to CCHNS. These are summarised in table 5.2. **Table 5.2**

### Recommendations for practice

Theme	Finding	Recommendation
<i>Accessibility</i>	The OAC was identified as flexible and easily accessible for many families. However, some parents identified that the opportunity to access the service outside of business hours would be useful, especially for fathers and working parents.	For community Child Health clinics to consider and review opening hours, according to client needs.
<i>Accessibility; Groups; Time</i>	Most clients preferred the OAC for Child Health support. However, occasionally clients and other key stakeholders identified that they would have preferred more time, more privacy and individual care.	To consider informing 'low risk' clients that individual appointments are available if required.
<i>Time; Adjusting to parenting; Social aspects of parenting</i>	Some clients identified that more time in the beginning when their baby was less than eight weeks old, would have been helpful. The nurses also identified that it was the first-time parents, with a new baby who require more time during the OAC clinic.	To consider a specific OAC service for parents with infants under eight weeks. This may be offered via a more structured group setting, with fewer clients and more time available.
<i>Documentation; Information</i>	Some nurses identified that the documentation used in the OAC is restricted in terms of space to write. They also would like to have the whole client record available for consultations	To consider reviewing the way in which documentation is done in the OAC.

	in the OAC.	
<i>Complex issues; Time; Peer support; Working in the Open Plan clinic</i>	Nurses shared experiences of clients presenting to the OAC clinic with complex needs and issues. The nurses also identified that the clinics are very busy.	To consider how the OAC is staffed, according to child health nurse and client needs.
<i>Peer support; Complex situations; Working in the Open Plan clinic</i>	Many key stakeholders identified the importance of peer support in their practice within Child Health, especially when caring for families with complex needs through the OAC.	To consider the availability and accessibility of clinical supervision and peer support within Child Health Services.
<i>Information</i>	Nurses, clients and other key stakeholders identified that the information shared in the OAC clinic was non-judgemental and often reassuring and helpful. However, some key stakeholders identified that they received or overheard conflicting information that was not evidence-based or up-to-date.	To ensure all staff have opportunity for regular in-service, and are responsible for informing themselves of evidence based literature to facilitate best practice.
<i>Open plan's purpose; Environment</i>	Experiences were shared by the nurses of the difficulties of working in the OAC in rural settings. Rural setting evaluation was beyond the scope of this study.	Further research into the use and effectiveness of the OAC in rural settings would be beneficial.
<i>Nurse-client relationship</i>	All key stakeholders identified the importance and value of a consistent, therapeutic relationship between the client and nurse working in the OAC.	To review staffing and rostering practices to facilitate continuity of care for clients accessing the OAC clinic.
<i>Nurse-client</i>	Some key stakeholders identified that	To consider how linkages are



<i>relationship; Information</i>	they did not know a lot about how, when or where Child Health delivered services to 'low risk' clients. Other agencies shared the benefit of working closely with Child Health, and vica versa to provide consistency and improved care.	built and sustained between Child Health and other service providers. To also review the marketing of Child Health to other services and the general public.
<i>Working in the Open Plan; Time; Peer support</i>	Some nurses identified the pressure that can result from limited staffing of the OAC clinic, due to staff on sick leave. The nurses stated they would reschedule their home visiting clients to staff the Open Plan clinic, thus placing further pressure on their workload.	To consider how relief staff may assist with managing the OAC clinic.

### **5.15 Conclusions**

The purpose of phase two of the research study was to understand what the OAC meant to those involved with it, and to gain insight into the everyday experience of the OAC. This purpose was achieved through a North American phenomenological inquiry approach, which enabled the exploration and interpretation of multiple participants' lived experiences of the phenomenon. New knowledge and understanding has been generated through this inquiry. According to the participants the OAC represented a place where support and reassurance could be accessed flexibly and provided in a non-judgemental manner. The emerging themes described a busy and bustling clinic. It was a place where parents felt safe and supported. They enjoyed the flexibility, the appointment-free structure and valued the accessible location of the both the urban clinics, where shops were close by and public transport available. However, for working parents, services offered in extended hours would be of benefit. The service had a clear role definition and according to the participants achieved this purpose through the working of the OAC, in conjunction with other support services (such as the breastfeeding clinic and the early intervention specialists).

Parents often shared experiences of feeling lonely and socially isolated. They valued the consistency of seeing the same child health nurse, and the child health nurses valued this for reasons of continuity. The parents reported the benefits of the group approach, and overall preferred it to individual appointments. The mothers identified their use of other service providers, for example their general practitioner if sensitive or confidential issues required attention. The information discussed during the clinics was offered in a non-judgemental way, however the findings indicate that it is essential that the child health nurse's advice and practice is consistent with the latest evidence-based guidelines.

The child health nurses sometimes found the clinic stressful and busy, without enough time to perform thorough family assessments. The parents did not perceive this busyness to be a problem, neither did they identify waiting as an issue. Through reflective interpretation some areas for quality improvement have been generated by these experiences, which have been outlined in table 5.2.

Therefore, this second study has yielded new and greater understanding of the Open Access Approach to child health surveillance and parent support, as perceived by those with real life, direct experiences of it.

**Chapter 6:**

**Prospective Cohort Study (Phase three)**

## **6.1 Introduction**

This third study within the overall research project prospectively investigated patterns of attendance at the Open Access Clinic (OAC) and clients' sources of child health information and support. Furthermore, key infant and child health areas were explored, such as childhood nutrition, obesity, and key health promotion areas, such as safe infant sleeping.

## **6.2 Methodology**

### **6.2.1 Design**

The study design was descriptive and context-specific, and therefore it was not intended to empirically generalise the findings to the wider population. However, the findings are relevant to other child health services in Australia, and theoretical generalisation (Sharp, 1998) is possible. Theoretical generalisation differs from empirical generalisation in that theories specify, in principle, the logical or necessary relationships between variables, based on previous propositions. This is in contrast to empirical generalisation which is only concerned with showing that some relevant characteristics of a sample are typical of a population (Sharp, 1998). It is important to understand and acknowledge this difference when applying generalisation to this study and further nursing research.

### **6.2.2 Sample**

A convenience sample of 72 clients (parents; predominantly mothers) was recruited over a three-month period (June – August, 2007). The sample size was determined by the number of parents attending the clinic during the three-month recruitment period, and their participation rate. Although power sampling was not undertaken prospectively, based on an estimated medium effect size of 0.5 and a power of 0.8 the final sample was sufficiently large to detect differences at a significance level of  $p = 0.05$ . However, although tests of difference within the sample were undertaken, no statistically significant differences were found.

### **6.2.3 Data collection**

Participants were followed up for a total period of eighteen months following recruitment. The initial interview (when the infant was less than six weeks old) was undertaken face-to-face, and subsequent interviews were made by telephone. They were timed to coincide with the routine immunisations and developmental assessments in the infant's Personal Health Record i.e. at two, four, six, twelve and eighteen months of age.

A structured interview schedule was utilised, which enabled the participants to identify:

- How often they had attended the clinic during the preceding two/three months.
- The reasons given for their pattern of attendance.
- Their current child nutrition practices.
- Their parental coping and well-being.
- What, if any, sources of child health care information and support (other than the clinic) they had accessed during the preceding two/three months.
- Their reasons for choosing/seeking alternative sources of child health care information and support.

#### **6.2.3.1 Initial interview**

The initial interview (at one month) used a structured questionnaire to collect data concerning:

- Demographics (participant age; employment status; country of birth; indigenous status; highest education level)
- Child health services access (reason for choosing OAC; referral sources; frequency of attendance; reasons for consulting other services, such as a general practitioner and why)
- Infant nutrition (method of infant feeding; difficulties experienced with feeding; preventative strategies for childhood obesity)
- Infant development (developmental assessment attendance and by whom)

- Parental information sources
- Preventative health care (safe sleeping knowledge and practice; place infant usually slept)
- Parent-infant relationships (parents' sources of support; management of stressful situations with infant; recognition and discussion of infant cues; feelings towards infant).

### **6.2.3.2**                    *Two, four, and six month follow-up interviews*

Structured questionnaires were used to collect data within most of the above areas (6.2.1.1) and also data concerning:

- Infant immunisation status
- Oral hygiene and care
- Diagnosis of a postnatal mood disorder in the participant
- Knowledge and practice relating to complementary / solid feeding
- Strategies the parent implemented to promote their infant's development

### **6.2.3.3**                    *Twelve and eighteen month follow-up interviews*

Structured questionnaires were used to collect data in the above areas (6.2.1.1 and 6.2.1.2) and also data concerning:

- The infant's usual diet and concerns regarding eating habits (such as 'fussy' eating or food refusal)
- Parental involvement in playgroups
- Parental employment

## **6.3 Data analysis**

Primarily, quantitative data were collected; obtained from an interview schedule of structured questions with a range of given responses. Some qualitative data were obtained initially,

which were analysed thematically and coded numerically to enable quantitative analysis. All data were entered into an SPSS (Statistical Package for Social Scientists) version 15 database for analysis. Significance was set at  $p = 0.05$ .

## **6.4 Findings**

The following section details the key findings from the prospective cohort study, specifically in the areas of: cohort demographics; community health service information; alternate child health service providers; attendance at general practitioners; parental information sources; infant nutrition; immunisation; teething and oral care; infant development; infant sleep and SIDS; parent-infant attachment and postnatal mood adjustment; employment; and reasons for withdrawal from the study.

### **6.4.1 Cohort demographics**

The participants were recruited by OAC child health nurses over a three month period, from June-August, 2007. The sample of parents ( $n = 72$ ) was recruited from two urban open access clinics, and consisted predominantly of females ( $n = 64$ ; 88%) of Australian descent (see table 6.1). About a third (30%) of the cohort had completed secondary school education, and this was the most commonly identified highest education level (see figure 6.1). The predominant occupation of the cohort was identified as 'home maker', and represented 46.2% of the sample (see figure 6.2).

Table 6.1 Cohort ethnicity

Country of birth	%	n
<i>Australia</i>	81.4	57
<i>New Zealand</i>	2.9	2
<i>Other</i>	8.6	6
<i>Missing data</i>	7.1	7
Residential status		
<i>Australian citizen</i>	84.3	59
<i>Australian permanent resident</i>	7.1	5
<i>Australian temporary resident</i>	1.4	1
<i>Missing data</i>	7.1	7
Indigenous status		
<i>Non-Indigenous</i>	87.1	61
<i>Participant of Aboriginal or Torres Strait Island decent</i>	5.7	4
<i>Missing data</i>	7.1	7

Figure 6.1 Cohort education level

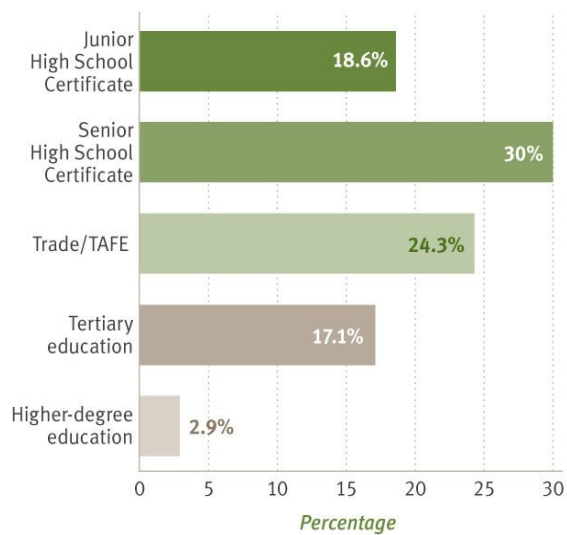
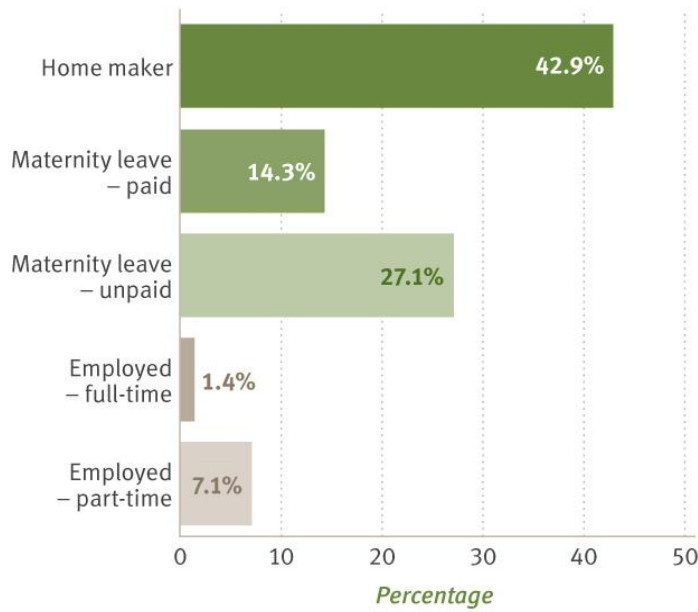




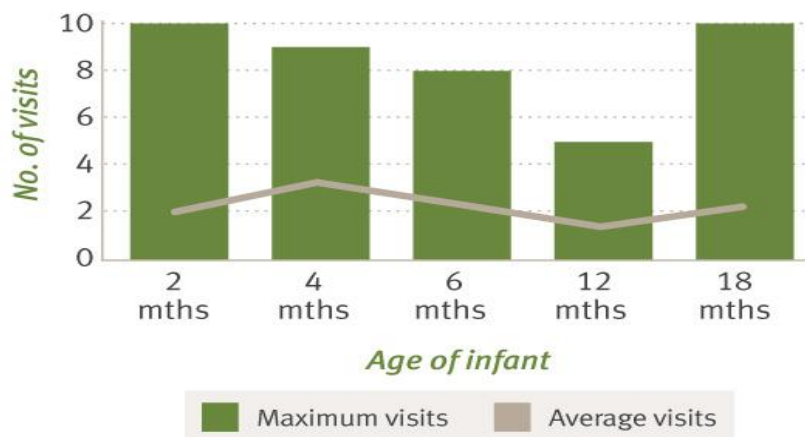
Figure 6.2 Cohort employment status



#### 6.4.2 Community child health service information

Due to the nature of the OAC, with parents choosing how often to attend, based on their own needs, there was significant variance noted between each interview time-point in terms of frequency of visits to the OAC (see figure 6.3). Overall, the average number of visits over the eighteen month period was 10.24 (mean), with the minimum visits 1, and the maximum, 30 visits.

Figure 6.3 Frequency of visits between interview points



The initial interview required participants to identify how they had found out about the OAC. Figure 6.4 shows that the predominant referral source was by staff from the maternity unit (n = 39; 55.7%). When asked why they had chosen the Child Health OAC, in preference to other health service providers, the majority of parents (n = 23; 32.9%) responded that it was due to convenience (see figure 6.5). A large number of participants gave 'other' reasons for their attendance, of which the most common reason was that they knew that they would be able to speak with a "qualified" child health nurse.

Figure 6.4 Referral source

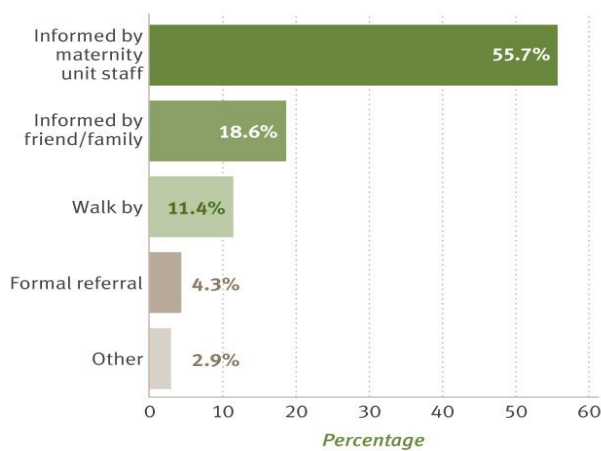
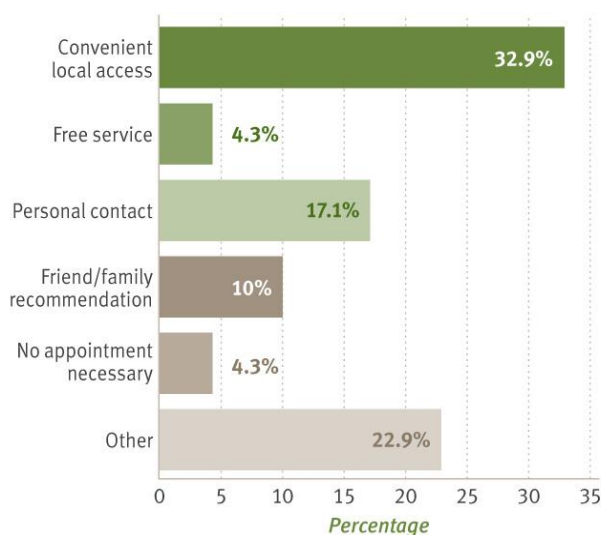


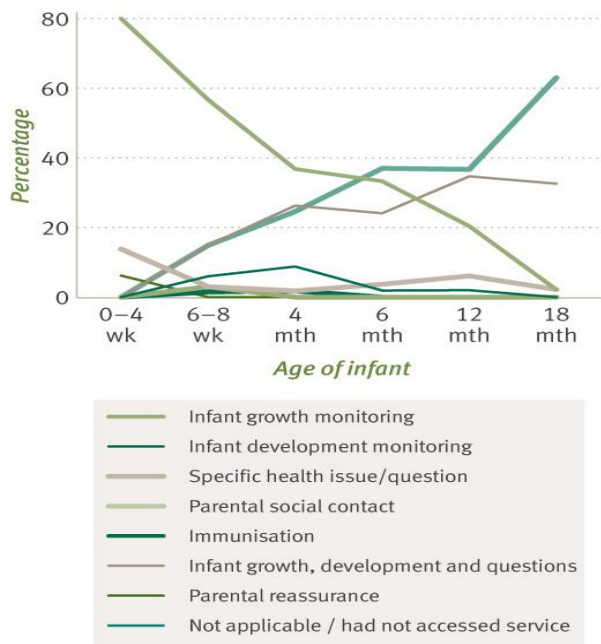
Figure 6.5 Reasons for choosing the open access clinic



At each of the interview time-points, the parents were asked to give the main reason for their attendance at the OAC. Figure 6.6 indicates the trends over the eighteen month period. It can

be seen that initially participants' attendance was concerned with their infant's growth. The focus on growth only, as a reason, decreased significantly from the age of four months onwards, and was replaced with concerns about growth and development.

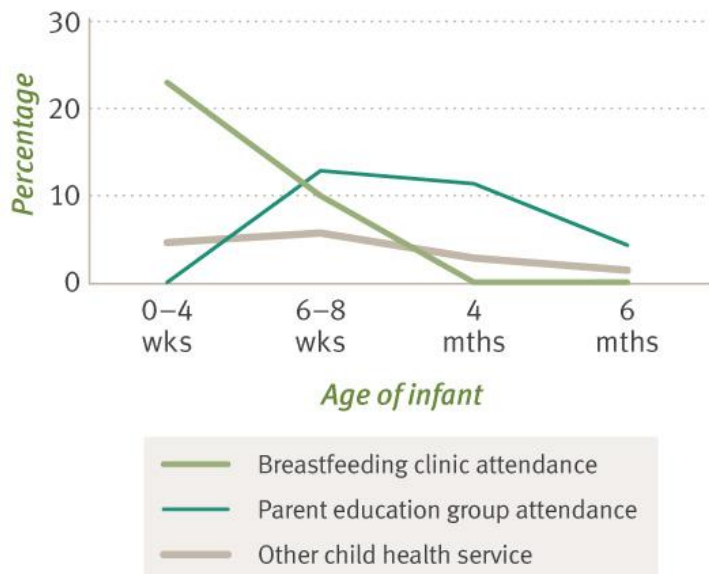
Figure 6.6 Reasons for attendance at the open access clinic



Various services are offered in conjunction with the OAC clinics, such as a specialised breastfeeding clinic and a parent information group. Initially, the demand for the breastfeeding clinic was high, with a considerable number of the sample (n = 15; 21.4%) accessing it. At around two months of age the need for the breastfeeding clinic had halved and was marginally overtaken by parents' need for educational/informational support. Other services, such as the Day Stay Centre, were accessed by around 5% of the sample initially, although demand for them fell after two months (see figure 6.7.)

Statistical analysis was conducted to determine whether there was a relationship between frequency of contact with the OAC and breastfeeding duration. There was no statistically significant increase in breastfeeding duration, in the parents who accessed the OAC more than ten times (average number of visits) in the eighteen month period, compared with those who accessed the service less than ten times.

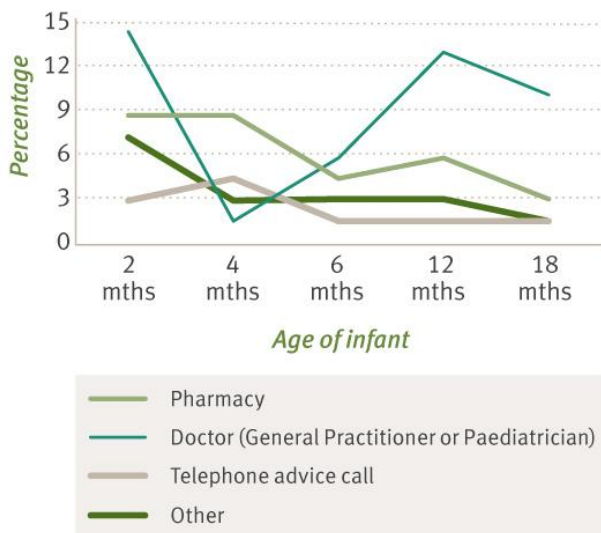
Figure 6.7 Patterns of attendance at non-OAC services



### 6.4.3 Alternate child health service providers

Queensland Health is not the only child health service provider. Parents may choose to access other service providers for growth and development assessments, and support with parenting. The following chart (figure 6.8) demonstrates parent reported patterns of attendance with other child health providers over the eighteen month period.

Figure 6.8 Patterns of attendance – alternate services



Those participants who chose to access another service for child health information and support (other than Queensland Health Child Health Services) predominantly gave the reasons for their choice as location of the service and 'after hours' accessibility.

#### **6.4.4 Attendance at general practitioners**

At the one and two month interviews the participants were asked if they had attended their general practitioner for their infant in the previous month and, if so, why. As can be seen in figure 6.9, at both time-points the majority of the cohort had attended their general practice. Their reasons for attending are summarised in table 6.2.

At the two month interview, of those participants who had seen both their general practitioner and a child health nurse, 23% identified that conflicting advice had been given. Additionally, when asked about any other differences between the general practitioner and the child health nurse consultation, 9.7% of participants identified that the child health nurse had provided more thorough and holistic information regarding their infant's health and well-being than their general practitioner.

*Figure 6.9 Attendance at general practitioner*

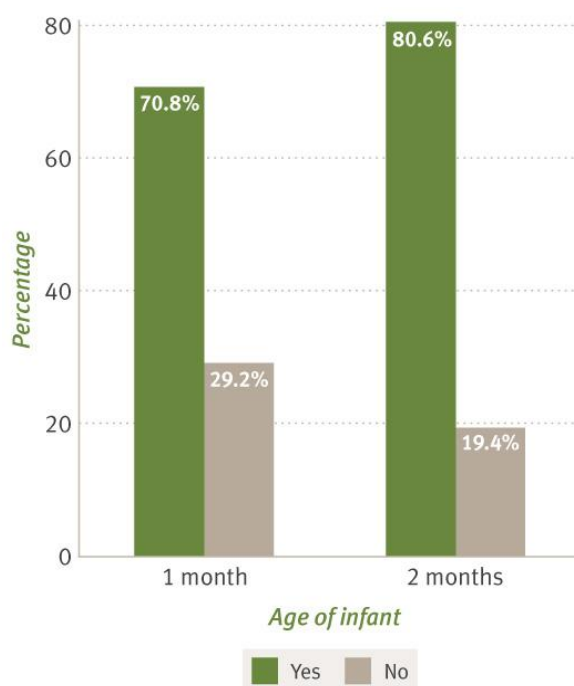


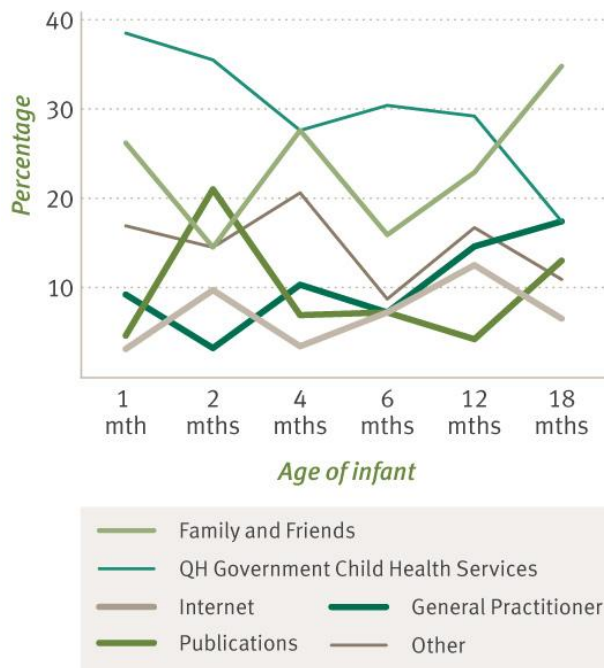
Table 6.2 Attendance at general practitioner

Reason for attending general practitioner	Birth – 1 month (n)
General check-up	35
Upper respiratory tract infection	3
Rash	2
Poor feeding	1
Other	4

### 6.4.5 Parental information sources

Parents were asked what their primary information source was regarding issues around their infant's health and well-being at each of the interview points. Queensland Health Child Health Services and family and friends were identified as the main sources of information. The other primary sources were publications, the Internet, and their general practitioner. The rates of access, and their trends over eighteen months, are shown in figure 6.10.

Figure 6.10 Parental information sources

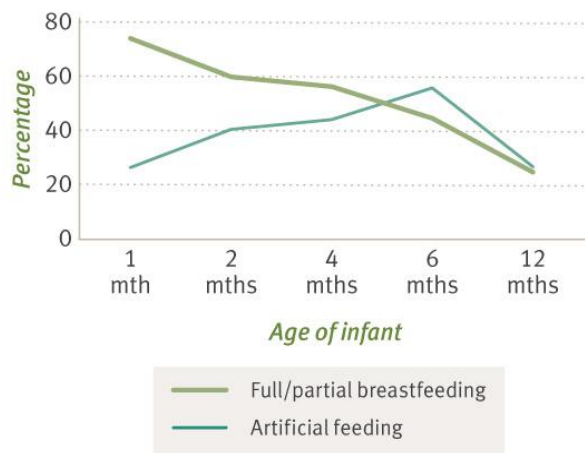


## 6.4.6 Infant nutrition

### 6.4.6.1 Infant feeding

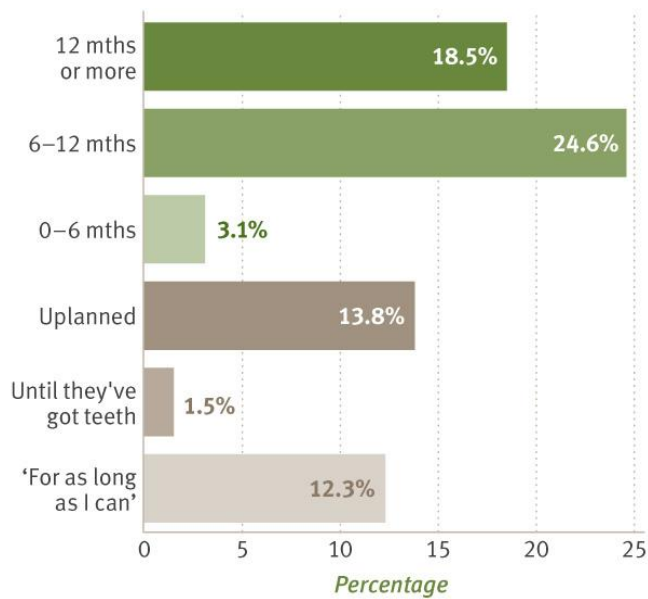
At each of the interview points, parents were asked what their infant's predominant feeding method was. As can be seen in figure 6.11, the breastfeeding rate declined steadily over the first twelve months, and was overtaken by formula feeding at around five months of age.

Figure 6.11 Infant feeding method



When the initial questionnaire was administered, if a participant identified that they were breastfeeding, then they were asked how long they intended to breastfeed. 25% identified that they intended to breastfeed for six-twelve months, and another 18% intended to breastfeed for twelve months or more (see figure 6.12). Very few participants ( $n = 7$ ; 9%) identified that the 'official recommendation' to breast feed babies for at least twelve months (NHMRC, 2003) influenced their decision regarding duration of breastfeeding; more frequently citing returning to work ( $n = 10$ ; 13.8%), as the rationale behind the duration chosen.

Figure 6.12 Intentions for breastfeeding duration



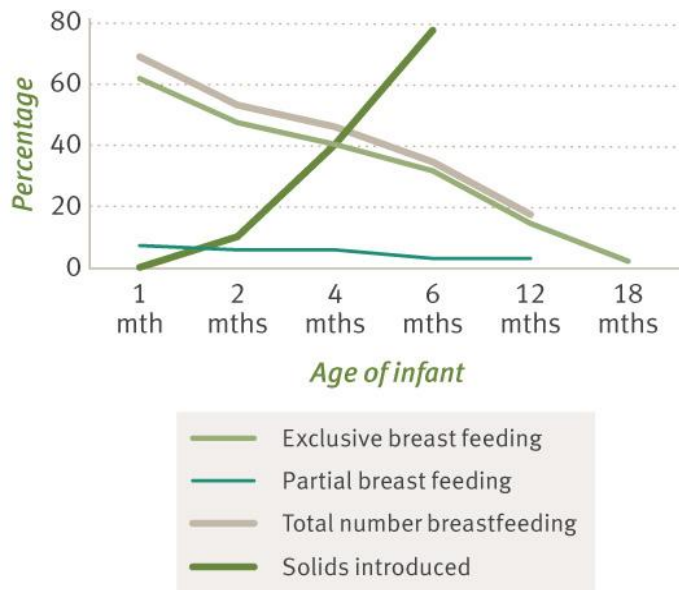
The main reason cited for a parent to choose to artificially feed their infant (asked in the initial interview) was difficulties with breastfeeding (n = 12; 16.6%). Only two participants identified that they chose not to breastfeed for another reason.

About half (n = 19; 26.4%) of the breastfeeding participants identified difficulties with breastfeeding in their infant's first two months of life. Low breast milk supply was cited most frequently (n = 7; 9.7%) as the main difficulty with breastfeeding. Over the eighteen month period of study, breastfeeding rates decreased gradually with the age of the child.

Statistical analysis was conducted to determine whether secondary school education positively influenced breastfeeding duration in this cohort. However, no statistically significant difference in breastfeeding duration was found between parents who had completed secondary education only or those who had completed higher education.



Figure 6.13 Exclusive/partial breastfeeding and solids



#### 6.4.6.2 Introduction of solids

Most families (77%) had introduced solids by six months (see figure 6.13). At the two month interview, the majority of participants (83.6%) identified that they were aware of the recommendations regarding the introduction of solid/complementary food. However, whilst the majority understood that the recommendation was to introduce solids at around six months, approximately half of the cohort had already introduced solid food at the four month follow-up (see figure 6.14).

Therefore all participants in the study had introduced solid food to their infant at the six month follow-up. Of these infants, 81.5% of them were eating a variety (three or more) of foods. The most frequently cited reason for early introduction of solid food (at the two and four month follow-ups) was that the infant was not satisfied on breast milk or artificial formula (n = 20; 27.8%).

The majority of participants (81.6% at twelve months; 89.1% at eighteen months) identified no significant challenges with their toddler's nutrition or eating. However, at twelve months of age, of those participants reporting infant nutrition challenges, food refusal and fussy eating were equally problematic. However, by eighteen months of age, infants' fussy eating was the only problem reported.

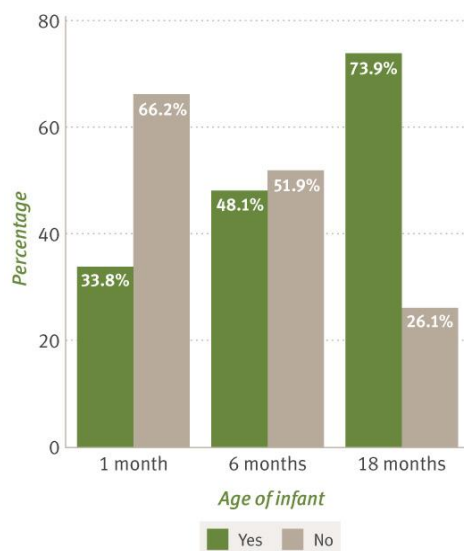
Figure 6.14 Age of infant when introduced to solid food



### 6.4.6.3 Childhood obesity

At three intervals (one month, six months and eighteen months) participants were asked whether they had implemented strategies to prevent childhood obesity. Providing their child with a 'healthy diet' was cited most frequently as the main obesity prevention strategy at both the six month (n = 15; 20.8%) and the eighteen month (n = 17; 23.6%) follow-ups. By eighteen months, over half of the parents had implemented specific strategies to prevent childhood obesity.

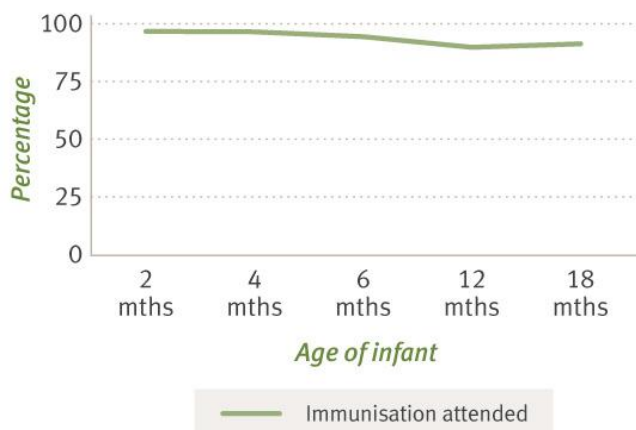
Figure 6.15 Implementation of childhood obesity strategies



### 6.4.7 Immunisation

The majority of participants had attended to their infant's immunisations at the relevant times when they were due (figure 6.16). Of the small number of participants who chose not to immunise their child (n = 3; 4.2%), the potential for harmful side effects was given as their reason.

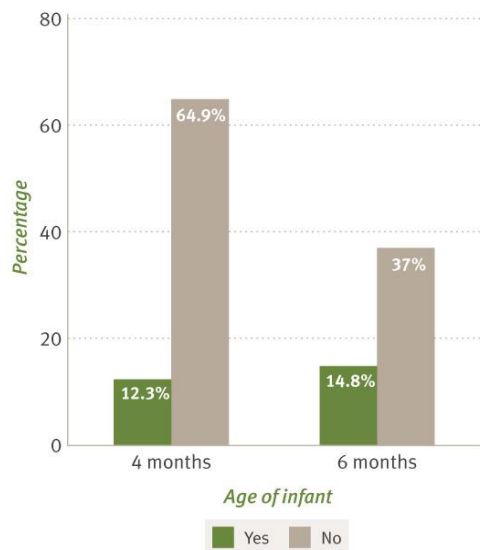
Figure 6.16 Immunisation rates



### 6.4.8 Teething and oral care

The participants were also asked if the child health nurse had discussed teething or oral hygiene care with them when attending the OAC. Many families stated that this issue had not been discussed. More participants (n = 26; 36.1%) were still predominantly offering their twelve month old toddler a bottle for their drinks, rather than a cup (n = 20; 27.8%).

Figure 6.17 Discussion of oral hygiene



#### 6.4.9 Infant developmental assessment

At each follow-up point, the participants were asked if their infant's developmental assessment (as per the Personal Health Record) had been performed. Developmental assessment rates were consistently above 80%. This compares favourably with developmental assessment attendance data collected in phase one (see figure 6.18). A variety of child health care providers may provide the developmental assessment of an infant. Figure 6.19 identifies parents' patterns of access to services for developmental assessments. As can be seen from the graph, assessments are provided mainly by child health clinics, although a substantial percentage are provided by general practitioners. By month eighteen, it was the general practitioners who are providing the majority of assessments.

Those families who had attended their general practitioner or another service provider for a developmental assessment were asked about the content of the assessment. For example, was the infant weighed and measured only, or was the parent also asked developmental questions regarding the infant, and whether their hips and eyes were checked. Figure 6.20 below shows that at each developmental assessment a significant percentage of infants were only partially assessed. At eighteen months, when the majority of participants had accessed their general practitioner for the developmental assessment, a significant percentage was incomplete.

Figure 6.18 Developmental assessment attendance

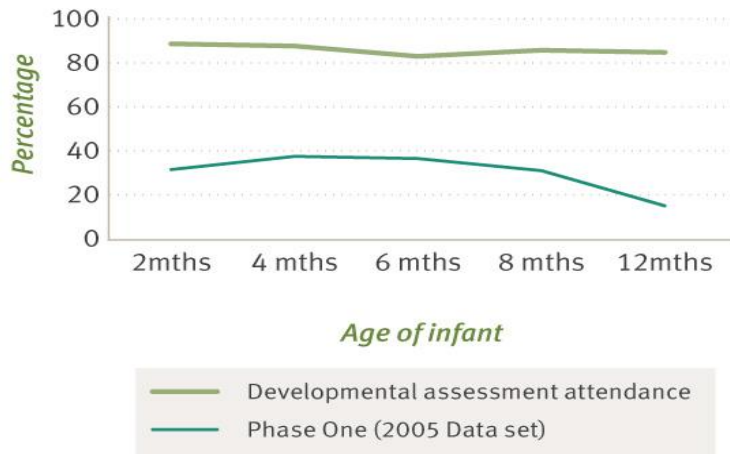


Figure 6.19 Developmental assessment attendance by provider

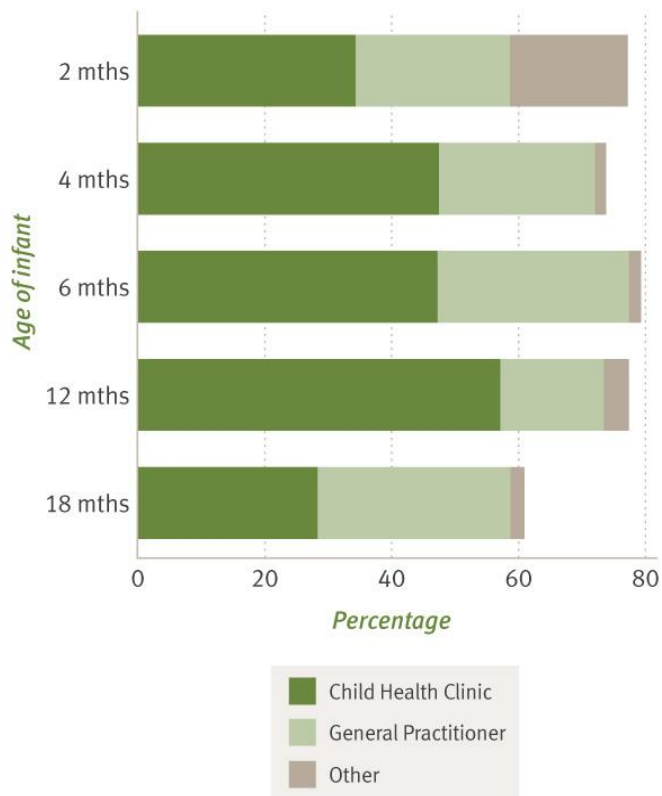
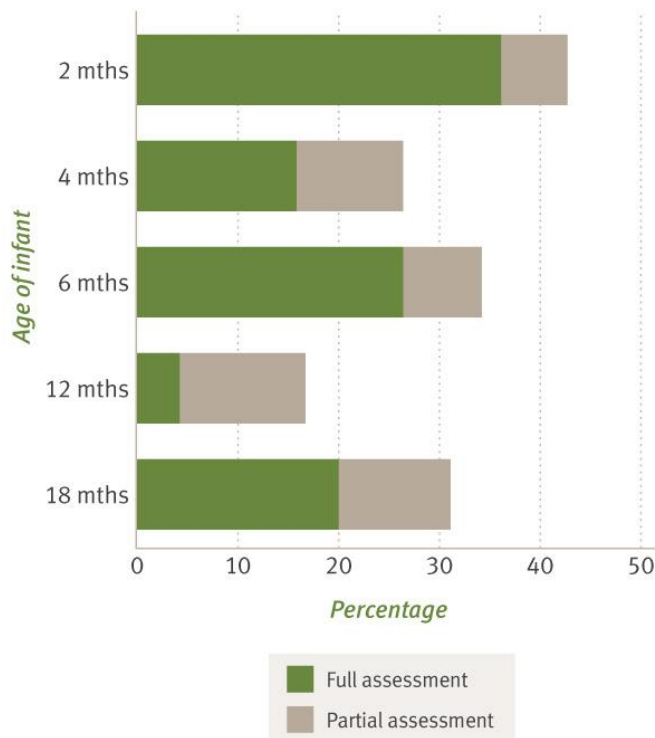


Figure 6.20 Full/partial developmental assessment



#### 6.4.10 Infant sleep and sudden infant death syndrome

The majority of the participants stated they were knowledgeable about SIDS and its preventative strategies (98.5%). Of those who identified they had a good understanding, 77.1% were able to identify three or more key safe sleeping strategies, such as placing the baby on their back to sleep, and keeping the baby smoke free. Parents accessed information from a variety of sources, of which the most common source was a health information leaflet provided by Queensland Health maternity staff (see figure 6.21). The infant's usual place of sleep was also identified at each follow-up point. As can be seen in figure 6.22, around 20% of parents allowed their baby to sleep in the parents' bed. However, by the age of two months, this figure had fallen significantly to under 5%. The percentage of infants sleeping in their parents' bed remained low until follow-up at eighteen months. This small increase at eighteen months is consistent with children's increased ability to be independently mobile at this age.

Figure 6.21 Main information source for SIDS preventative strategies

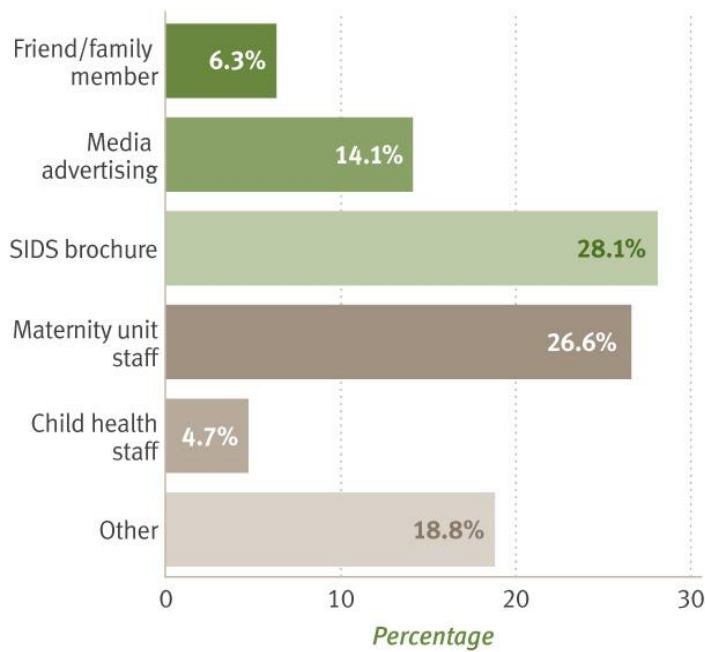
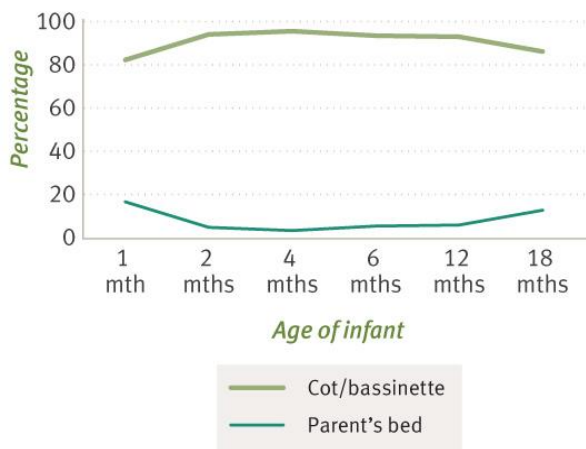


Figure 6.22 Infant's usual place of sleep

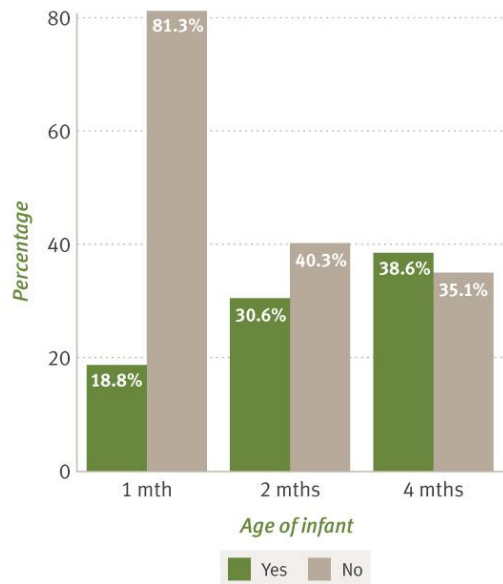


#### 6.4.11 Parent–infant relationship and postnatal adjustment

At the initial interview, and the two, four, and six month follow-up interviews, parents were asked to describe how they felt about their baby, using one key descriptive word. The majority of parents described this feeling with words such as 'beautiful', 'lucky', 'joyful', 'besotted', and 'wonderful'. However, some parents identified that the predominant feeling about their new baby was feeling 'scared', 'overwhelmed', 'high maintenance', and 'concerned'.

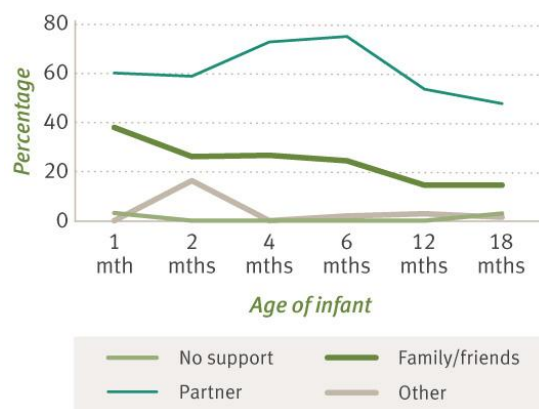
The parents were also asked at the initial interview (one month), and the two and four month interviews whether the child health nurse had discussed recognition of infant cues or communication. As can be seen in figure 6.23, although this was discussed minimally at month one, as the infant grew older discussion occurred more often.

Figure 6.23 Discussion of infant cues and communication



At each interview, participants were asked to identify their most helpful support person. As shown in figure 6.24, 'helpful' support was provided predominantly by family members. Other sources of support included child health nurses, neighbours, and playgroup mothers.

Figure 6.24 Most helpful parental supports





Participants were also asked during the final interview whether they were attending a play/parents group with their toddler. At the eighteen month interview, 60.9% of families were attending a play/parents group.

At two time-points (initial and four month interviews) participants were asked how they managed stressful events with their infant. A variety of coping strategies was reported, of which the most common was to share their child’s care with another person; most often their partner (see figure 6.25).

There was no statistically significant difference in breastfeeding rates between those parents who had returned to work by six months, and those who remained at home longer.

Rates of postnatal mood disorders (such as anxiety and/or depression) were collected at the two, four, and six month follow-up interviews. Participants were also asked to state whether they had discussed these issues with the child health nurse working in the OAC. As can be seen in table 6.3, most mothers did not experience mood changes. Of those who did, most had discussed this issue with the child health nurse.

It is likely that the subsequent decrease in needing to use management strategies for stressful events (such as sharing baby’s care with the partner), is directly related to the decrease in stressful events with the infant, by the four month interview.

Figure 6.25 Management strategies for stressful events

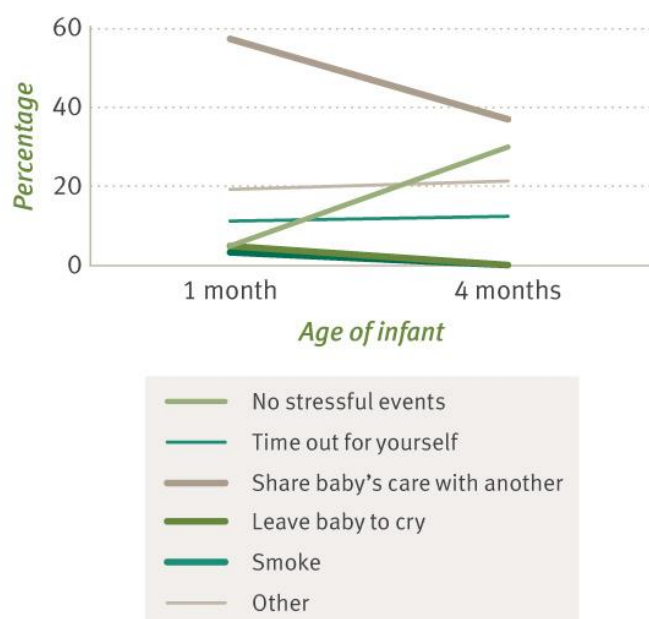


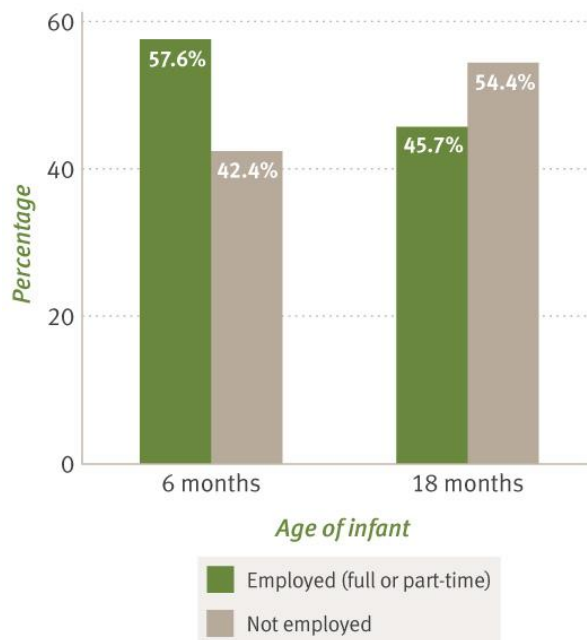
Table 6.3 Postnatal adjustment difficulties

	Maternal mood changes (n)	No maternal mood changes (n)	Discuss with the OAC clinic nurse? (n)
2 months	11	51	8
4 months	8	49	2
6 months	2	51	2

### 6.4.12 Employment

Participant employment rates were collected at the six and eighteen month follow-ups. Whilst the majority of participants were not working at the six month follow-up, this trend had reversed at eighteen month follow-up (see figure 6.26).

Figure 6.26 Participant employment rates



#### **6.4.13 Reasons for withdrawal from the study**

Of the total cohort (n = 72) 24 participants (34.3%) did not remain in the study for the full eighteen months. Participants were withdrawn at various time-points, with the largest number (n = 8; 11.1%) lost at two-month follow-up point. 22 participants (31.4%) were withdrawn because they were no longer contactable by telephone. Of the two participants who were withdrawn for other reasons, one had changed her attendance to another clinic outside the OAC and the other participant's child was no longer in her care.

### **6.5 Discussion**

#### **6.5.1 Introduction**

This study has yielded informative data concerning child health services access and patterns of access over an eighteen month period. Of the original cohort of 72 participants, 46 (65.7%) remained in the study for the full eighteen months. This section will discuss the characteristics, trends and attributes of this cohort in light of the wider literature, specifically in the areas of cohort demographics, children's health services, infant nutrition, infant development, family health promotion, and adjustment to parenting.

#### **6.5.2 Cohort demographics**

The demographics of the cohort provide insightful information into the characteristics of families who chose to access the OAC. In the phase one documentary analysis (Kearney et al., 2008) many client health records had missing data in these areas; thus it was difficult identify clients' characteristics. Although the sample in phase three (n = 72) was much smaller than phase one (n = 600) its prospective design enabled collection of specific information concerning participants' gender, ethnicity, indigenous status, and maternal education and employment.

### **6.5.2.1 Gender**

The participants in this study were recruited when they presented to the OAC at least once, with an infant less than six weeks of age. The participants were predominantly the biological mother of the infant (91.4%). This raises an important issue of the involvement of fathers in their new infant's health consultations. Current Australian research (Fletcher, 2009; Fletcher, Matthey, & Marley, 2006) has raised some poignant and timely questions amongst health care providers in relation to the role and adjustment of new fathers to parenting. There is a strong sense that community child health services have historically focused upon the mother and infant, with the father as an appendage to this dyad (Fletcher, 2009). In light of the emerging literature regarding the role of fathers, and their importance in young infants' lives (Fletcher, 2009; Nystrom & Ohling, 2004; Sarkadi, Kristiansson, Oberklaid, & Bremberg, 2008), it is timely for community child health services to reflect upon father-inclusive care and develop strategies to meet fathers' health needs. "Father engagement seems to have differential effects on desirable outcomes by reducing the frequency of behavioural problems in boys and psychological problems in young women, and enhancing cognitive development, while decreasing delinquency and economic disadvantage in low SES [socio-economic status] families" (Sarkadi, Kristiansson, Oberklaid, & Bremberg, 2008). In some Queensland Health Services inter-district working committees have been formed to address this concerning trend, and survey tools have been used to explore fathers' health service requirements.

### **6.5.2.2 Ethnicity**

The participants were mostly born in Australia (81.4%), with just over 10% of participants being born overseas. However, of those born overseas, only one participant was not an Australian citizen or permanent resident. According to the latest available Australian Bureau of Statistics data, the total overseas-born population of Ipswich is 16.4% (Australian Bureau of Statistics, 2006). The Australian Bureau of Statistics census data does not identify the proportion of this population with children under the age of eighteen months, thus limiting the ability to adequately compare the cohort with the overall overseas-born population. Despite this, a notable increase of 6% has occurred since the phase one documentary analysis. In phase one, only 4% (1999, traditional individual appointment model) and 7% (2001, OAC model) of families were of overseas origin.

The Australian Bureau of Statistics does not have data prior to 2006 identifying the local population's country of birth, thus making it difficult to know whether the establishment of the OAC or the increase in overseas-born families living in Ipswich accounts for the increase. Parents born overseas may have different parenting practices, which require more targeted child health support. For example, a recent Australian study identified that knowledge of SIDS prevention strategies was significantly poorer among overseas-born women, compared with Australian-born mothers (Kemp, Harris, & Chavez, 2006). Overseas-born new parents may also be at increased risk of social isolation because they have minimal local, family support networks. Therefore it is essential that Community Child Health Services are aware of and provide culturally sensitive care to different cultural groups, understanding that their health needs may be different to the mainstream population.

### **6.5.2.3      *Indigenous status***

Many indigenous children live in relative socio-economic disadvantage to other Australians, and have poorer health outcomes, specifically in relation to asthma, partial deafness and otitis media. They are more likely to be exposed to passive smoking, be born of low-birth weight, and have a higher infant mortality rate (Australian Institute of Health and Welfare, 2008). Potentially, many chronic health conditions experienced by older indigenous people could be prevented through intervention in the early years. Thus, the early years are an opportune time for health services to invest resources to improve the lifelong wellbeing of Aboriginal and Torres Strait Islander (ATSI) peoples.

Participants identifying themselves as ATSI comprised 5.7% of the cohort. This is a significant increase from the documentary analysis, where only 1.5% of the sample (both in the individual and OAC models) identified as ATSI. The Australian Bureau of Statistics (2006) census data indicates that the total percentage of the local Ipswich population identifying as indigenous was 3.6%. The Ipswich population rate is slightly higher than the national indigenous population rate, which comprises 2.5% of the total Australian population (Australian Institute of Health and Welfare, 2008). The phase three findings indicate a potentially significant increase in indigenous families accessing the OAC, in comparison to phase one. However, it is important to acknowledge the limitations of the relatively small phase three convenience sample, and the possibility that the increased percentage of ATSI peoples accessing the

OAC, is not representative of the whole population of ATSI peoples accessing the service. Further analysis of current data is required to confirm this trend.

Aboriginal and Torres Strait Islander peoples from urban communities have identified that the most significant barrier to accessing health care services is cost (Australian Institute of Health and Welfare, 2008). Therefore, as the OAC is free, and very close to public transport and other services, this may have assisted in increasing accessibility to this population. The most significant change within Queensland Health in this area, is the appointment of designated advanced health care workers, of ATSI descent, to work alongside community child health teams. The finding that OAC access by ATSI peoples has increased suggests that the liaison role of these health professionals may be a factor that has affected their choice to access this section of the service.

#### **6.5.2.4 Maternal education and employment**

The cohort was comprised predominantly of well-educated mothers, with 30% having completed secondary school and 41.4% having completed a post-schooling trade/TAFE (Technical and Further Education) qualifications or tertiary qualifications. High maternal education has been associated with positive health behaviours such as longer breastfeeding duration (Scott, Aitkin, Binns, & Aroni, 1999). Statistical analysis did not identify a significant difference in this cohort between education level and breastfeeding duration, likely due to the small sample size, however this has been well researched in other, larger studies (Scott et al., 1999). Statistical analysis did not identify a significant difference in this cohort between education level and breastfeeding duration. However, this is probably due to the small sample size, as differences have been shown in other larger studies (Scott et al., 1999).

Approximately half (42.9%) of the cohort identified themselves as a 'home-maker' (therefore they were not employed in paid work) at the time of the initial (one month) interview. By six months this number had increased to 57.6% of the cohort; and by eighteen months decreased to 45.7% of the cohort. The initial increase of 14.7% by six months is likely explained by the cessation of maternity leave (usually not more than six months duration). The subsequent decrease of 11.9% likely reflects the participants' return to paid employment. In many industrialised countries maternal employment rates have continued to increase (Hawkins, Griffiths, Dezateux, Law; Millennium Cohort Study Child Health Group, 2007; Cooklin, Donath,

& Amir, 2008). A large, cohort study in the United Kingdom indicated that the longer a mother delayed her return to work post-partum, the more likely she was to continue to breastfeed (Hawkins et al., 2007). In this study, no statistically significant decrease in breastfeeding rates was found in those women who had returned to work at six months, compared with those who remained at home. With more and more women engaged in the workforce, the World Health Organisation has called for legislation to be implemented in every country to protect breastfeeding, by providing fourteen weeks of maternity leave (paid or unpaid) (World Health Organisation, 2000). International debate continues about this issue, as the industrialised world faces chronic lifestyle conditions, such as childhood obesity, the risk of which has been shown to be reduced through exclusive breastfeeding (Von Kries et al., 1999).

The increase in return to paid employment for mothers also highlights concerns over the accessibility of Community Child Health Services for working parents. Currently OAC clinics are offered during working hours and this may become a barrier to accessibility for some working families. This issue was also explored in the phase two stakeholder analysis, when mothers reported that 'out-of-hours' service provision would be useful for both themselves and their partners. Thus, the phase three data has highlighted the need for Queensland Health services to consider the changing demographics of the Australian family and review innovative models of care to provide easily accessible health care for this group.

### **6.5.3 *Children's community health services***

Within Queensland a variety of health care services provide support to parents with infants and children, including: Queensland Health Community Child Health Services; general practitioners; pharmacy baby clinics; and, non-government organisations (such as the Australian Breastfeeding Association). Parents choose which health service to access with their infant/child, and there is little consistency in care pathways, types of services provided and from whom, and service accessibility. Many parents access multiple services or none at all (Queensland Health, 2008). Throughout the duration of the study participants were asked which health care services they accessed and why. This has yielded helpful information on patterns of attendance and health care needs at different stages during the first eighteen months of life.

### **6.5.3.1 Queensland Health Community Child Health Services**

Participants were recruited following at least one consultation in the OAC with a child health nurse. Therefore all clients had at least one service contact with Community Child Health. Over half (55.7%) of the participants stated they were informed about the service from the local hospital maternity unit. The other two most frequently cited referral sources were: informed by a friend/family member; and walked by and 'dropped-in'.

Anecdotally, there has been some concern regarding parents being inadequately informed about postnatal support services, by maternity units. Globally, it is well recognised that early postnatal support, via health professionals enhances infant and parental health and well-being, such as breastfeeding rates (World Health Organisation, 1998). Queensland Health is currently reviewing the collaboration pathways between pregnancy, birthing and postnatal care, through the Universal Postnatal Contact Services Initiative (Queensland Health, 2008). This initiative aims to improve collaboration between maternity services and community child health services, ensuring that every family is contacted by a health professional and informed about support services, after the birth of their new baby (Queensland Health, 2008).

Participants identified that the main reason they chose the OAC as their child health service provider was due to convenient, local access (32.9%); ability to see a qualified child health nurse (22.9%); and the face-to-face contact (17.1%). These findings are similar to the parental experiences identified in the phase two stakeholder analysis, where parents also valued the face-to-face consultation, and the flexible, easily accessible clinic times. Personal contact with a health professional for support and reassurance is a key reason for health care service attendance by Australian parents (Goldfeld, Wright, & Oberklaid, 2003; Keatinge, 2006).

Within Australia, contact with government child health services varies from state to state. In Victoria and South Australia a universal home visiting service is offered, with approximately 98% of first time parents making some contact with the maternal and child health nurse (Goldfeld et al., 2003). One of the reasons for a lack of consistency in the types of child health services provided, has been due to child health and well-being data collection not being prioritised to the same extent as information relating to other agendas, with major policy and funding decisions made with few or little data informing this process (Goldfeld & Oberklaid,



2005). This has made it difficult to develop services and initiatives to meet this population's health care needs.

At the initial interview (0-six weeks) many participants (80%) stated that infant growth monitoring was their main reason for attendance. This early focus on the infant's weight measurement however became less important to parents over the eighteen month period, with more holistic questions and developmental concerns arising as the infant's age increased. This has important implications for service provision and addressing parent-led needs, at different times. While weight monitoring appears to be an early focus in the neonatal period, with time the parents became more interested in talking to the child health nurse about overall aspects of infant development, specific family health needs, and other topical issues. This confirms the importance of family-centred care and the clarification needed between the parent and nurse, ensuring the nurse is addressing the same health needs the parent has (Arborelius & Bremberg, 2003). When health professionals pursue their own agendas rather than responding to the mother's own concerns this is often perceived in a negative, unhelpful and unsupportive way (Arborelius & Bremberg, 2003). It is essential that child health nurses take the parents' lead, responding to those health issues important to them at that time. One very useful strategy implemented by Queensland Health is the Family Partnerships approach (Davis, Day, & Bidmead, 2002). Currently, each child health nurse in Queensland is provided with training and ongoing support to develop this approach to work with families. It has effectively equipped staff with essential skills in parent-nurse communication, goal setting, empathy and other attributes which are essential in providing effective healthcare.

Concurrent with the OAC, Community Child Health also offers a specialist breastfeeding clinic and parent information sessions, such as infant massage. The uptake of these complementary services was initially high in the first four months of the infant's life and a quarter of the cohort accessed the breastfeeding clinic during this period. This has important implications for timeliness and accessibility of breastfeeding support. The *Ten Steps to Successful Breastfeeding* (WHO, 1998) states that, upon discharge, all mothers should be made aware of local breastfeeding support services and groups. There should be a quick and accessible service, as continuing to breastfeed with cracked nipples or low supply is unsustainable without help, for most women. There is a need to offer specialist breastfeeding clinics within the first few weeks of an infant's life, as this is a very high risk time for weaning (Li, Fein, Chen, & Grummer-Strawn, 2008). However, there was no statistically significant

difference found in breastfeeding duration of those mothers who had accessed the OAC more than average i.e. ten visits over 18 months, compared with those who had accessed it less often. This finding suggests that it is more likely that breastfeeding duration is linked with other factors, for example the timing of the need for help.

### **6.5.3.2 Attendance at general practitioners**

Consistent with other recent Australian research (Goldfeld et al., 2003), most of the families within the cohort, at the one and two month interview points, had also accessed their general practitioner for their infant's health needs. A visit to their general practice was predominantly for a well-baby check-up. An infant's first year of life is a period of high health service usage (Goldfeld et al., 2003). However, the need to visit multiple health professionals for the same service is questionable in the current fiscal and human resource limited environment.

In this cohort, 23% of the participants reported that conflicting advice had been given between the child health nurse and general practitioner. Brodribb et al.'s (2008) research into the knowledge and attitudes of general practitioner registrars regarding breastfeeding is a poignant example of a potential area for misinformation to be provided. Brodribb et al. (2008) found 40% of breastfeeding knowledge items were answered incorrectly by the majority of the general practitioner registrar participants. Of concern was that 40% of these general practitioner registrars stated that they were confident with their knowledge regarding breastfeeding and their effectiveness in assisting women, despite having had virtually no education or training in breastfeeding; they answered many basic knowledge questions incorrectly (Brodribb et al., 2008).

It is difficult for parents to navigate the seemingly complex health care system, especially when they may not have a clear understanding of the different health providers' roles, knowledge and expertise. Potentially, to reduce replication of services, more clarification could be provided to parents as to where it is best to access specific information regarding specific areas of infant health. For example, a clear pathway could be developed; providing guidelines about when to access Community Child Health, for example for growth and development assessments, well-baby concerns and breastfeeding issues. Similarly, it may be more appropriate to consult the general practitioner regarding an unwell infant, immunisation or an ongoing health condition.

Goldfeld et al. (2003) found that middle-income, first-time parents in Victoria averaged 35 health care visits for their infant. The key issues which parents identified in Goldfeld et al.'s study of infant health care usage were opening hours and waiting times (especially keeping babies in a room full of sick adults) of general practitioner services, and the limited level of explanation given to parents by the general practitioner. This concern was also expressed by the participants in this study. Parental concerns with the Maternal and Child Health Service in Goldfeld et al.'s study included inconsistency of information and the limited hours available; issues which were also identified in the key stakeholder (phase two) and cohort (phase three) studies. This high usage of health care was not for unwell or sick infants; 93% were primary health care visits. This demonstrates a high need for parental support in the infant's first year. It is also important to consider that Goldfeld et al.'s (2003) cohort were predominantly very well educated (91.7% of cohort had achieved a high school certificate or higher), and average household income was higher than the Australian average at the time, which does vary from this study. However, it is evident that similar issues were identified within both studies, in terms of parental concerns, despite some educational and socioeconomic variance, however the cohort from this study accessed child health care services less frequently.

The present study has demonstrated that in a universal healthcare system parents are able to access a number of services for their children. There is no evidence, however, of a coordinated approach to service delivery that could capture the opportunities presented by such high frequency visits at a time when, developmentally, there is a great need for consistent preventative and supportive advice and intervention (Goldfeld et al., 2003). From an international perspective, in Sweden parents access Community Child Health nurses on average 13-14 times in their infant's first year of life, thus nurses play the key role in health promotion and health surveillance (Magnusson, Persson, & Sundelin, 2001). A more coordinated, multi-service approach would ensure parents have a clear understanding of health care providers' specialist roles and expertise in caring for their family in their infant's early years, and potentially reduce excess service usage.

#### **6.5.4 Infant development**

In Queensland, parents are encouraged to attend regular developmental assessments for their infants concurrent with the immunisation schedule, that is at two, four, six, twelve and eighteen months of age. Parents may choose to attend these immunisations and

developmental assessments with a child health nurse, a general practitioner or a paediatrician. Routine assessments are also known as health surveillance and aim to identify potential developmental issues early (Magnusson et al., 2001). There is mixed evidence regarding the effectiveness of routine developmental assessment on infants (Magnusson et al., 2001). Throughout industrialised countries the frequency of recommended medical visits varies from two in New Zealand through to six in the USA. Blank (2003) reviewed the available literature and found that there was no clear evidence to guide the number of health supervision visits. As discussed earlier, the lack of data and clear evidence available to health professionals does not provide sufficient information to enable the development of effective guidelines for this process.

Magnusson et al. (2001) found that severe health problems and key abnormalities in infants were detected only to a limited extent through routine health examinations. However, the minor and moderate problems that were detected warranted continuance of a health surveillance programme. Furthermore, in a Scandinavian study (Magnusson, Sundelin, & Westerlund, 2006) it was found that there was no evidence that health examinations carried out by nurses were of lower quality in detecting health problems than those carried out by physicians. The authors questioned the viability and need for physicians (already short and in demand) to carry out a routine health assessment at eighteen months, when the nurses' consultation was often more focused on parental concerns and child development and growth. "Hence the conclusion would be that it is possible to replace the physician with the nurse, especially as the latter seems to have been better at detecting early speech and behavioural problems..." (Magnusson et al., 2006, p. 53).

In this cohort study, the number of families accessing the OAC child health nurse was similar to those accessing the general practitioner for the eighteen month developmental assessment (child health nurse 28.3%; general practitioner 30.4%). This figure predominantly reflected parental-preference and which service was more accessible at the time. However, earlier in the infant's life, more parents accessed the child health nurse for the developmental assessment. For example, at the four month assessment 47.4% attended the child health nurse, compared to 24.6% accessing the general practitioner. This is consistent with high health service attendance frequencies when infants are less than six months old, a time when parental need for information and support is high.

Developmental delay is relatively common in Australia, with rates of around 15% (Oberklaid & Efron, 2005). Of concern is that only about half of these delays are detected prior to school commencement. Parents are usually the first to pick recognise a problem with their child's development. Parental reports of current attainment of developmental tasks has been shown to be accurate and reliable (Glascoe, 1997). Effective tools have been developed within Australia for picking up early developmental concerns quickly and easily, based on parental report, such as the *Parent Evaluation of Developmental Status* (Oberklaid & Efron, 2005), and these would help busy general practitioners with an effective, brief approach (Oberklaid & Efron, 2005). The "GP has an important role to play in early identification of developmental delays, appropriate referrals for detailed assessment, and ongoing family support" (Oberklaid & Efron, 2005, p. 742). There is mixed information in the literature about which health professionals are the most adequately prepared to detect and refer children's' developmental concerns. This further confirms the need for a more coordinated approach between children's health care providers.

In the documentary analysis (phase one) low rates of attendance of routine developmental assessments was a concerning finding. However, this cohort study (phase three) has demonstrated that a very high proportion of parents attended these assessments, albeit using a variety of health care service providers. This is consistent with other research demonstrating that parents often utilise a variety of health care providers to ascertain health services (Goldfeld et al., 2003).

### **6.5.5 Infant nutrition**

The three key areas of infant nutrition explored in the study were breastfeeding practices, introduction to solid/complementary foods, and childhood obesity. These infant nutrition aspects provide useful data pertaining to evidence-based key performance indicators to evaluate service effectiveness and outcomes (WHO, 2008).

#### **6.5.5.1 Breastfeeding**

The World Health Organisation (2003) recommends exclusive breastfeeding as the optimal infant food source for the first six months of life, and to continue beyond two years in conjunction with complementary foods. Breastfeeding rates and duration provide a key

indicator to assess infant and young child feeding practices (WHO, 2008). A recent project designed to measure exclusive breastfeeding rates in South-East Queensland, found that exclusive breastfeeding rates were 38.1% at two months of age, and 9.5% at five months of age (Queensland Health, 2007). This is similar to other developed countries, such as Canada, where exclusive breastfeeding rates are also around 38.7% at four months (Dennis, 2006). This figure is well below the Queensland Health targets of 60% of babies being exclusively breastfed at three months of age, and 50% of babies being breastfed at six months of age (Queensland Health, 2002).

In the OAC cohort, the exclusive breastfeeding rate at two months of age was 47.1% and at six months of age 31.4%. This is higher than the local rates. This could be due to a variety of reasons. Firstly, mothers accessing the OAC may be supported better by the child health nurses, and thus persist with breastfeeding for longer. This is well evidenced in the wider literature, stating that families supported by a health professional in the early weeks of an infant's life (with regard to breastfeeding) are more likely to persist (WHO, 1998).

Furthermore, approximately 25% of the cohort accessed the breastfeeding clinic in the first eight weeks of their infant's life, which potentially would have corrected early feeding problems. Timely and accessible breastfeeding support is essential, as issues such as pain with breastfeeding are identified in approximately 80% of all mothers (Brodrigg, 2004). The limitation in comparing these figures is that the Infant Nutrition Project (Queensland Health, 2007) measured population rates whereas the OAC sample was much smaller and cannot be generalised.

In this cohort, return to work was the most frequently cited reason for choosing a certain duration to breastfeed. Other studies have identified this as a reason for weaning also (O'Brien et al., 2007). The most frequently noted difficulty with breastfeeding was low-supply, which is also consistent with the wider literature as a key reason for women stopping breastfeeding (O'Brien et al., 2007). This reason for weaning is linked to the mother's confidence in her ability to breastfeed, or breastfeeding self-efficacy, rather than often true low-supply or a knowledge deficit (O'Brien et al., 2007; Dennis, 2006). Dennis' (2006) research also indicated that maternal self-efficacy in relation to breastfeeding was strongly influenced by maternal education level, asserting that higher education may provide a stronger sense of personal competence and thus the mother may approach difficult tasks as challenges to be met, rather than threats to be avoided (Dennis, 2006). Considering that this

cohort was predominantly educated at secondary school level or higher, this may also have influenced the higher than average breastfeeding rate.

Considering the vast benefits of breastfeeding for infants, mothers and the wider community, child health services are ideally placed to affect the low breastfeeding rates through easily accessible, effective support, as offered through the breastfeeding clinics, operating in conjunction with the OAC.

#### **6.5.5.2 Introduction of complementary foods**

For infants, after six months of age, it becomes increasingly difficult for them to meet their nutritional needs from breast milk alone (WHO, 2001). Concurrent with this nutritional need, infants are developmentally ready for complementary foods, at around six months of age (Naylor & Morrow, 2001). Despite this global recommendation being eight years old now, many families continue to introduce complementary foods earlier than six months, for a variety of reasons. In this study, the OAC cohort demonstrated similar trends, with 11.5% of two month-old infants receiving solid food, 49.1% of infants receiving solid food at four months, and 100% of the cohort's infants having eaten solid foods by the six month interview. The most frequently cited reason given by parents for commencing solid/complementary foods was that their 'baby was not full on breast milk/formula alone'.

Limited Australian research is available describing the incidence of early introduction to complementary foods. However in a recent infant feeding survey in the United Kingdom, 85% of mothers had introduced solids by four months of age (Department of Health, 2004). The majority of mothers in this study (91%) reported they had received information about when and how to introduce solids from the health visitor. Similarly, of the mothers in the OAC cohort 83.6% stated they were aware of the recommendations regarding introduction of solids, with 75.4% able to identify 'around six months' as the specific recommendation. Despite this, around half of the cohort had introduced solid food at four months. Thus, it would appear that they have accurate knowledge regarding recommendations, however there are other more influential factors affecting their infant feeding choices.

Concerns regarding nutritional adequacy of exclusive breastfeeding until six months, and slowing of infant weight gain influences parental choice for early introduction of solids (Heining et al., 1993). Potential solutions for this are to consistently provide parents with evidence-

based information, being pro-active about informing them regarding the normal course of breastfeeding, situations they may encounter, and erroneous advice that may be given to them (Deshpande, 2008). For example, mothers may be questioned frequently about their baby 'sleeping through the night', with introducing solids offered as an effective method of achieving this goal. However, through child health nurses being aware that this does not in fact alter the infant's sleeping pattern (Heining et al., 1993; Keane, 1988), and informing parents of more effective settling strategies, the temptation to introduce solids early may be influenced. Furthermore, in the recent parliamentary inquiry into breastfeeding (Department of Health and Ageing, 2007), a recommendation was made to review baby food labelling (currently labelled to introduce 'from four months') with Food Standards Australia and New Zealand, as this advertising undermines exclusive breastfeeding for six months.

The OAC cohort had higher than average breastfeeding rates and duration, compared to SE Queensland rates. However confounding variables were not controlled, and thus the finding cannot be directly linked to the OAC. However, it is encouraging that many women did continue to breastfeed and identified that they had received helpful support from the OAC and concurrent breastfeeding clinics.

### **6.5.5.3 Childhood obesity**

Childhood obesity is increasing in prevalence throughout Australia (Doak et al., 2006). Current data suggests that 25% of Australian children are overweight or obese, and that this figure is growing (Margarey et al., 2001). Childhood obesity has numerous negative long-term effects on children's health and wellbeing, and through into adulthood (Campbell et al., 2008).

Cochrane reviews have established that opportunities for prevention of childhood obesity are poorly understood (Summerbell et al., 2005). One study has shown that the early years, specifically prior to the infant reaching eighteen months of age, have been demonstrated to be an effective time to commence obesity prevention strategies (Campbell et al., 2008).

In this study, at the one, six and twelve month interviews, participants were asked if they had thought about and implemented any strategies to reduce the risk of childhood obesity. Parents were more likely to implement strategies as the infant became older, with 73.9% of the cohort stating that a 'healthy diet' was their key strategy for decreasing the risk of childhood obesity.



Anticipatory guidance is a promising approach to prevent multiple health issues, and promote healthy behaviours. Previously, anticipatory guidance has been shown as effective in other health promotion strategies, such as parent-infant interactions and reading to children (Nelson et al., 2003). Considering that many parents are actively aware of the childhood obesity health issue, it is opportunistic for child health nurses to provide evidence-based information on effective preventative measures to reduce this concerning Australian health issue.

### **6.5.6 Immunisation**

The immunisation rates of the cohort were consistently high, with only three participants choosing not to immunise due to the 'potential for harmful side-effects'. Throughout the study, all three of these participants did not attend for any of their infants' immunisations. The high immunisation rate is consistent with phase one data and does not appear to be negatively affected by the OAC approach (Kearney et al., 2008).

### **6.5.7 Teething and oral care**

The oral health of infants and young children is an important indicator of their life-long oral health (Goldfeld, 2007). Early childhood dental problems affect children, not only in their youth, but have been shown to be predictive of problems affecting general growth and development, due to the effects on sleep and eating patterns (Acs et al., 1999). In this study, only 12.3% of parents at four months and 14.8% of parents at six months reported that the child health nurse in the OAC had discussed oral/dental care with them. Early intervention and prevention of dental problems is vital, as infants are rarely able to identify oral or dental problems themselves. Parents often make enquiries regarding 'teething' management and health professionals could opportunistically provide anticipatory guidance regarding good dental care at this time. As demonstrated in phase one (Kearney et al., 2008), by adding a specific health need to the clinical pathway used by child health nurses in the OAC (as in the case of SIDS prevention) an increase in discussion and documentation is likely to occur.

### **6.5.8 Safe sleeping and SIDS prevention**

Queensland has had one of the highest rates of SIDS in Australia in recent years (Young, Schluter, & Francis, 2002). In this study, the majority of the participants stated they were knowledgeable about SIDS and its preventative strategies (98.5%). Of those who identified they had a good understanding, 77.1% were able to identify three or more key safe sleeping strategies, such as placing the baby on their back to sleep and keeping the baby smoke free. Most parents stated that they received their information regarding safe sleeping from the maternity unit staff (26.6%) with only 4.7% identifying the child health nurse as their main information source regarding SIDS prevention.

Whilst the cohort appeared to have a good understanding of SIDS reduction, child health nurses were not in the forefront of the parents' minds as an avenue for information regarding SIDS. Considering the regularity of contact child health nurses have with parents while the infant is growing, it is important that this information is not left for midwives to disseminate in the early days post-birth, but is reinforced throughout the eighteen month contact period with the OAC.

Parents were also asked, at each interview point, where their baby slept predominantly. While most babies slept in a cot or bassinette, some babies slept in bed with their parents. There is varied literature on the safety of co-sleeping and how it is affected by multiple variables, such as parental tiredness levels and whether either parent is a smoker (Blair et al., 1999). Current Queensland Health policy is that all parents are informed properly about the risks of co-sleeping and if they chose to do so, how to go about it in the safest possible way (Queensland Health, 2005).

### **6.5.9 Parental support, parent adjustment, and parent-infant attachment**

The birth of a new baby is a significant life event and for many parents can be a very stressful and challenging time. Throughout the follow-up period, parents were asked about support networks, how they adjusted to the demands of parenting and exploration around their relationship with their new infant was explored

### **6.5.9.1 Parental Support**

The cohort (predominantly mothers) identified consistently their partners and immediate family as the most helpful support people for them. “A sufficient number of supporters who can help by giving time and concrete assistance in child care and housework may positively affect the mother’s state of mind, and consequently strengthen her self-esteem in her new role” (Tarkka, 2003, p. 238). This has been supported in the literature, in that mothers with a stable and supportive relationship with the infant’s father find the adjustment to parenting more manageable (Warren, 2005). Conversely, this has negative implications for those parents without a supportive partner and limited family support network, which is becoming increasingly common in Australia (Jackson et al., 2005). Furthermore, if fathers experience depression or other mental illness, this can escalate difficulties for the mother, and impact on both parents’ relationship with the new baby (Fletcher, 2006). Child health nurses play a pivotal role in facilitating mothers to engage in support groups, parenting networks and other services which may significantly enhance their ability to cope with their new parenting role. An advantage of the OAC is that it involves a group approach, whereby parents have the opportunity to develop relationships with each other, and potentially form support networks. This advantage was discussed at length during the key stakeholder analysis (phase two), by both the mothers, child health nurses, and other key stakeholders.

### **6.5.9.2 Parental adjustment**

Adjustment to parenting has been explored at length within the current literature (Nystrom & Ohling, 2004; Warren, 2005). Therefore, in this study, at the one month and four month interviews, parents were asked how they had managed a stressful event with their infant, such as persistent crying in the early hours of the morning, or when the infant was unwell. At both one and four months, the most frequently cited answer was to ‘share the baby’s care with another person’ (57.1%; 36.8% respectively). This has important considerations. For example, if the mother was at home alone and the partner (most frequently identified as the ‘other person’) was at work or unavailable, the question highlighted is ‘did the parent have other resources to draw upon to cope?’ Again, this has implications for parents without a key person available to support them in the early weeks with their infant. Close to 5% of the cohort stated that they would ‘leave the baby to cry’, which in an early neonate may generate concerns.

By four months of age, 29.8% of the cohort could not recall a stressful event. This emphasises that the early weeks of an infant's life are a key opportunity for child health services to offer flexible, effective and accessible support and care, as this is demonstrated as the time when parents need it most. This was also confirmed by the frequency of parental access to services, which was higher in the early months, compared with when the baby was older. Furthermore, if parents are unable to access effective health care support in the early weeks, due to a lack of knowledge about available support, clinic appointment waiting times, or limited transport, more significant adjustment issues may arise. This is potentially avoidable, if early support is available.

Consistent with the phase one documentary analysis (Kearney et al., 2008), a notable proportion of the cohort (21.5%) identified a significant postnatal adjustment difficulty at the two month interview. This figure reduced significantly to approximately 4% by the six month interview. The majority (72.7%) of participants identifying a postnatal mood disorder (depression or anxiety) stated they had discussed this with the child health nurse at the OAC. However, this does indicate that 27.3% of the participants chose not to disclose this to the nurse. It is unknown why this was, however through drawing on the experience of parents in the phase two key stakeholder analysis, they may have chosen another health care provider (such as their general practitioner) to discuss this with, as they perceived the OAC to be 'for their baby' rather than for themselves. Another potential reason for this is the possibility that due to the focus of the child health nurse around questions regarding 'their own programme' and their focus on the infant's health and well-being, rather than allowing the parent to lead the consultation. Nurse-centred health care has been identified as a barrier to effective support (Arborelius & Bremberg, 2003).

### **6.5.9.3 Parent-infant relationship**

If there are significant parental adjustment issues, this will likely affect the parent-infant relationship (Fletcher, 2006). At the one month, two month, four month and six month interviews parents were asked to describe how they felt about their baby using one key descriptive word. The majority of parents described this feeling with words such as 'beautiful', 'lucky', 'joyful', 'besotted', and 'wonderful'. However, some parents identified that their predominant feeling about their new baby was feeling 'scared', 'overwhelmed', 'high maintenance', and 'concerned'. Nystrom and Ohrling's (2004) review of the literature on the

adjustment to parenting also acknowledged these expressions regarding early parenthood, further indicating that even for families without identified risk factors (such as domestic violence or mental illness), this can be a stressful and overwhelming time.

How child health nurses explore and identify the dynamics of the parent-infant relationship within the clinic setting is an evolving area of research; there is very limited research evidence in this area. Thus, the parents were asked at the one month, two month and four month interviews if the child health nurse had discussed infant cues or communication with them. At the four month interview, about half of the respondents who had attended the OAC in the previous two months stated that the child health nurse had explored infant cues and behaviours. However, at the one month interview the majority of parents (81.3%) did not identify this as a discussion point. This may be due to the focus of the parent on the infant's weight, feeding and output (the main reasons given for attending in the early weeks) and the nurse responding to these specific concerns. However, it would be opportunistic for child health nurses to explore the early parent-infant relationship through some open-ended questions, as simple discussion of 'what their infant is telling them' or 'what special moments have you noticed between you and your baby in the last week or two?' Through further exploration child health nurses may begin to identify parent-infant relationship issues earlier and refer them on to more selected services, such as early intervention specialists. One practical way of prompting this discussion would be to add it to the clinical pathway used in the OAC. This was shown to be an effective strategy to increase discussion and documentation in the documentary analysis phase (Kearney et al., 2008).

While parents accessing the OAC are deemed 'low risk' by default, as they have not been offered the intensive home visiting service, this study has identified clearly that this 'universal population' has significant health care needs. Parents most frequently access infant health care services for reassurance and support (Goldfeld et al., 2003). This trend is also evident in this cohort. However, without reassurance and support, parents may lose confidence in their ability to parent. More specifically, it has been shown that a lack of confidence in breastfeeding adequacy by the mother is the most frequently cited reason for early weaning (Scott et al., 1999). Therefore, considering the marked adjustment parents experience with a new baby, it is essential that services respond to this need with accessible and effective health care.

## 6.6 Limitations

Due to the relatively small sample size ( $n = 72$ ) recruited for this study, it was not appropriate to undertake statistical analysis of differences between most sub-groups within the cohort due to their small numbers. However, for some independent variables, such as maternal education, the sub-groups were sufficiently large to enable tests of difference to be applied. However, no statistically significant differences were found within the cohort.

The study design was descriptive and context-specific, and therefore it was not intended to generalise the findings to the wider population. However, the findings are relevant to other child health services in Australia, and theoretical generalisation (Sharp, 1998) is possible.

## 6.7 Conclusions

Through prospectively following this cohort over their infants' first eighteen months of life, insightful contemporary information has been gathered from local Queensland families. More specifically, clear trends of usage, such as increased visit frequency and use of breastfeeding clinics in the early weeks, provide helpful evidence to assist in service planning. Through understanding where parents access information, such as family and friends, health services may target these sources with health promotion activities. "The real challenge lies in ensuring sustained policy effort to achieve long-term measurable change in outcomes for children – to improve their health and well being, to modify the effects of social determinants, and to minimise the inequalities already apparent in early childhood" (Goldfeld & Oberklaid, 2005, p. 209).

This study has affirmed that parents have varied patterns of attendance within the OAC, based on their immediate needs, and that these change with the age of the infant. There is also important data regarding patterns of usage of other child health service providers, such as access of general practitioners and child health nurses for routine well-baby assessments.

Potentially, parents could be provided with clearer service pathways prior to discharge from maternity units, informing them regarding which services are helpful for specific infant health issues. There is also potential for increased collaboration between Queensland Health and general practitioners and practice nurses, to ensure that services are streamlined and thus reduce the burden on the health care system unnecessarily. This may also be helpful in

ensuring consistency of health care information provided to parents between different providers.

Whilst this study is limited by the small sample size, and a context specific group of families, it does provide new information in key areas, such as why parents introduce solids early, when they consider prevention for childhood obesity, where they are attending for their infants' developmental assessments, and health care needs at different stages between 0-eighteen months. These findings will provide Child Health Services, with valuable information to more efficiently and effectively plan services to meet parental and infant health needs.

**Chapter Seven:**

**Overall findings and discussion**



## 7.1 Introduction

The following chapter synthesises and discusses the predominant, most significant findings which emerged from the various phases within this study. As detailed in chapter three, the reason for choosing a triangulated research approach was to achieve both a holistic understanding of the OAC and its contribution to child health surveillance, but further, to enable the opportunity for confirmation and completeness of the findings to occur. Phase one involved a documentary analysis comparing key clinical indicators between the traditional individual appointment method of child health surveillance and the new OAC group-based approach. The second phase explored the everyday experience of those directly involved in the OAC, including the perspectives of clients, health workers and child health nurses. The final phase involved a prospective cohort study, following up parents over an 18 month period tracking patterns of health care behaviour. This chapter draws upon each of the key findings from each phase, both individually and in the context of the other phases and wider literature. The primary findings in relation to the evaluation of the OAC which are discussed in-depth in this chapter are: the OAC as a child health surveillance mode and the outcome of interventions relating to: infant nutrition, and infant development; health promotion and disease prevention, including SIDS preventative care and immunisation; parental support and well-being, including postnatal mood disorders and the parent-infant relationship; and, service delivery approaches to child health surveillance.

## 7.2 Child health surveillance

Aimed at the prevention and early detection of potential health problems, such as developmental delay or behavioural concerns, child health surveillance has become the normal language of early child health providers. This process forms a core component of the OAC, and was identified and explored in each of the three phases. Currently, "there is no consensus on how surveillance is defined" (NHMRC, 2002, p.220). The most frequently cited definition of child health surveillance is that of Hall and Elliman (2006), and provides a thorough description of this health care service:

*...[Child health surveillance is] the oversight of the physical, social, and emotional health and development of children; measurement and recording of physical growth;*

- Infant nutrition: including growth assessments, breastfeeding rates and duration and introduction of complementary foods
- Infant development: rates of intervention referrals and assessments completed
- Infant sleep and settling: including SIDS awareness, preventative practice and difficulties
- Immunisation: rates and status

*monitoring of developmental progress; offering and arranging intervention when necessary; prevention of disease by immunisation and other means; and health education...*

Whilst all encompassing of much of the work performed in the OAC, in terms of child health surveillance, this definition remains very broad and lacking specific detail of the *how to*. This serves to add ambiguity and vagueness to the work of those who are providing child health surveillance. Thus, the detail of the process outlined in this study has provided some insight into the specifics of this process, as delivered through the OAC. Surveillance ideally is a responsive action, with the skilled health professional responding to parent needs, as well as monitoring the infant's physical growth and development.

The specific areas of child health surveillance explored and evaluated throughout this project included:

### **7.2.1 Infant Nutrition**

A key component of child health surveillance within the OAC was the promotion of optimal infant nutrition, through effective support for families with regards to key areas such as breastfeeding, infant growth monitoring, and introduction of nutritious complementary foods. A number of dimensions of this surveillance role were explored throughout all three studies, and will now be discussed.

#### **7.2.1.1 Breastfeeding**

As discussed in the literature review, good early infant nutrition is vitally important to ensure the best start possible. The current recommendation for optimal infant nutrition is exclusive breastfeeding, with the introduction of nutritious complementary foods from around six months of age (WHO, 2003). Australian breastfeeding rates fall well below national targets, with

current exclusive breastfeeding rates in the area of study being 38.1% at two months of age, and 9.5% at 5 months of age (Queensland Health, 2007).

Between each phase various elements regarding breastfeeding were explored. In phase one, breastfeeding rates and duration were compared between each sample set to determine whether the group-based OAC had a statistically significant impact upon outcomes when compared with the traditional individual appointment model. This study found that breastfeeding rates on initial presentation with the service were very similar between the pre- and post-OPA data sets ( $n = 144$  (1999);  $n = 138$  (2001)), yet duration rates were statistically significantly higher ( $n = 65$ ,  $p < 0.001$ ) in the 2005 group at 12 months, once the OAC had been well established. This finding confirmed that the OAC did not have a negative impact upon breastfeeding rates for those mothers receiving this group-based care, compared with individual care. It is unknown specifically why there was an increase in the duration rates in the 2005 data set, however the most likely key event which occurred in the period between 2001 - 2005, was the introduction of a specific breastfeeding clinic operating concurrent to the OAC, also without the need for an appointment with clients choosing when to attend based on their own needs.

Further explored in phase three, it was found that nearly a quarter of the cohort (21.4%,  $n = 15$ ) had accessed the breastfeeding clinic by the time their infant was 2 months old. Whilst not able to be generalised to the whole population, due to the relatively small sample size, it is important to note that the exclusive breastfeeding rates in phase three were higher than local population breastfeeding rates at both two (47.1%) and five months (31.4%), suggesting that timely, accessible support may potentially improve rates and have a positive impact on breastfeeding continuation. This assumption is supported both in the wider literature (WHO, 1998; Brodribb, 2004) and the experiences of the participants in study two. The child health nurses in study two noted the value of the breastfeeding clinic, stating that there was not enough time, privacy or resources to provide a thorough breastfeeding consultation during the OAC, but rather this was a good 'first point of call' to refer on to more specific services. In addition, some mothers participating in the study made comments on the importance of the reassurance received by the nursing staff that their breastfed baby was thriving and growing within a normal range, and this encouraged them to continue on. However, inconsistent breastfeeding advice was experienced also by the mothers participating in the study, which

would likely have a negative impact upon breastfeeding confidence, knowledge and therefore ability to continue on (Hauck, Hall, & Jones, 2007; Hailes & Wellard, 2000). This is a key area for quality improvement identified within the OAC. Evidence-based, consistent breastfeeding advice and support is absolutely essential to ensure an improvement is made in breastfeeding initiation and duration rates.

### **7.2.1.2 Introduction to complementary foods**

The second key infant nutritional area investigated in this study was the introduction to complementary foods. The OAC is a platform for child health nurses to provide anticipatory guidance to parents around the timeliness, food choices and developmental readiness for infants to commence complementary foods. The World Health Organisation introduced infant feeding guidelines in 2001 which altered the recommended age to introduce complementary foods from 4-6 months, to 6 months (WHO, 2001). In phase one, over half the families (54.5%) introduced complementary foods at around 4 months. Despite the recommendation changing from 4 to 6 months, in the time lapse between phase one and phase three, this trend was sustained in phase three with 49.1% of the cohort having been introduced to complementary foods at around 4 months. A number of recent studies have explored this phenomenon. Globally, WHO (2003) found that no more than 35% of infants are exclusively breastfed for the first 6 months. Locally, a Western Australian study found the median age of introduction of complementary foods to be 17.6 weeks, with 93% of infants from this cohort having received complementary foods prior to 26 weeks (or 6 months) (Scott, Binns, Graham, & Oddy, 2009). This study established young maternal age, smoking prior to pregnancy and not fully breastfeeding at 4 weeks to be the key factors influencing early complementary food introduction (Scott et al, 2009). Further, another recent study explored women's perceptions of the validity of the recommendation to exclusively breastfeed for 6 months and found that they placed high value on exclusive breastfeeding due to the emotional and physical health benefits for the baby, yet the return to work or school was a key factor in being able to execute this goal (Bai, Middlestadt, Peng, & Fly, 2009). The most frequently cited reason for early introduction to complementary foods in study three was the 'baby not full on breast milk / formula alone'. Therefore, whilst it appears most women (83.6% in study three) were aware of the recommendation to introduce food at 6 months, other more influential factors and

values altered the practice of the women, both in this study and in the wider literature (Bai et al., 2009).

It may therefore be concluded that the OAC had a minimal impact upon the timing of the introduction to complementary foods, rather other variables, such as return to work, as cited in the literature (Bai et al., 2009; Scott et al., 2009) are more influential. With this knowledge, OAC child health nurses (and the wider health professional population working with children) may target health care information and education to address these variables and more vulnerable groups.

### **7.2.1.3 Growth monitoring**

Routine infant growth monitoring is recommended by the NHMRC (2002), during the neonatal and early infancy period. This part of child health surveillance assists both health professionals and parents to identify nutritional adequacy and well-being in infants. In phase three, 80% of parents interviewed stated that during their infant's initial 0-6 weeks, growth monitoring was their primary purpose for attending the OAC. Whilst this was important to parents in the early months, this focus transferred as the infant aged, with more holistic concerns, such as developmental progress, becoming more important and subsequently became the key reason for attending the OAC. This finding was confirmed in study two with multiple research participants stating that a key purpose of the OAC was a service to monitor their baby's growth through weighing. However, it was perceived that while the 'weigh' was a reason for attending, the research participants certainly experienced a broader benefit of attending, stating support and reassurance was as, if not more, valuable.

Hall and Elliman (2006) assert that interpretation of infant growth requires a high level of skill and judgement and is generally more accurate when contextual data, such as low or high birth weight is considered. Further, weighing an infant too often, with a strong focus on the weight alone can cause parental stress and anxiety, as current recommendations are for an infant to be weighed around 5-6 times in the first 12 months of life, rather than weekly for instance (Wright, 2000).

Another important aspect of growth monitoring now emerging is that overfeeding of artificially fed infants in the first six months of life can contribute to childhood and later adult obesity (Stettler, Stallings, Troxel et al., 2005; Dennison, Edmunds, Stratton, & Pruzek, 2006). This

risk has been found to be higher in socioeconomically disadvantaged minority parent-infant dyads where infant hunger and full cues may not be so well interpreted (Worobey, Lopez, & Hoffman, 2009). In light of the statistically higher proportion of socioeconomically disadvantaged parents accessing the OAC, in comparison to the traditional individual appointment model (study one), this is an important finding for the child health nurses working within the OAC to be aware of.

Therefore the monitoring of infant growth may have the potential to reduce the risk of childhood obesity, failure to thrive and other serious childhood conditions. However, it is important that the health professionals executing this component of child health surveillance are appropriately skilled and knowledgeable with regards to contextual factors affecting growth and provide reassurance to parents regarding this.

### **7.2.2 Infant development**

The second component of child health surveillance which was provided through the OAC was the support, monitoring and assessment of infant development. This section will review the evidence for routine developmental surveillance, and the rates and referrals generated for developmental concerns within the OAC.

Routine points for infant development have been established alongside the immunisation schedule and are recorded in the Personal Health Record (Queensland Health, 2009) for all infants. These developmental assessments can be performed by a qualified registered nurse (that is a child health nurse), general practitioner (GP) or paediatrician in Queensland. It is the parent's responsibility to attend to these assessments, as these are conducted on a voluntary basis.

The schedule for developmental monitoring varies from state-to-state in Australia, and throughout the world (Core Child Health Programme – UK, 2010), however the developmental milestones remain universal. Currently, there is mixed evidence regarding the effectiveness of routine developmental assessment (Magnusson et al., 2001). In some sectors, routine developmental assessment times are being phased out, with developmental assessment only performed in response to parental concerns, with an overall review occurring by the infant's first birthday (Core Child Health Programme – UK, 2010). It has been well recognised that parents are often the first to identify a concern with their infant's development (Glascoe, 1997)

and tools such as the Parent Evaluation of Developmental Status (Oberklaid & Efron, 2005) have proved to be effective in assessing infant developmental progress. Despite this, the current recommendation remains, with routine developmental assessment conducted in line with immunisations (NHMRC, 2002).

During an infant developmental assessment, all aspects of an infant's development should be examined, including physical, social, emotional, moral and spiritual progress. The opportunity to develop is the right of every child (Article 27: United Nations, 1989). Child development can be enhanced by providing infants opportunities to explore and learn within a responsive, secure family unit (Santrock, 2009). During each visit to the OAC, parents were offered the occasion to discuss any concerns they may have regarding their infant's development. The child health nurses also conduct a basic developmental assessment during this consultation, with a more formal and thorough assessment carried out only at routine times (i.e., in conjunction with immunisations), or when there is a parental concern.

As highlighted in the literature review approximately 10-20% of Australian children experience developmental or behavioural problems significant enough to affect their daily functioning (Oberklaid, 2000). In study one, the number of infants referred for developmental problems was over 20% in both the traditional appointment and OAC models, slightly higher than the Australian average. The literature has supported the continuation of a child health surveillance programme for this very reason, to detect early subtle developmental delays and subsequent targeted intervention (NHMRC, 2002; Magnusson et al., 2001). Yet an evaluation of the effectiveness and efficiency of these services is required, as delayed detection of children's subtle developmental problems persists in Australia (Hart, Brinkman, & Blackmore, 2003), with nearly half of the developmental delays not detected prior to school commencement (Oberklaid & Efron, 2005). This gap in early detection may be due to a variety of reasons, however easily accessible efficient and effective surveillance programmes, such as the OAC, may work to narrow this gap, as early intervention is paramount to achieve each child's potential (Santrock, 2009; Schulz, 2003; Norrie-McCain & Mustard, 1999).

During study one a statistically significant decrease ( $p < 0.001$ ,  $df = 1$ , at the 12 month assessment) was found in the documentation of developmental assessments in the OAC cohort, when compared with the traditional individual appointment model. This may have potentially been the result of a lack of documentation (in that the child health nurses were not completing the formal assessment tools in the client health record) or that parents were

choosing another service provider to complete this assessment, for example their GP. Therefore, in the prospective cohort (study three) parents were asked if, when and why this assessment was completed. This allowed more detail to be known, and confirmation of findings to occur if this were so. Encouragingly, in study three developmental assessment attendance rates were consistently above 80%, thus demonstrating that parents mostly did attend to these assessments, yet not solely with community child health services, but other child health providers also. A clear trend emerged, which showed that in the first 6 months parents predominantly accessed the OAC for these assessments, and then from 6-18 months the GP was accessed more frequently for these developmental assessments. Therefore, whilst the developmental assessment rates appeared to decrease with the OAC, it was not the model of care which affected parental attendance of these assessment, but rather choice of service provider.

Of particular concern was that around 10-15% of parents who had attended their infant's developmental assessment with their GP, stated that the GP did not attend a complete examination. For instance, the infant may have been weighed, but no developmental questions or concerns were discussed. A Scandinavian study compared the quality of nurse opposed to physician routine developmental examinations of infants, finding that nurse examinations were not of any lower quality (Magnusson et al., 2006). The authors found that the nurses' examinations were more focused on parental concerns and child development and growth, and that the nurses were better at detecting early speech and behavioural problems (Magnusson et al., 2006). Study three appeared to confirm Magnusson et al., (2006) findings; however more detailed research is required to assess this quality difference within the Australian context if conclusions are to be drawn. Mindful of this, due to the exceptionally high workload and limited consultation time available to many GP's, this finding has important implications for community child health nursing services in Australia. At present, service communication can be fragmented and is often duplicated (Goldfeld, Wright, & Oberklaid, 2003). In study two, a number of the health care providers working with children (namely the GP's, paediatricians and child safety officers) discussed the value of collegial working relationships between the various services and how this enhances family care (in the 'relationships with other service providers' theme).

Therefore, an 'us and them' attitude between nurses and physicians would not be helpful, but rather a unified, collegial approach valuing the importance of each provider's role would



enhance care. In the recently released report from the National Health and Hospitals Reform Commission (2009), a key recommendation to nurture the best start for children and their families proposes "the opportunity to be enrolled with a primary health care service...[to] enable well integrated and coordinated care and a comprehensive understanding of the health needs of children and their families" (p.20). Furthermore they have recommended improved continuity of care for families within a universal framework, to ensure early identification of developmental concerns occurs, and are treated, thus enhancing lifespan development (National Health and Hospital Reform Commission, 2009).

Therefore, while the literature supports routine developmental assessment as part of a child health surveillance programme (NHMRC, 2002), delayed detection and concerns regarding the quality of the effectiveness of the various programmes remains. This study adds new knowledge regarding the rates of attendance of these developmental assessments and some data regarding the quality of the services provided. Also, trends were observed regarding parental choice of service provider for these assessments, based predominantly on ease of access at the various age points, which may assist in service development and collaboration between the various child health service providers. Further research is required to gain improved understanding of the various service roles in child health surveillance and how improved quality and reduced duplication may occur.

### ***7.2.3 Health promotion and disease prevention***

The final aspect of the OAC child health surveillance programme which was investigated and quality assessed was that of health promotion and disease prevention, specifically in the areas of safe infant sleeping, oral hygiene care and immunisation. Current recommendations are that these particular health promotion areas are discussed opportunistically, with health workers providing anticipatory guidance when appropriate (NHMRC, 2002).

#### ***7.2.3.1 Sudden Infant Death Syndrome***

Sudden infant death syndrome (SIDS) is the death of an infant between 1 month and 1 year of age, which cannot be explained by other events or causes (SIDS&KIDS, 2009). Although relatively uncommon, SIDS remains the leading cause of death during infancy in Australia (ABS, 2009). Deaths from SIDS declined by 83% during the period between 1985 - 2005, and

this was attributed to the public health campaign "Back to Sleep" through SIDS and KIDS Australia (ABS, 2007). This campaign significantly raised community awareness regarding preventative strategies for SIDS.

Nurses, especially community child health nurses, are in an ideal position to provide information and support the 'back to sleep' message of SIDS prevention. However, studies have shown that this message is not always clear and consistent (Miller, Fraser, & Moy, 2008; Young et al., 2002). Concern remains that health professionals may not be fully aware of the evidence-based preventative strategies or communicate these effectively to parents.

During the OAC, child health nurses had the opportunity to discuss SIDS prevention and safe sleeping with parents. During study one client health records were reviewed for documentary evidence that the nursing staff had discussed SIDS prevention with families during their consultation. In the traditional appointment model, SIDS prevention was documented as being discussed statistically significantly more often than in the 2001 OAC cohort ( $p = 0.027$ ,  $t = 4.91$ ,  $df = 1$ ). During the period of time between 2001 - 2005, SIDS prevention was added to the documentary clinical pathway, which resulted in a large rise in documentation of discussion of SIDS prevention ( $p < 0.001$ ;  $n = 164$  (2005);  $n = 6$  (2001);  $n = 16$  (1999)). Therefore, it was not the model of care which affected SIDS prevention discussion, but rather the documentation, in that the addition of this to the clinical pathway supported increased written evidence of discussion.

Yet, whilst this finding was encouraging, it was unknown what parents' actual knowledge of SIDS prevention was or where they gained this information. Therefore, in phase three parents were asked during the initial interview what their understanding of SIDS prevention was. This group was highly knowledgeable regarding SIDS, with 98.5% stating they were aware of SIDS, and 77.1% of the group able to identify three or more preventative safe sleeping strategies (for example, sleeping babies on their back, keeping babies cigarette smoke free and safe bedding linen arrangements). Most parents stated they learnt about SIDS prevention through a brochure (28.1%) or the maternity unit staff (26.6%). Yet, due to the enormous impact a SIDS event has on a family and the effectiveness of the preventative strategies, community child health services must aim for a 100% knowledge and implementation of prevention rate. Therefore, there remains room for improvement in this area within the OAC.

### **7.2.3.2 Oral hygiene and care**

There is strong evidence that oral health during infancy and childhood is a significant determinant of lifelong health and well being (Thomson, Poulton, Milne, Caspi, Broughton, & Ayers, 2004). Dental problems in childhood not only affect dental health, but also the general health and well-being of a child, with dental caries leading to pain, infections and subsequent time of school or affects on growth and development (Goldfeld & Kilpatrick, 2007). Dental caries (decay) are one of the most common chronic childhood diseases (Mouradian, 2001). Public health measures, such as water fluoridation have been successful in reducing the prevalence of dental caries, however inequalities remain in vulnerable populations, such as indigenous and immigrant children in which groups the incidence remains high (Goldfeld & Kilpatrick, 2007). Therefore, opportunistic health promotion in these groups would be beneficial to address these inequalities. "Given that most infants of this age do not come in to contact with the dental profession, rather their parents seek advice from a range of primary care providers, it is being increasingly recognised internationally that cross-disciplinary efforts are required to achieve a reduction in disease burden associated with childhood dental caries" (Goldfeld & Kilpatrick, 2007,p.99).

Nurses working in the OAC were strategically placed to be able to transfer a health promotion message to improve oral care. In phase three investigation of this message was explored by asking parents at the 4 and 6 month interview points whether the child health nurse had discussed teething or oral hygiene care with them during their consultation. Only a minority of participants (12.3% at 4 months and 14.8% at 6 months) stated they had discussed this with the OAC nurse. This is of concern, considering the impact of poor oral health on overall health and well-being. Additionally, 36.1% of the cohort was still offering their infant a bottle for their drinks, rather than a cup at the 12 month interview point. Prolonged bottle usage has been linked to high risk of tooth decay, and all infants should transition to cup by their first birthday (American Dental Association, 2004). The transition to a cup is therefore a key health promotion message which perhaps is not being addressed through the OAC and is subsequently an area for quality improvement.

### **7.2.3.3      *Immunisation***

Immunisation is a key public health strategy which has seen the virtual eradication of many harmful childhood diseases (NHMRC, 2008). Whilst immunisation itself is not provided through the OAC, the immunisation service (facilitated by the local city council) operates concurrent to the OAC in the same location. Furthermore, immunisation rates are a key performance indicator for child health. Immunisation rates in Australia remain relatively high, yet a 1% decrease from 98% - 97% was noted between 2006 – 2007 (ABS, 2007).

In phase one the immunisation rates were consistently high in both the traditional and OAC models, with no statistically significant difference noted between the models of care.

Therefore, there was no negative effect upon immunisation rates with the introduction of the group approach. Similarly in the study three cohort only three participants did not attend all of the immunisations in the 18 month follow-up period, and these three all conscientiously objected to immunisation and were concerned about side effects, thus not attending to any immunisations in the study period. Whilst the OAC did not directly provide the immunisations there is clear evidence within the literature that regular client reminder / recall systems through primary health care services improve immunisation attendance rates (Szilagyi et al., 2005). Therefore, the community child health service is an effective means through which immunisation rates can be influenced, and this was not affected by the OAC approach.

This section has provided an overview of the key areas of child health surveillance which are provided through the OAC. Another important aspect of child health surveillance is parental and family support. This element will now be discussed in greater detail, specifically how well the OAC supports families in the first 18 months of parenting.

## **7.3      Parental Support and Wellbeing**

Parenting has been described as the most important public health issue facing Western societies today (Hoghugh, 1998). A vital part of public health child health surveillance programmes, both in Australia and internationally, is the support of parents, specifically in the areas of parental coping, postnatal depression, parent-infant attachment or other parental health needs (Patient UK, 2010; NHMRC, 2002; Queensland Health, 2009). Little specificity however is provided in the 'how to' of this role, and subsequently is open to interpretation by the various child health service providers. Whilst the literature regarding the early months of

parenting is diverse and specific, *how* child health nurses (or other health professionals) support parents is a little more ambiguous.

Three specific areas of this role within child health surveillance which have been investigated throughout this study are those of parental support and reassurance; postnatal mood disorders; and parent-infant attachment.

### **7.3.1 Parental support and reassurance**

Various studies have explored the importance of support during the transition to parenting (Warren, 2005; Tarkka, 2003; Tarkka, Paunonen, & Laippala, 2000). New parents receive support from a variety of sources, including their partner, family and friends, other new parents, health professionals and the greater community. Support (or lack of it) has been correlated with parenting self-efficacy, maternal role transition and postnatal mood disorders (Tarkka, Paunonen, & Laippala, 2000).

The support received from the maternal partner has been shown to have the greatest impact and is most valuable to many mothers (Hildingsson, Tingvall, & Ruberesson, 2008; Tarrka, 2003). Similarly, in this study (specifically in study three) partners were identified as the most helpful support person to the mother (average 60.58%). This finding has implications for those parents whose partner is absent or unsupportive. This has been found to increase the likelihood of postnatal depression, difficulty coping and subsequently poorer child health outcomes (Tarkka, Paunonen, & Laippala, 2000; O'Hara, 2009). This confirms that during the OAC (and individual appointments) with parents, it is essential that nurses enquire into family functioning and support networks. Whilst this study has identified that parents accessing the OAC value partner support, how child health nurses engage with parents to enquire into the relationship between the infant's parents within the OAC setting would require further investigation and exploration.

Another area of parenting support which warrants discussion is the support from other parents or peers. In contemporary society, mothers often feel isolated with many working in paid employment previous to childbearing. To address this social isolation, studies have found that child health nurses should encourage parents to attend early parenting groups, as these have been shown to have a positive effect on motherhood, provide psychological support, and

parents have reported improved coping and confidence (Jarvinen et al., 2000; Bondas-Salonen, 1998).

During phase one the client health records were audited for documentary evidence that the child health nurses had referred (or encouraged mothers) to attend a playgroup, new parent group, Australian Breastfeeding Association meeting, or equivalent. There was very limited data recorded in the client health records regarding this support to parents across both the traditional appointment and OAC cohorts, with the vast majority containing no data at all (n = 378; 94.5%), regarding this important resource. It is unknown whether the child health nurses did discuss this and did not document this referral / discussion, or not. However, it does highlight the lack of quality documentation in this area and poses an important area for quality improvement.

Further in phase two, a number of mothers shared their experiences of social isolation, loneliness and thus the value in attending the OAC to meet other mothers. However, the OAC was not described as the type of group where meaningful relationships developed, with one mother commenting that the research focus group itself would have been like something she would have enjoyed in the early weeks of first-time parenthood. Subsequently, an early parenting group was developed during the research study, known as the Forth Trimester, targeted at first-time parents with an infant aged between 0 -8 weeks. This new group was not formally evaluated as part of this research study, yet its development and implementation was an early organisational response to the findings from studies one and two of this project.

Furthermore, in phase three parents were asked at the 18 month interview point if they were involved in or attending a parent group or playgroup for support. Over half the cohort (60.9%) of families stated they were. Scott et al (2001) study found that new parent groups commenced through the community child health clinic predominantly continued meeting for 12 months and beyond.

Also, in phase three playgroup mothers were identified as a key source of support for some participants when asked who their key support group / person was throughout the 18 month period (peak of 16.1% at the 2 month interview point). This finding may imply that the child health nurses in the OAC did inform and/or encourage parent participation in parenting groups; however this link is only based on circumstantial evidence due to a lack of clear documentation regarding this aspect of the OAC. Further, with the adaption of the clinical pathway to include SIDS preventative strategies (occurring in 2004), referral to parenting

groups (such as the Fourth Trimester) were added, and thus a likely increase in documentation would be seen in current client health records, based on previous findings from phase one.

In terms of health professional support of the parenting role, many parent participants who attended the OAC stated a reason for their visit was to receive reassurance that they were 'doing a good job.' Similarly, it has been demonstrated in the literature that appraisal support, support for parental competence and decision-making are important child health nurse traits (Tarkka, Paunonen, & Laippala, 2000; Warren, 2005). Other studies have confirmed that affect (emotional support), affirmation and aid from child health nurses was found to be helpful and supportive to mothers (Tarkka et al., 1999). Further in a phenomenological study conducted by Bondas-Salonen (1998) mothers identified that they enjoyed educational support by a competent midwife / nurse, within a group setting where issues could be shared and explored through the nurses' facilitation and parental openness. This description is similar to those provided by the participants in phase two, whereby the OAC was described as a place where parents and nurses shared knowledge, experiences and the parenting journey. The social support provided by child health nurses has been shown to play a significant role in the development of motherhood (Tarkka et al., 2001), and thus child health clinics, such as the OAC compose a vital aspect of effective family support.

Yet, an overarching theme expressed in phase two and also in the wider literature (Davis, Day, & Bidmead, 2002; Tammentie, Paavilainen, Tarkka, & Astedt-Kurki, 2009), is the crucial relationship between the child health nurse and the parent. The participants in phase two shared the importance of the trusting, equal relationship between nurse and parent in planning the infant's care, and that the process of 'knowing' the nurse and the nurse 'knowing' the family enhanced the care received through the OAC. As one mother stated: "It's nice that they remember you from week to week...they know you, they know your child, they know what happened last week." If this relationship was not present, care was more about 'routine examinations' rather than parental needs or concerns (Tammentie et al., 2009), as one mother stated in this Scandinavian study "It's really hard that they don't remember us, that she's got no idea who we are". This Finnish study found that parents identified *discussion of their life situation at the time* as the most important expectation of the child health clinic, however experienced the nurses' focus was upon physical measurement of the child and immunisations (Tammentie et al., 2009). They desired specific help for their individual needs.

For some mothers in phase two, this was also identified as a key reason for attending the OAC child health clinic; however they shared experiences of their questions being answered and individual cares attended. Some parents stated they simply did attend for a weigh and measure. Therefore, the important point is that child health nurses provide flexible parent-led consultations, through the OAC rather than a prescriptive routine set of tasks. This would enhance the supportive role of the child health nurse for parents.

This section has discussed the importance of parenting reassurance and support, both from health professionals, family and peers. Parents identified that the OAC provided effective parental support, through the therapeutic relationship between the child health nurse and parent. However clearer documentation is required to confirm referral to peer support groups. Partners were identified as they most helpful support to new mothers, and this has implications for child health nurses ensure exploration of family dynamics through competent family assessment skills during the OAC consultations.

### **7.3.1.1 Postnatal mood disorders**

For those parents without caring support, the risk of postnatal mood disorders (specifically depression and anxiety) is higher (O'Hara, 2009). The specific aetiology of postnatal mood disorders is unclear although according to present knowledge the greatest risk factor is seen to be lack of social support (Simons et al., 2003). Overall, depression is the single largest contributor to years lived with disability and internationally, for women aged 15-44 years old depression is second only to HIV/AIDS in terms of total disability (WHO, 2001). Locally, it is estimated that around 16% of mothers are diagnosed with postnatal depression (Beyond Blue, 2010). The effects of postnatal anxiety and depression are widespread, and affect the whole family unit. Maternal anxiety both during the pregnancy and postnatal period has been found to increase perceived infant temperamental difficulties (Henrichs, Schenk, Schmidt, Velders, Hofman, Jaddoe, Verhust, & Tiemeier, 2009). Furthermore, mothers with a lower education, severe fatigue and dissatisfaction with family life are at higher risk (Doering Runquist, Morin, & Stetzer, 2009; Tammentie, Tarkka, Astedt-Kurki, & Paavilainen, 2002). Links have also been found between unemployment and physical health problems and postnatal depression (Rubertsson, Waldenstrom, Wickberg, Radestad, & Hildingsson, 2005). Conversely, close mother-infant attachment and breastfeeding are important protective factors



against PND (Tarkka et al., 2002). So too is equipping mothers with realistic (rather than overtly optimistic) expectations for early motherhood (Callahan Churchill & Davis, 2010).

Whilst the OAC is not specifically designed to support mothers experiencing postnatal mood disorders (a separate intensive home visiting service is supposed to capture this group of mothers), phase one and three found steady rates of mothers with diagnosed PND attending the OAC (phase one, n = 45 (7.5%); phase three n = 11 (15%)). Statistically, these rates were similar to the national average, despite many mothers in the health service district with PND being visited in their homes. Similarly, 2 participants in phase two also identified that they had been diagnosed with PND, and had found good support through the OAC. Yet, one child health nurse reported an experience of seeing one mother in a rural OAC who did not disclose her diagnosis of PND to the urban clinic OAC nurse as she always seemed too busy. Considering the detrimental effects of postnatal depression, it is essential that those mothers involved with the OAC are provided with referrals to more targeted services (such as individual and/or group therapy, medical involvement and increased social supports). Yet one recommendation from a recent Finnish study was that mothers with a diagnosis of PND should be allowed the flexibility to access community child health clinics more frequently if that is what their support needs are (Tammentie et al., 2009). Similarly, it was found in phase one parents with a diagnosis of PND attended the OAC statistically significantly more frequently than those without PND. The OAC allows the flexibility for these variable attendance patterns, perhaps more so than that of scheduled appointment systems. It is important to note however, that the OAC is a good first-base for parents to access help, however is not resourced or designed to provide the more intense support required by families experiencing PND.

However, perhaps the most important aspect pertaining to PND which child health nurses can offer through the OAC is to optimise parental supports through referral and linkages to more targeted group programmes and services.

### **7.3.1.2 Parent-infant attachment**

The relationship between parents and their infants has been an area of significant health care research over the past few decades (Norrie-McCain & Mustard, 1999; Schulz, 2003). “The

parent–child relationship refers to the connection between parent and child and includes attributes such as

closeness, influence, attachment, and investment” (Lutz et al., 2009, p.262) Nursing services and interventions play a significant role in optimizing this relationship and identifying any dysfunction that may exist in this relationship. During a consultation in the OAC, child health nurses have an opportunity to observe parent-infant interaction as described by this nurse in phase two:

*Her whole demeanour was like this [nurse slumped in chair] with the baby like this and she couldn't look at the pram and your instinct immediately is “oh my goodness, you've got a problem” – we need to deal with it*

Whilst this nurse observed a mother who could not look at her baby in the pram (and subsequently identified a high likelihood of PND), the nurses in the clinic also had the opportunity to observe affectionate and appropriate parent-infant responsiveness. Whilst complex and poor attachment signs were identified in the OAC, this was not the norm, thus was not explored in great depth during this study. However, the subtle communication and cues which infants give their parents could be enhanced through nurse education with parents.

Phase three explored the parent-infant relationship via the regular telephone interviews. Many parents identified that the nurse at the OAC had not discussed infant communication or cues with them (81.3% at 1 month; 40.3% at 2 months). This is concerning, as the social-emotional development of the infant is just as important as other areas of development, and may not attract similar attention to physical growth and development by nursing staff. The self-efficacy, competence and confidence of mothers has been shown to affect their relationship with their infant (Tarkka et al., 2000).

In addition, Mercer and Walker's (2006) review of the current literature pertaining to the parent-infant relationship found a consistent relationship between maternal attachment and attitude to her infant and her sense of self-confidence and competence in mothering. Subsequently, as this relationship between the mother and infant develops so too does her confidence. For health care service providers, this confirms the need for more intense support in the early transition (usually from birth to 4 months) to parenting, with support services being required less intensively as the infant approaches 12 months old (Mercer &

Walker, 2006). The transition to parenthood, or becoming a mother, has been found to evolve in stages during the first 8-12 months of an infant's life (Tarkka, 2003). Research has found that initially mothers are strongly influenced by health professionals and others giving advice, and then they develop a parenting style, unique to themselves, as the infant approaches 8 months (Tarkka, 2003). Parents' confidence and self-efficacy has been shown to develop alongside the increasing age of the infant (Hudson, Elek, & Fleck, 2001), and subsequent use of health care service support would accordingly decrease. This access trend (of more frequent visits in early months, and less frequent in latter months, see figure 3.3 in phase three), was confirmed in the prospective cohort study.

Prior to Mercer and Walker's (2006) review of research focused on nursing interventions to promote maternal adaptation to parenting, Donaldson (1991) conducted a similar review, as the previous decade had seen a large body of research conducted around maternal role adjustment (Lutz, Anderson, Pridham, Riesch, and Becker, 2009). Although some 19 years old Donaldson's (1991) recommendations remain relevant today, in that she found that mothers who received nursing support and interventions during the first 8 weeks postpartum asked more questions, expressed more concerns and utilised more community resources. At that time she raised concerns regarding early discharge of mother and infant from hospital following birth, and that the postpartum support system had been widely neglected in America (Donaldson, 1991). Mercer and Walker (2006) found that nursing interventions to enhance the mother-infant relationship were more effective if demonstrations and aspects were noted in the mother's own infant; and that mother's preferred face-to-face consultation in this area, rather than audio or video – taped mediums. Nystrom and Ohrling (2004) also suggested that nursing support which empowers parents can also assist in the development of secure parent-infant relationships.

Some participants (in phase two) agreed that for first-time parents with a young infant the OAC was not always the best avenue to service their complex needs. Rather, a more structured early parenting group tailored for first-time parents with an infant 0-8 weeks (like the Fourth Trimester mentioned earlier) would allow more time with the child health nurse, opportunity to discuss issues with other mothers and relieve some of the time and workload pressures off the nurses working in the OAC. This group may also provide the 'space' for more detailed observation of parent-infant attachment, and ways to enhance this vital relationship.

- Clear, direct and evidence based communication between nurse and parent
- Conveying concern, enquiring about emotional state and empathetic responsiveness to parent questions and enquiries
- Interventions which foster a sense of competence in parenting (such as information and advice re: feeding, sleep & settling, bathing, etc) which empower parents

The support of early interaction between parent and infant has been shown to promote the development of secure attachments (Tammentie et al., 2009), and this secure relationship is the context within which child development occurs, and is thus fundamentally linked to optimal developmental and health outcomes for the child (Lutz et al., 2009).

While further research is required to test nursing interventions which support the parent-infant relationship, existing evidence (summarised in Lutz et al (2009) literature review) supports a number of key roles which can be implemented in the OAC. These include:

Thus, the nurses working in the OAC potentially can provide parents with these tools to enhance their parenting self-efficacy and thus attachment to their infant.

#### **7.4 Service delivery approaches to child health surveillance**

The third key discussion area highlighted throughout this project and the wider literature (Goldfeld et al., 2003), is the utilisation of the various health care providers who perform child health surveillance and the different approaches used within each of these services. The National Health and Medical Research Council's critical review of the evidence (2002) in this area surmised that 'most families would benefit from ongoing contact with a universal system that is responsive to their needs' (p.224). However, the report is now some 8 years old and further provides no specificity of who should provide these services, how they are to be provided, or any other particular details regarding the operation of a universal child health surveillance system.

While this study has aimed to evaluate one approach (the Open Access Clinic) to child health surveillance, very little other published evidence is available in the area of group-based approaches to child health surveillance (Brooks et al., 1993; Lee et al., 2003; Rice & Slater, 1997). Countries such as the United Kingdom have a long established universal health visiting service, however this too has recently been under review (Lowe, 2007). The recently

released National Health and Hospitals Reform Commission (2009) report in Australia has recommended the introduction of universal child and family health services, which offer a schedule of core contacts with families with infants, specifically in the first three years of life, targeting health monitoring, advice and support of parenting, and early identification of extra health needs. How this is done in the current resource (both human and fiscal) challenged environment will require innovative solutions. Similarly, they have recommended an integrated approach to service delivery (NHHRC, 2009), yet this study has highlighted (specifically in phase three) that there is likely duplication of child health services, between general practitioners and Queensland Health CCHS, and a dearth of communication and collaboration between various health care providers.

Yet, what this project has also demonstrated is that parents choose a variety of services to meet their health care needs. For instance, phase one found a reduction in documented formal developmental assessments in the OAC cohort (both 2001 and 2005). When further investigated in phase three, it was found parents accessed a variety of child health care services (such as their GP or paediatrician) to attend these assessments. In addition to this, parents shared experiences in phase two of accessing their family GP for more private or sensitive issues (such as postnatal haemorrhoids), as they perceived that to be a more appropriate service. However, it cannot be assumed that *all parents* were this well informed about the various services and which were the most appropriate for various health needs. It is beyond the scope of this study to provide an in-depth analysis of this service utilisation trend; however some recommendations generated from this study are further discussed in chapter eight.

## **7.5 Conclusion**

In the key areas of an effective child health surveillance programme (areas of infant growth and development, health promotion and parent support), this research study has evaluated one component of a child health surveillance programme which has compared favourably to more traditional methods, when offered within a holistic child and family health care service. However, there remains significant room for quality improvement within the OAC service, especially in the areas of consistent-evidence based information and advice and specific

areas of anticipatory guidance, such as SIDS prevention, the parent-infant relationship and infant dental care.

**Chapter Eight:**

**Conclusions and Recommendations**

## **8.1 Introduction**

In conclusion, this study has yielded new and informative knowledge and understanding regarding the OAC approach to child health surveillance and parental support. Whilst it was initially developed in response to limited resources, as this study has shown, the OAC performs competitively with more traditional individual appointment methods of child health care. This final chapter will summarise the most significant findings which this study has generated, the significance of these findings for nursing, including clinical and further research implications. Then a discussion regarding the study limitations will ensue, followed by some concluding remarks.

## **8.2 New knowledge generated from this study**

This study has confirmed that the Open Access Clinic approach to child health surveillance compared favourably to the traditional individual appointment model in terms of health indicators and client satisfaction. Previous to this study, scant evidence was available, in Australia and beyond, regarding child health surveillance models of care and which approaches were effective and/or valued by parents, child health nurses and other health care workers. New knowledge was also gained in the area of parental patterns of health care behaviour in their infants first 18 months of life, which had not been examined in the universal population in Queensland previously. There are a number of other key findings which are important to highlight in this concluding chapter.

Previous to this study, community child health nurses had no rigorous evidence with which to guide service delivery models of care with regards to child health surveillance. Traditionally, this service had been offered via individual appointments in a clinic setting. This style of service was resource intensive and resulted in significantly long waiting times for parents (6-8 weeks was the norm previous to the introduction of the OAC). This study has demonstrated that the group-based, appointment free OAC approach compares favourably in the areas of parent support and reassurance, infant growth and development, health promotion and infant nutrition.

Secondly, rich qualitative data emerged during the second phase of the study, which provided greater understanding and knowledge regarding the direct everyday experience of the OAC. It was imperative that this method of child health surveillance met parental and service needs,



not only in a measurable, quantitative sense (for example, in breastfeeding rates), but also in terms of client satisfaction. Prior to this study it was unknown if parents, child health nurses and other workers were pleased with the OAC approach. This study has provided an in-depth exploration into the strengths of the OAC approach, such as the flexibility, reduction in waiting times and parent support, and also areas for quality improvement, such as consistent, evidence-based information and documentation, and the need for more nurse-time for first-time mothers with a new baby.

The final area of new nursing knowledge generated by this study was the provision of a clear insight into patterns of healthcare behaviour over the early parenting months (0-18 months), which was followed up in phase three. Prior to this study, limited literature had explored where Australian parents accessed health care services for their infants and no previous Queensland literature was available at all. This study found there to be significant duplication of services between community child health nursing services and general practitioners. Phase three also provided clear patterns of attendance, and how often and where parents accessed information and support, which may assist in future health promotion initiatives. Further areas for quality improvement within the OAC were also identified in phase three, including the lack of discussion in the early months (0-6 months) about the infant's cues and communication and parent-infant relationship, a core area of child health nursing support.

Overall, the new knowledge generated from this study will assist community child health nursing services to consider contemporary alternatives to traditional models of care. Furthermore, this study has made a significant contribution to the evidence base which guides community base child health nursing.

### **8.3 Significance of the findings for nursing**

As a result of the new knowledge gained from this study, subsequent clinical implications have emerged. The key clinical implications from this study directly affect the local CCHS where the study was conducted, but also have ongoing ramifications for other urban child health care services and community health nursing both in Australia and abroad.

### **8.3.1 Implications for clinical practice**

Firstly, this study concluded that the OAC is a safe, effective and efficient method through which to deliver a quality child health surveillance service. A number of strengths were identified, including a parent-led, flexible approach to anticipatory guidance; a reduction in clinical waiting times; an increase in the breastfeeding duration in the OAC cohort; increase in socioeconomically disadvantaged families accessing the OAC service when compared to the traditional individual appointment service; and the benefits of parent-to-parent support experienced by the families accessing the OAC. The study also identified areas for quality improvement within the local service, especially in the areas of documentation, discussion of SIDS and safe sleeping practices, and anticipatory guidance regarding parent-infant attachment and infant cues and communication.

As this study has found that the OAC model of child health surveillance compared favourably with the traditional individual appointment service, other CCHS may also consider reviewing the models of care through which they deliver services. Contemporary approaches to nursing services have been trialled in many districts throughout Australia with varying success. This study also may provide a foundation for other CCHS and community based nursing services to potentially trial Open Access models of care.

Finally, the third phase of this study highlighted the duplication of child health services, especially between CCHS and GP centres. This duplication occurred predominantly due to a lack of clear discharge planning pathways, where parents were not well informed as to which service was available and/or the most appropriate to access for child health surveillance or parenting support. A lack of consistency between health service districts within Queensland may add to this confusion and potential under or over usage of services.

### **8.3.2 Implications for further research**

The findings from this study also have implications for further research. Firstly, this study only evaluated one urban community child health service, which was context specific and did not include varying socioeconomic or cultural population groups or rural communities. Therefore, there remains a lack of good quality evidence to guide child health surveillance programmes in rural and culturally diverse communities.

Impact of early discharge on postnatal support services, namely general practitioners and community child health services requires more careful examination and the subsequent effects this has on mothers' confidence in their parenting ability and choices made with regards to child health care is another area requiring more intensive review.

There would also be benefits in conducting a study large enough to assess statistical significance in health outcomes for those parents regularly accessing CCHS compared with those who do not. This may also contribute to the value of current services and justify their efficacy and potentially attract additional funding, if found to be effective and useful.

While this study has highlighted that duplication and under or over-usage of CCHS may occur, it is currently unknown how to address this. Further research and investigation into transitional pathways between hospitals, community centres, general practitioners and non-government support agencies would assist in building collaboration and reduce unnecessary duplication and confusion for parents.

Further research would also be useful to evaluate open access approaches to service delivery in other areas of community nursing care, such as mental health or disability services.

Therefore, while it is well understood that the early years are crucial in lifelong development, the way in which universal health care services support parents with young infants and children is not so well known and requires closer examination.

## **8.4 Study limitations**

The research findings from this study make an important contribution to understanding and assessing the efficacy and perceived value of open access, group approaches to child health surveillance and parent support. Important factors to consider when evaluating the study include: the study size and design; missing data and participant withdrawals; and location of the study.

This study did not aim to scientifically prove a hypothesis, but rather the objective was to evaluate the effectiveness and quality of a nursing-based community health service. This objective was achieved. While, theoretical generalisation (Sharp, 1998) of the findings is possible, overall population generalisation of these findings is not. This is due to the relatively small sample size and context specific purposive data collection. Similarly, while a level of

transferability may occur from the phase two findings, overall generalisability may not as this was not the aim or purpose of this study.

In phase one some of the health indicators being compared were not documented in the client health records. This led to a portion of data being unable to be collected and some areas to remain poorly understood, yet this poor documentation in some areas was significant in itself and discussed in chapter four. Similarly, in phase three some data was missing due to participants being unable to be contacted at routine questionnaire points. Furthermore, some participants were unable to be contacted for the duration of the prospective cohort study from a particular point forward, and this reduced the volume of data collected towards the end of the 18-month data collection period.

Finally, this study sample predominantly comprised of Caucasian Australians and parents from diverse or minority groups were minimally represented. However, an increase in families identifying as indigenous was noted in the phase three sample. Therefore, whether the OAC is culturally appropriate for families from other ethnicities and backgrounds is unknown and requires further examination.

## **8.5 Concluding remarks**

This research study has made an important contribution to nursing knowledge in the area of universal community child health services. It is now known that the OAC approach to child health surveillance and parent support improved timely accessibility of well-child health care services for families within this study, without compromising on service quality. Many strengths of this approach were identified, such as improved breastfeeding duration and a high level of parent reported support and reassurance. However, areas for further quality improvement with the OAC approach were also identified, especially in the area of increased time allowed for first-time parents with an infant under 3 months old, client health record documentation and client-care pathways between the various service providers, both government and non-government.

As articulated in the introduction to this study it is the right of every child (and their family) "...to the enjoyment of the highest attainable standard of health and to facilities for the

treatment of illness and rehabilitation of health...parties shall strive to ensure that no child is deprived of his or her right of access to such health care services" (Article 24: World Health Organisation, 1989). This study was about examining one approach to improved *access to universal community child health care services*, and considering if it was the 'highest attainable standard'. Whilst the OAC has improved access, parental confidence and subsequently health outcomes in the universal population group explored in this study, it is also of immense benefit that areas for quality improvement were identified in this study so that standards of child health care may be improved upon and further examined.

## **Appendices**

**Appendix A: Participant information form (phase two - focus group participants)**

## INFORMATION LETTER

### TO PARTICIPANTS

I am Lauren Kearney a Registered Nurse, and Child Health Nurse. I am interested in your experience of using the Open Plan Clinic to inform future development of the service. I am enrolled in a research degree and this research study is part of my studies at ACU National.

Queensland Health in partnership with the Australian Catholic University is inviting key stakeholders in our service, to participate in research evaluating the effectiveness of service provision to families accessing the Open Plan clinics.

- **Purpose of the Study?**

Many new mothers attend local Child Health Clinics in their residential area to access information, support and advice regarding their parenting role. However, very little research has been conducted to evaluate whether or not child health services are adequate or appropriate for our clients.

The Child Health team are aiming to evaluate our service to families who access our Open Plan drop-in clinics.

- **What is involved?**

If you agree to participate in the study, you along with other key stakeholders will be invited to participate in a one hour focus group. This will involve asking questions about the open plan clinic and how well it meets your / client needs and suggestions for improvement.



- **What sort of questions will I be asked?**

The questions will be about the Open Plan clinic. They will be focused around your experience of the open plan clinics, and your perceived effectiveness of the service in meeting client needs.

- **Can I change my mind?**

You are free to withdraw from the study at any time, and this will not affect your employment or working conditions in any way.

- **What happens to the information I provide?**

All information you give in the interviews will be used for the purposes of the study. Following the interview any details which identify you (for example your name) will be coded. All records will be kept in a locked cabinet at Community Health at the Ipswich Health Plaza and at the Australian Catholic University, McAuley campus. No names or case histories or identifying personal information will be reported or published in the presentation of the results of the study.

- **Will I receive anything for taking part?**

Queensland Health needs key stakeholders like you to help us carry out this important work. While the study may not benefit you personally, the study aims to improve services provided to local families based on your feedback.

This will ultimately improve the future health and well being of mothers, fathers and babies throughout Queensland, by providing information that will assist Queensland Health in meeting client needs.

- **Who do I contact?**

*Any questions regarding this project should be directed to the Supervisor and the Student Researcher*

Lauren Kearney (Student researcher)

(07) 3817 2372

School of Nursing

Australian Catholic University

PO Box 456

OR

Professor Paul Fulbrook (Supervisor)

(07) 3623 7420

A summary of the results of the study will be forwarded to you as feedback and follow-up after the project is completed.

This study has been approved by the Human Research Ethics Committee at Australian Catholic University and West Moreton Human Research Ethics Committee.

▪ **What if things go wrong?**

In the event that you have any complaint or concern about the way you have been treated during the study, or if you have any query that the Investigator or Supervisor and Student Researcher have not been able to satisfy, you may write to the Chair of the Human Research Ethics Committee care of the nearest branch of the Research Services Unit.

Chair, HREC  
C/o Research Services  
Australian Catholic University  
Brisbane Campus  
PO Box 456  
Virginia QLD 4014  
Tel: 07 3623 7294  
Fax: 07 3623 7328

*Any complaint or concern will be treated in confidence and fully investigated. The participant will be informed of the outcome.*

If you agree to participate in this project, you should sign both copies of the Consent Form, retain one copy for your records and return the other copy to the Investigator or Student Researcher.

.....  
Signature of student researcher

.....  
Supervisor

**Appendix B: Participant information form (phase two - individual interview participants)**

## INFORMATION LETTER TO PARTICIPANTS

I am Lauren Kearney a Registered Nurse, and Child Health Nurse. I am interested in your experience of using the Open Plan Clinic to inform future development of the service. I am enrolled in a research degree and this research study is part of my studies at ACU National.

Queensland Health in partnership with the Australian Catholic University is inviting key stakeholders in our service, to participate in research evaluating the effectiveness of service provision to families accessing the Open Plan clinics.

- **Purpose of the Study?**

Many new mothers attend local Child Health Clinics in their residential area to access information, support and advice regarding their parenting role. However, very little research has been conducted to evaluate whether or not child health services are adequate or appropriate for our clients.

The Child Health team are aiming to evaluate our service to families who access our Open Plan drop-in clinics.

- **What is involved?**

If you agree to participate in the study, you along with other key stakeholders will be invited to participate in a 20-30 minute interview. This will involve asking questions about the open plan clinic and how well it meets your / client needs and suggestions for improvement.

- **What sort of questions will I be asked?**

The questions will be about the Open Plan clinic. They will be focused around your experience of the open plan clinics, and your perceived effectiveness of the service in meeting client needs.

- **Can I change my mind?**

You are free to withdraw from the study at any time, and this will not affect your employment or working conditions in any way.

- **What happens to the information I provide?**

All information you give in the interviews will be used for the purposes of the study. Following the interview any details which identify you (for example your name) will be coded. All records will be kept in a locked cabinet at Community Health at the Ipswich Health Plaza and at the Australian Catholic University, McAuley campus. No names or case histories or identifying personal information will be reported or published in the presentation of the results of the study.

- **Will I receive anything for taking part?**

Queensland Health needs key stakeholders like you to help us carry out this important work. While the study may not benefit you personally, the study aims to improve services provided to local families based on your feedback.

This will ultimately improve the future health and well being of mothers, fathers and babies throughout Queensland, by providing information that will assist Queensland Health in meeting client needs.

- **Who do I contact?**

*Any questions regarding this project should be directed to the Supervisor and the Student Researcher*

Lauren Kearney (Student researcher)

(07) 3817 2372

School of Nursing

Australian Catholic University

PO Box 456

OR

Professor Paul Fulbrook (Supervisor)

(07) 3623 7420

A summary of the results of the study will be forwarded to you as feedback and follow-up after the project is completed.

This study has been approved by the Human Research Ethics Committee at Australian Catholic University and West Moreton Human Research Ethics Committee.

▪ **What if things go wrong?**

In the event that you have any complaint or concern about the way you have been treated during the study, or if you have any query that the Investigator or Supervisor and Student Researcher have not been able to satisfy, you may write to the Chair of the Human Research Ethics Committee care of the nearest branch of the Research Services Unit.

Chair, HREC  
C/o Research Services  
Australian Catholic University  
Brisbane Campus  
PO Box 456  
Virginia QLD 4014  
Tel: 07 3623 7294  
Fax: 07 3623 7328

*Any complaint or concern will be treated in confidence and fully investigated. The participant will be informed of the outcome.*

If you agree to participate in this project, you should sign both copies of the Consent Form, retain one copy for your records and return the other copy to the Investigator or Student Researcher.

.....  
Signature of student researcher

.....  
Supervisor

## Appendix C: Consent form (phase two)



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**CONSENT FORM**

**Copy for Researcher/ Copy for Participant**

*Child Health Services: Evaluation of support of 'low risk' families with infants aged 0-18 months*

PRINCIPAL INVESTIGATORS / SUPERVISORS: Professor Paul Fulbrook

STUDENT RESEARCHER: Lauren Kearney

I ..... *(the participant)* have read *(or, where appropriate, have had read to me)* and understood the information provided in the Letter to Participants. Any questions I have asked have been answered to my satisfaction. I agree to participate in this focus group that will be audio taped, realising that I can withdraw my consent at any time without comment or penalty. I agree that research data collected for the study may be published or may be provided to other researchers in a form that does not identify me in any way.

NAME OF PARTICIPANT: .....

(block letters)

SIGNATURE .....DATE ...../...../.....



SIGNATURE OF PRINCIPAL INVESTIGATOR or SUPERVISOR:.....

DATE...../...../.....

[and, if applicable]

SIGNATURE OF STUDENT RESEARCHER:.....

DATE: ...../...../.....

## Appendix D: Data Analysis Framework (phase two)

The steps used to guide the data analysis within this study are listed below and based on the work of van Manen (1990) - Methodological Structure of Human Science Research - a dynamic interplay between six research activities:

1. Turning to a phenomenon which seriously interests us and commits us to the world;  
*This is always the project on someone, who sets out to make sense of a particular aspect of human life "A phenomenological description is always one interpretation, and no single interpretation of human experience will ever exhaust the possibility of yet another complementary, or even potentially richer or deeper description" (p.31)*
2. Investigating experience as we live it rather than as we conceptualise it;  
*That is 'turning to the things themselves' (Husserl, 1911,p.116) Full of the world, full of lived experience*
3. Reflecting on the essential themes which characterise the phenomenon;  
*Phenomenological research consists of reflectively bringing into nearness that which tends to be obscure, that which tends to evade the intelligibility of our natural attitude of everyday life (p.32)*
4. Describing the phenomenon through the art of writing and re-writing;  
*This process is bringing to speech of something "When I speak I discover what it is that I wished to say" (Merleau-Ponty, 1973, p.142 cited on p.32)*
5. Maintaining a strong and orientated pedagogical relation to the phenomenon;  
*To be strong in our orientation means that we will not settle for superficialities and falsities (p.33)*
6. Balancing the research context by considering parts and whole.

## Appendix E: Participant information form (phase three)



**Queensland  
Government**  
Queensland Health

***Participant Information***

*Evaluation of Child Health Services*

We are inviting new mothers accessing our Ipswich and Winston Glades Open Plan clinics to participate in research evaluating the effectiveness of service provision to their families.

▪ **Purpose of the study?**

Many new mothers attend local Child Health Clinics in their residential area to access information, support and advice regarding their parenting role. However, very little research has been conducted to evaluate whether or not child health service are adequate or appropriate for our clients...that is, you!

We are aiming to evaluate our service to families who access our Open Plan drop-in clinics.

▪ **What is involved?**

If you agree to participate in the study, you (along with approximately 100) other parents will be interviewed privately by a researcher (who is also a child health nurse), and asked to complete some questionnaires over the phone. The interview schedule is as follows...

- Initial face to face / telephone interview with the researcher
- A phone interview every 2 months for 6 months (total of 3 phone calls)
- A phone interview every 3 months for the following 12 months (total of 4 calls)

*\* Please note you are under no obligation to continue to attend the clinic after your initial visit, if you choose not to.*

- **What sort of questions will I be asked?**

The questions will be about you and your baby's health and well being.

- **Will my care be different?**

Whether you participate in the research or not, you will receive the same care as all families who utilise our service.

- **Can I change my mind?**

You are free to withdraw from the study at any time, and this will not affect your current or future treatment or care in any way.

- **What happens to the information I provide?**

All information you give in the interviews will be used for the purposes of the study. Following the interview any details which identify you (for example your name) will be coded. All records will be kept in a locked cabinet at Community Health at the Ipswich Health Plaza. No names or case histories or identifying personal information will be reported or published in the presentation of the results of the study.

- **What if things go wrong?**

The Research team has a duty of care to protect you and your baby from harm. The information you provide will be kept confidential with the exception of suspected child abuse or neglect or if the information becomes subject to a court order.

- **Will I receive anything for taking part?**

We need families like yours to help us carry out this important work. While the study may not benefit you personally, the study aims to improve services provided to local families based on your feedback.

This will ultimately improve the future health and well being of mothers, fathers and babies throughout Queensland, by providing information that will assist Queensland Health in meeting client needs.

*If you wish to participate, please let your child health nurse at the Ipswich or Winston Glades Clinic know.*

## *Thank-you*

If you have any questions about the study at any time, feel free to contact the research assistant Lauren Kearney or Wendy Kastelein, Acting Team Leader, at Child Health on 3817 2422.

If you have any complaints about the study, feel free to contact Mr Steve Lewis (Ethics Officer), West Moreton Health Service District, telephone (07) 3271 8642, or 3835 9900 (pager 72124). Email [ethics@gcmhr.uq.edu.au](mailto:ethics@gcmhr.uq.edu.au)

All complaints will be treated in confidence, investigated fully and you will be informed of the outcome.

## Appendix F: Consent form (phase three)





**Queensland  
Government**  
Queensland Health  
Child Health

**CONSENT FORM**

***Evaluation of Child Health Services***

**AIMS:** *I understand that I am participating in a study to evaluate the current services being offered to the parents of 'low risk' families in the West Moreton Health Service District.*

**PROCEDURE:**

*I will be interviewed initially by the Research Assistant with a one to one contact and then telephone interview and required to complete some questionnaires two monthly for the next 6 months and then each three monthly until my baby is 18 months of age. I understand that each interview will take approximately half an hour of my own time. I realise that the information I give will benefit other families as it will provide evidence to support changes to the program and will improve services that will meet the client's needs as well as Queensland Health. I am willing to answer questions about my own and my baby's health and similar topics.*

**VOLUNTARY PARTICIPATION and RIGHT TO WITHDRAW:**

*I am aware that I may refuse to participate in the study and withdraw my consent at any time without giving a reason if I so wish and that this will not affect the care I receive now or in the future. I can also request that any audiotapes of my interview/interviews be erased at any time during the study and again, this will not affect any care that I will receive now or in the future.*

**CONFIDENTIALITY:**

*All information I give will be treated confidentially. The information I provide will be combined with information from other clients of the service and as such I will not be identified within the study. The information I provide will be securely stored with an identification number only to maintain confidentiality.*

*I understand that if, during the course of the study, the research team has cause to believe that I or my baby are at risk of harm, the research team will work with me to find appropriate assistance. The research team may be required to provide details to the appropriate agency.*

**CONSENT:** *I have read the above, had the opportunity to ask questions, and agree to participate. I have been given a copy of the consent form. I understand that a second copy of the consent form will be kept in my file.*

Participant's name \_\_\_\_\_

Signed: \_\_\_\_\_ Date: / / 2005  
Participant

Signed: \_\_\_\_\_ Date: / / 2005  
Researcher

Signed: \_\_\_\_\_ Date: / / 2005  
Witness

If you have any questions about the study at any time, feel free to contact the researcher,

Lorrie Howlett at Child Health, Ipswich Health Plaza: Telephone 3817 2328

**Independent Contact:** If you have any complaints about the study you can contact the Ethics Officer, WMHSD Human Research Ethics Committee on 3271 8674 or email [ethics@qcsr.uq.edu.au](mailto:ethics@qcsr.uq.edu.au). All complaints will be treated in confidence, investigated fully and you will be informed of the outcome.

## Appendix G: Participant questionnaire (phase three)

***Child Health Services:  
Evaluation of support of 'low risk'  
families with infants aged 0-18 months***

***(Phase Three)***

*Questionnaire*

***Participant No . \_\_\_\_\_***

## **“Questionnaire A”**

**(Infant aged 0-6 weeks)**

**(NB/ This questionnaire is face to face and is the initial questionnaire with the family. At this time the consent process will also occur).**

Demographic Data (1)

1. Gender

Male (2)

Female (1)

2. What is your Country of birth

Australia (1)

New Zealand (2)

Other (3): \_\_\_\_\_

3. Are you an:

Australian Citizen (1)

Permanent Resident (2)

Other (3): \_\_\_\_\_

4. Do you identify as

Non-Indigenous

Aboriginal

Torres Strait Islander

South Sea Islander

5. Indicate your employment status

Employed full-time

Employed part-time

Home maker

Maternity leave (paid)

Maternity Leave (unpaid)

Other \_\_\_\_\_

6. Please indicate your highest education

- No Qualification
- Junior High School Certificate
- Senior High School Certificate
- Trade / TAFE Qualification
- Bachelor degree
- Masters Degree
- Doctorate

Service evaluation questions (2)

7. How did you first find out about our service?

- Maternity Unit Staff
- Friend / Family Member
- Walking by the clinic
- Website
- Contacted by CH staff
- Other: \_\_\_\_\_

8. What was the main reason you chose to attend the Ipswich / Winston Glades clinic rather than other child health providers (eg, GP, pharmacy)?

- Convenient local access
- Free service
- Personal Contact
- Friend / Family recommendation
- No Appointment Necessary
- Other: \_\_\_\_\_

9. When you came for the first time, what was your main purpose for coming?

- Baby's Growth Monitoring
- Baby's Development Monitoring
- Social Contact
- Immunisation
- Maternal Reassurance
- Specific Health Issue
- Other: \_\_\_\_\_

10. How often have you accessed the clinic in the last 6 weeks? \_\_\_\_\_

11. What is the main reason for your continued attendance?

- Continuity of nurse
- Location
- Accessibility (Don't need an appointment)
- Check baby's development
- To meet / talk with other mothers
- Monitor baby's growth
- Other \_\_\_\_\_

12. If you had a book in appointment with the child health nurse, did you attend in a group or individual appointment?

- Not Applicable
- 1:1 Appointment
- Group

13. If you had a group appointment, would you have preferred a 1:1 appointment to book in?

- Not Applicable
- Yes
- No

Infant Nutrition and Childhood Obesity (3)

14. Are you feeding your baby breast milk or formula?

- Breast Milk
- Formula
- Both
- Other

15. If breast milk, how long do you intend to breastfeed for?
- Not Applicable
  - Greater than 12 months
  - 6-12 months
  - Less than 6 months
  - Unplanned
16. Why have you chosen this length of time?
- Not Applicable
  - Official recommendation
  - Return to work
  - Other: \_\_\_\_\_
17. If you're formula feeding, what is the main reason that led you to make this decision?
- Not applicable
  - Difficulties with BF
  - Personal aversion to BF
  - That formula feeding is superior to breastfeeding
  - Lifestyle choice (eg, early return to work).
  - Other: \_\_\_\_\_
18. Formula being used:
- Not applicable
  - Cow's milk formula (Karicare/S26)
  - Soy formula
  - Lactose free formula
  - Other (HA or AR)
19. How have they chosen the volume the baby is currently on?
- Not applicable
  - According to manufacturer's recommendation
  - Daily quote ml/kg
  - Demand
  - Other: \_\_\_\_\_



20. Why have you chosen this formula?

- Not applicable
- Allergy
- Intolerance of Cow's Milk Protein
- Reflux
- Dietary Lifestyle Choice
- Other: \_\_\_\_\_

21. When planning your baby's feeding, have you thought about Childhood Obesity?

- Yes
- No

22. If yes, what are the main steps you have taken to prevent this from occurring?

- Breastfeeding
- Physical activity
- BF and physical activity
- Nothing
- Other

*Disease Prevention and Health Promotion (4)*

23. Are you planning to get your baby immunised?

- Yes
- No

24. What is the main reason for getting your baby immunised?

- Not applicable
- Prevention of disease
- Bale to attend day care
- Finanical incentive
- Social expectation
- Other : \_\_\_\_\_

25. Have you seen your doctor about your baby since your baby has been born?

Yes

No

26. If so, what was the main reason for seeing your GP?

Not applicable

Rash

Gastroenteritis

High temperature

Upper respiratory tract infection

Poor feeding

Unsettled baby

Check-up

More than 1 visit

Other: \_\_\_\_\_

27. If more than one visit:

Not applicable

Rash

Gastroenteritis

High temperature

Upper respiratory tract infection

Poor feeding

Unsettled baby

Check-up

More than 1 visit

Other: \_\_\_\_\_

28. Did you find there were any differences in information provided by your doctor and Child Health nursing services?

Not applicable

Yes

No

29. If yes, what were the differences about?

- Not applicable
- Feeding
- Sleep & settling
- Postnatal depression / mood changes
- Other: \_\_\_\_\_

30. Do you know what SIDS is?

- Yes
- No

31. Which steps have you taken to prevent SIDS?

- Not applicable
- Sleeping baby on back
- Smoking outside
- Smoking cessation
- Removing pillows / toys from cot
- SIDS safe bedding arrangements
- More than one
- Other: \_\_\_\_\_

32. If more than one, which ones:

- Not applicable
- Sleeping baby on back
- Smoking outside
- Smoking cessation
- Removing pillows / toys from cot
- SIDS safe bedding arrangements
- Other: \_\_\_\_\_

33. What is the main source of information that has provided you with information regarding SIDS?

- Not applicable
- Friend / Family member
- Media programme
- Brochures on SIDS
- Media advertising
- Maternity Unit Staff
- Child Health Nurse
- Other: \_\_\_\_\_

34. Where does your baby usually sleep?

- Cot
- In our bed
- Bassinette
- Other: \_\_\_\_\_

35. Have you accessed any of the following groups / services?

- Parent Education Group
- Lactation Clinic
- Day Stay Centre
- Positive Parenting Programme
- Postnatal depression group
- More than one
- Other: \_\_\_\_\_

36. If more than one, which ones:

- Parent Education Group
- Lactation Clinic
- Day Stay Centre
- Positive Parenting Programme
- Postnatal depression group

Other: \_\_\_\_\_

37. Were these groups of benefit to you?

- Yes
- No
- Not Applicable

38. What is the main source of information you have / use for your baby's health?

- None / Nowhere
- Parenting magazines
- Friends / family
- Government child health services
- Television
- Product information (eg formula)
- Internet
- Published literature (eg books)
- Brochures
- GP
- Other: \_\_\_\_\_

39. Other information sources:

- None / Nowhere
- Parenting magazines
- Friends / family
- Government child health services
- Television
- Product information (eg formula)
- Internet
- Published literature (eg books)
- Brochures

- GP
- Other: \_\_\_\_\_

40. Other sources:

---

Child Safety and Parental Supports (5)

41. Which one of the following words best describes how you feel about your baby MOST of the time:

- Happy
- Loving
- Stressed
- Caring
- Unhappy
- Scared
- Other: \_\_\_\_\_

42. Has the nurse in the Open Plan Clinic talked to you about you communicate and respond to your baby? (eg, baby's cues, how to play with them)

- Yes
- No

43. Parenting can be a really rewarding experience, but it can also be very challenging.

Your baby may be unsettled at times and you may be tired yourself. What is the main support do you have available?

- No support
- Child Health Nurse
- GP
- Partner
- Parents
- Friend
- Neighbour

- Playgroup mothers
- Community group (eg, church or NGO)
- Other:

---

44. Other sources of support:

- No support
- Child Health Nurse
- GP
- Partner
- Parents
- Friend
- Neighbour
- Playgroup mothers
- Community group (eg, church or NGO)
- Other:

---

45. If you find yourself in a difficult situation, what is the main strategy that you would most likely use?

- None
- Take time out for yourself
- Access supports for management (eg daystay, Group programme)
- Share care of baby with significant other (eg, mother or partner)
- Just 'give it time'
- Deep breathing / meditation
- Exercise
- 24 hour telephone helpline (Riverton / Lifeline)
- Leave baby to cry / Get some space
- Alcohol
- Cigarette smoke

Other:

---



# Questionnaire B

(Conducted via telephone interview when infant is 9-10 weeks old)

## Service evaluation questions (2)

1. How often have you attended the Open Plan Clinic since we last spoke? **(Remind people, if needed when I last spoke to them)**

- Not at all
- Number of times**

\_\_\_\_\_

2. For what reasons did you come?

- Baby's Growth Monitoring
- Baby's Development Monitoring
- Social Contact
- Immunisation
- Maternal Reassurance
- Specific Health Issue

Other: \_\_\_\_\_

3. Have you accessed any other services for child health information / services?

- Pharmacy
- Doctor
- Family Member
- Maternity
- Friend
- Hospital
- 24 hour telephone helpline
- Advice call – Ipswich CHS
- Other:

\_\_\_\_\_

4. Why have you chosen to access these other means of information / service?

- Continuity of nurse
- Location
- Accessibility (Don't need an appointment)
- Check baby's development
- To meet / talk with other mothers
- Monitor baby's growth
- Other \_\_\_\_\_

5. Has your baby had their 8 week immunisations?

- Yes
- No
- Appointment booked

6. If no, why hasn't your baby been immunised?

- Harmful side effects
- Financial
- Haven't had time
- Baby's been sick
- Conscientious objection
- Other: \_\_\_\_\_

7. Has your baby had their 6-8 week development screen attended in their personal health record (PHR)?

- Yes
- No
- Appointment Booked

8. If no, why hasn't your baby been screened?

- Not important
- Didn't know they needed it
- Have no concerns
- Haven't had time
- Other: \_\_\_\_\_

9. If "Yes" where did you have this attended?

- Child Health Open Plan
- Child Health Appointment
- GP
- Pharmacy clinic
- Other: \_\_\_\_\_

10. If an alternate service attended this development screen, was your baby:

- Bare weighed
- Hips checked
- Measured
- Questions about their developmental milestones
- Check eyes
- Listen to their chest
- Place them on their tummy

Infant Nutrition and Childhood Obesity

11. Are you feeding your baby breast milk or formula?

- Breast Milk
- Formula
- Both
- Other

12. Have you had any challenges so far with breastfeeding (only ask if BF)?

Yes

No

13. If yes, which words would best describe the challenges you've had?

Cracked / sore nipples

Difficulty with attachment

Difficulty with position

Too much milk

Not enough milk

Baby not wanting the breast

Nipple Shields

Other: \_\_\_\_\_

14. If you've had challenges, did you seek any help with these?

Yes

No

15. If yes, who did you go to for help?

Child Health Nurse / Service

Lactation Clinic

ABA

GP

Friend / Family

No-one

Other: \_\_\_\_\_

16. If not BF, when did you cease and why? (If weaned since last Questionnaire)

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17. If Formula feeding, formula being used:

- Cow's Milk Formula
- Soy Formula
- Lactose Free Formula
- Other (HA / AR)
- Not Applicable

18. How have they chosen the volume the baby is currently on?

- Not applicable
- According to manufacturer's recommendation
- Daily quote ml/kg
- Demand
- Other: \_\_\_\_\_

19. Why have you chosen this formula?

- Not applicable
- Allergy
- Intolerance of Cow's Milk Protein
- Reflux
- Dietary Lifestyle Choice
- Other: \_\_\_\_\_

20. Are you aware of the recommendations regarding the introduction of solids?

- Yes
- No

21. What do you understand about the current recommendations?

- Commence at around 6 months
- Pureed texture
- Signs of readiness
- Other: \_\_\_\_\_

22. Have you introduced solids?

Yes

No

23. If yes, which foods and textures?

Rice cereal

Fruit

Vegetables

Meat

Other: \_\_\_\_\_

24. If yes, why have you introduced the solids?

Not Applicable

Not full on formula

Did it with my other children

Thought I was supposed to by now

Other: \_\_\_\_\_

25. If answered yes to thinking about *Childhood Obesity* in previous questionnaire, are you still using the same strategies to prevent it?

Yes

No

Not Applicable

26. Are you doing anything else?

Yes

No

Not applicable

27. If yes, what else are you doing?

Breastfeeding

Physical activity

BF and physical activity

Nothing

Other: \_\_\_\_\_

Disease Prevention and Health Promotion

28. Have you seen your doctor about your baby since they were 4-6 weeks old?

- Yes
- No

29. If yes, what was your main reason for going to see your GP?

- Not applicable
- Rash
- Gastroenteritis
- High temperature
- Upper respiratory tract infection
- Poor feeding
- Unsettled baby
- Check-up
- More than 1 visit
- Other: \_\_\_\_\_

30. If more than one visit:

- Not applicable
- Rash
- Gastroenteritis
- High temperature
- Upper respiratory tract infection
- Poor feeding
- Unsettled baby
- Check-up
- More than 1 visit
- Other: \_\_\_\_\_

31. Did you find there were any differences in information provided by your doctor and Child Health nursing services?

- Yes
- No
- Not Applicable

32. If yes, what were the differences about?

- Not applicable
- Feeding
- Sleep & settling
- Postnatal depression / mood changes
- Other: \_\_\_\_\_

33. Do you know what SIDS is (Only ask is answered no in first Q)?

- Yes
- No
- Not Applicable (If already know)

34. Which steps have you taken to prevent SIDS?

- Not applicable
- Sleeping baby on back
- Smoking outside
- Smoking cessation
- Removing pillows / toys from cot
- SIDS safe bedding arrangements
- More than one
- Other: \_\_\_\_\_



35. If more than one, which ones:

- Not applicable
- Sleeping baby on back
- Smoking outside
- Smoking cessation
- Removing pillows / toys from cot
- SIDS safe bedding arrangements
- Other: \_\_\_\_\_

36. Where does your baby usually sleep?

- Cot
- In our bed
- Bassinette
- Other: \_\_\_\_\_

37. Have you accessed any of the following groups / services?

- Parent Education Group
- Lactation Clinic
- Day Stay Centre
- Positive Parenting Programme
- Postnatal depression group
- More than one
- Other: \_\_\_\_\_

38. If more than one, which ones:

- Parent Education Group
- Lactation Clinic
- Day Stay Centre
- Positive Parenting Programme
- Postnatal depression group
- Other: \_\_\_\_\_

39. Were these groups of benefit to you?

- Yes
- No
- Not Applicable
- 

40. What is the main source of information you have / use for your baby's health?

- None / Nowhere
- Parenting magazines
- Friends / family
- Government child health services
- Television
- Product information (eg formula)
- Internet
- Published literature (eg books)
- Brochures
- GP
- Other: \_\_\_\_\_

41. Other information sources:

- None / Nowhere
- Parenting magazines
- Friends / family
- Government child health services
- Television
- Product information (eg formula)
- Internet
- Published literature (eg books)
- Brochures
- GP
- Other: \_\_\_\_\_

Child Safety and Parental Supports

42. If you could think of a word that best describes how you feel about your baby MOST of the time, what would that be?

- Happy
- Loving
- Stressed
- Caring
- Unhappy
- Scared
- Other: \_\_\_\_\_

43. Has the nurse in the Open Plan Clinic talked to you about you communicate and respond to your baby? (eg, baby's cues, how to play with them)

- Yes
- No
- Not Applicable (if haven't attended since last call)

44. Who have been the **most** helpful supports to you over the past couple of months?

- Child Health Nurse
- Doctor
- Partner
- Parents
- Friend
- Neighbour
- Playgroup mothers
- Community group (eg, church or NGO)
- Other:  
\_\_\_\_\_

45. Have you had any mood changes since your baby was born?

- Yes
- No

46. If yes, did you discuss this at Open Plan with the nurse?

Yes

No

47. If no, would you like to discuss this?

Yes (Name & Ph given to CHN for f/u)

No

Not Applicable

48. If yes (q46), was this helpful?

Yes

No

Not Applicable

49. How was this addressed?

Referral to EIS

Referral to PND group

Referral to GP

Other: \_\_\_\_\_

# Questionnaire C

(Conducted via telephone interview when infant is 16-18 weeks old)

## Service evaluation questions

1. How often have you attended the Open Plan Clinic since we last spoke? (Remind them if needed).

- Weekly
- Fortnightly
- Monthly
- Occasionally (1-2 times last 3 months)
- Not at all
- Number of times**  
\_\_\_\_\_

2. Why did you attend?

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3. Have you accessed any other services for child health information / services?

- Pharmacy
- Doctor
- Family Member
- Maternity
- Friend
- Hospital
- 24 hour telephone helpline
- Advice call – Ipswich CHS
- Other

4. Why have you chosen to access these other means of information / service?

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5. Has your baby had their 4 month immunisations?

- Yes       No       Appointment booked

If no, why hasn't your baby been immunised?

- Harmful side effects  
 Financial  
 Haven't had time  
 Baby's been sick  
 Conscientious objection  
 Other: \_\_\_\_\_

6. Has your baby had their 4 month development screen attended in their personal health record (PHR)?

- Yes       No       Appointment booked

If no, why hasn't your baby been screened?

- Not important  
 Didn't know they needed it  
 Have no concerns  
 Haven't had time  
 Other: \_\_\_\_\_

If "Yes" where did you have this attended?

- Drop-in Clinic       GP       Pharmacy       Other

If an alternate service attended this development screen, was your baby:

- Bare weighed  
 Hips checked  
 Measured  
 Questions about their developmental milestones

- Check eyes
- Listen to their chest
- Place them on their tummy

Infant Nutrition and Childhood Obesity

7. Are you breastfeeding? (Only ask if BF on last questionnaire)

- Yes
- No

8. Have you had any challenges so far with breastfeeding?

- Yes
- No

If yes, which words would best describe the challenges you've had?

- Cracked / sore nipples
- Difficulty with attachment
- Difficulty with position
- Too much milk
- Not enough milk
- Baby not wanting the breast
- Nipple Shields
- Other: \_\_\_\_\_

If you've had challenges, did you seek any help with these?

- Yes
- No

If yes, who did you go to for help?

- Child Health Nurse / Service
- Lactation Clinic
- ABA
- GP
- Friend / Family
- No-one
- Other: \_\_\_\_\_





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Have you introduced solids?

Yes

No

If so which foods and textures?

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If yes, why have you introduced the solids?

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*Disease Prevention and Health Promotion*

12. Do you know what SIDS is? (Only ask if answered 'no' in survey one & two)

Yes

No

13. Which steps have you taken to prevent SIDS?

Sleeping baby on back

Smoking cessation

Smoking outside

Removing toys / pillow from cot

"Short Sheeting" cot

Other: \_\_\_\_\_

14. Where have you / do you intend to access information regarding this topic?

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15. Where does your baby usually sleep?

Cot

In our bed

Bassinette

Other: \_\_\_\_\_

16. Have you accessed any of the following groups / services?

- Parent Education Group
- Lactation Clinic
- Day Stay Centre
- Positive Parenting Programme
- Postnatal depression group
- Other: \_\_\_\_\_

Is there a service / group would you like to see offered at Child Health that currently is not?

\_\_\_\_\_

Were these groups of benefit to you, if so, for what reason, if not, why?

(a) \_\_\_\_\_ (b) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

17. Has the nurse in the Open Plan Clinic talked to you about teething issues with your baby?

- Yes
- No

If yes, was this helpful?

- Yes
- No

18. Where do you find our information on your baby's health?

- Parenting magazines
- Friends / family
- Government child health services
- Television
- Product information (eg formula)
- Internet

- Published literature (eg books)
- Brochures

Child Safety and Parental Supports

18. What description best describes how you feel about your baby most of the time?

- Happy
- Loving
- Stressed
- Caring
- Unhappy
- Scared
- Other: \_\_\_\_\_

19. Has the nurse in the Open Plan Clinic talked to you about you communicate and respond to your baby? (eg, baby's cues, how to play with them)

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20. Who have been the most helpful supports to you (top three) over the past couple of months?

- Child Health Nurse
- Doctor
- Partner
- Parents
- Friend
- Neighbour
- Playgroup mothers
- Community group (eg, church or NGO)
- Other: \_\_\_\_\_

Why have they been the most helpful?

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21. In the initial interview we mentioned about some of the challenges which may arise with parenting. If you have experienced a stressful and challenging situation with your baby please detail how you managed that situation, if it has occurred.

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22. Have you had any mood changes since your baby was born?

Yes

No

23. If yes, did you discuss this at Open Plan with the nurse?

Yes

No

If no, would you like to discuss this?

Yes (Name & Ph given to CHN for f/u)

No

If yes (q23), was this helpful?

Yes

No

How was this addressed?

Referral to EIS

Referral to PND group

Referral to GP

Other: \_\_\_\_\_

24. Any other comments?

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# Questionnaire Four

(Conducted via telephone interview when infant is 6-7 months old)

## Service evaluation questions

1. How often have you attended the Open Plan Clinic since we last spoke? (Remind them when last conversation was)

- Weekly
- Fortnightly
- Monthly
- Occasionally (1-2 times last 3 months)
- Not at all
- Number of times**  
\_\_\_\_\_

2. Why did you attend?

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3. Have you accessed any other services for child health information / services?

- Pharmacy
- Doctor
- Family Member
- Maternity
- Friend
- Hospital
- 24 hour telephone helpline
- Advice call – Ipswich CHS
- Other

4. Why have you chosen to access these other means of information / service?

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5. Has your baby had their 6 month immunisations?

- Yes       No       Appointment booked

If no, why hasn't your baby been immunised?

- Harmful side effects  
 Financial  
 Haven't had time  
 Baby's been sick  
 Conscientious objection  
 Other: \_\_\_\_\_

6. Has your baby had their 6 month development screen attended in their personal health record (PHR)?

- Yes       No       Appointment booked

If no, why hasn't your baby been screened?

- Not important  
 Didn't know they needed it  
 Have no concerns  
 Haven't had time  
 Other: \_\_\_\_\_

If "Yes" where did you have this attended?

- Drop-in Clinic       GP       Pharmacy       Other

If an alternate service attended this development screen, was your baby:

- Bare weighed  
 Hips checked  
 Measured

- Questions about their developmental milestones
- Check eyes
- Listen to their chest
- Place them on their tummy

Infant Nutrition and Childhood Obesity

7. Are you breastfeeding? (Only ask if BF on last questionnaire)

- Yes
- No

8. Have you had any challenges so far with breastfeeding?

- Yes
- No

If yes, which words would best describe the challenges you've had?

- Cracked / sore nipples
- Difficulty with attachment
- Difficulty with position
- Too much milk
- Not enough milk
- Baby not wanting the breast
- Nipple Shields
- Other: \_\_\_\_\_

If you've had challenges, did you seek any help with these?

- Yes
- No

If yes, who did you go to for help?

- Child Health Nurse / Service
- Lactation Clinic
- ABA
- GP

- Friend / Family
- No-one
- Other: \_\_\_\_\_

Why did you choose this person / service to help you?

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If you indicated it was a service (eg nurse), how did you find out about that?

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9. If not BF, when did you cease and why? (Ask this if answered no, at q7)

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*Formula being used:*

- Cow's milk Formula (Karicare / S26)     Lactose free formula
- Soy formula     Other (HA or AR)

*Volume / Brand* \_\_\_\_\_

Why have you chosen this formula? (Only ask if changed or just weaned)

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Have you introduced solids?

- Yes
- No

If so which foods and textures?



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If yes, why have you introduced the solids?

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Disease Prevention and Health Promotion

12. Do you know what SIDS is? (Only ask if answered 'no' in all previous surveys)

Yes

No

13. Which steps have you taken to prevent SIDS?

Sleeping baby on back

Smoking cessation

Smoking outside

Removing toys / pillow from cot

"Short Sheeting" cot

Other: \_\_\_\_\_

14. Where have you / do you intend to access information regarding this topic?

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15. Where does your baby to sleep?

Cot

In our bed

Bassinette

Other: \_\_\_\_\_

16. Have you accessed any of the following groups / services, since we last spoke?

Parent Education Group

Lactation Clinic

Day Stay Centre

- Positive Parenting Programme
- Postnatal depression group
- Other: \_\_\_\_\_

Is there a service / group would you like to see offered at Child Health that currently is not?

\_\_\_\_\_

Were these groups of benefit to you, if so, for what reason, if not, why?

(a) \_\_\_\_\_  
 \_\_\_\_\_ (b) \_\_\_\_\_  
 \_\_\_\_\_

17. Has the nurse in the Open Plan Clinic talked to you about caring for your baby's teeth?

- Yes
- No

If yes, did you find this helpful?

- Yes
- No

How will you care for your baby's teeth?

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

18. Where do you find our information on your baby's health?

- Parenting magazines
- Friends / family
- Government child health services
- Television
- Product information (eg formula)
- Internet
- Published literature (eg books)
- Brochures

Child Safety and Parental Supports

18. What description best describes how you feel about your baby most of the time?

- Happy
- Loving
- Stressed
- Caring
- Unhappy
- Scared
- Other: \_\_\_\_\_

19. Has the nurse in the Open Plan Clinic talked to you about you communicate and respond to your baby? (eg, baby's cues, how to play with them)

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20. Who have been the most helpful supports to you (top three) over the past couple of months?

- Child Health Nurse
- Doctor
- Partner
- Parents
- Friend
- Neighbour
- Playgroup mothers
- Community group (eg, church or NGO)
- Other:  
\_\_\_\_\_

Why have they been the most helpful?

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21. In the initial interview we mentioned about some of the challenges which may arise with parenting. If you have experienced a stressful and challenging situation with your baby please detail how you managed that situation, if it has occurred.

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22. Have you had any mood changes since your baby was born?

Yes

No

23. If yes, did you discuss this at Open Plan with the nurse?

Yes

No

If no, would you like to discuss this?

Yes (Name & Ph given to CHN for f/u)

No

If yes (q23), was this helpful?

Yes

No

How was this addressed?

Referral to EIS

Referral to PND group

Referral to GP

Other: \_\_\_\_\_

24. Any other comments?

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# Questionnaire Five

(Conducted via telephone interview when infant is 9-10 months old)

## Service evaluation questions

1. How often have you attended the Open Plan Clinic since we last spoke? (Remind if needed)

- Weekly
- Fortnightly
- Monthly
- Occasionally (1-2 times last 3 months)
- Not at all
- Number of times**  
\_\_\_\_\_

2. Why did you attend?

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3. Have you accessed any other services for child health information / services?

- Pharmacy
- Doctor
- Family Member
- Maternity
- Friend
- Hospital
- 24 hour telephone helpline
- Advice call – Ipswich CHS
- Other

4. Why have you chosen to access these other means of information / service?

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Infant Nutrition and Childhood Obesity

7. Are you breastfeeding? (Only ask if BF on last questionnaire)

Yes

No

8. Have you had any challenges so far with breastfeeding?

Yes

No

If yes, which words would best describe the challenges you've had?

Cracked / sore nipples

Difficulty with attachment

Difficulty with position

Too much milk

Not enough milk

Baby not wanting the breast

Nipple Shields

Other: \_\_\_\_\_

If you've had challenges, did you seek any help with these?

Yes

No

If yes, who did you go to for help?

Child Health Nurse / Service

Lactation Clinic

ABA

GP

Friend / Family

No-one

Other: \_\_\_\_\_



Disease Prevention and Health Promotion

11. Where does your baby usually sleep?

- Cot
- In our bed
- Bassinette
- Other:  
\_\_\_\_\_

12. Have you accessed any of the following groups / services, since we last spoke?

- Parent Education Group
- Lactation Clinic
- Day Stay Centre
- Positive Parenting Programme
- Postnatal depression group
- Other:\_\_\_\_\_

Are you aware of the Positive Parenting Programme?

- Yes
- No

13. Has the nurse in the Open Plan Clinic talked to you about caring for your baby's teeth?  
(only if 'no' at last questionnaire)

- Yes
- No

If yes, was this helpful?

- Yes
- No

14. Where do you find our information on your baby's health?

- Parenting magazines
- Friends / family
- Government child health services
- Television



- Product information (eg formula)
- Internet
- Published literature (eg books)
- Brochures

Child Safety and Parental Supports

18. What description best describes how you feel about your baby most of the time?

- Happy
- Loving
- Stressed
- Caring
- Unhappy
- Scared
- Other: \_\_\_\_\_

19. Has the nurse in the Open Plan Clinic talked to you about you communicate and respond to your baby? (eg, baby's cues, how to play with them)

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20. Who have been the most helpful supports to you (top three) over the past couple of months?

- Child Health Nurse
- Doctor
- Partner
- Parents
- Friend
- Neighbour
- Playgroup mothers
- Community group (eg, church or NGO)
- Other: \_\_\_\_\_

Why have they been the most helpful?

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21. In the initial interview we mentioned about some of the challenges which may arise with parenting. If you have experienced a stressful and challenging situation with your baby please detail how you managed that situation, if it has occurred.

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22. Have you had any mood changes since your baby was born?

Yes

No

23. If yes, did you discuss this at Open Plan with the nurse?

Yes

No

If no, would you like to discuss this?

Yes (Name & Ph given to CHN for f/u)

No

If yes (q23), was this helpful?

Yes

No

How was this addressed?

Referral to EIS

Referral to PND group

Referral to GP

Other: \_\_\_\_\_

24. Any other comments?

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# Questionnaire Six

*(Conducted via telephone interview when infant is 12-13 months old)*

## Service evaluation questions

1. How often have you attended the Open Plan Clinic since we last spoke?

- Weekly
- Fortnightly
- Monthly
- Occasionally (1-2 times last 3 months)
- Not at all
- Number of times**  
\_\_\_\_\_

2. Why did you attend?

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3. Have you accessed any other services for child health information / services?

- Pharmacy
- Doctor
- Family Member
- Maternity
- Friend
- Hospital
- 24 hour telephone helpline
- Advice call – Ipswich CHS
- Other

4. Why have you chosen to access these other means of information / service?

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5. Has your baby had their 12 month immunisations?

- Yes       No       Appointment booked

If no, why hasn't your baby been immunised?

- Harmful side effects  
 Financial  
 Haven't had time  
 Baby's been sick  
 Conscientious objection  
 Other: \_\_\_\_\_

6. Has your baby had their 12 month development screen attended in their personal health record (PHR)?

- Yes       No       Appointment booked

If no, why hasn't your baby been screened?

- Not important  
 Didn't know they needed it  
 Have no concerns  
 Haven't had time  
 Other: \_\_\_\_\_

If "Yes" where did you have this attended?

- Drop-in Clinic       GP       Pharmacy       Other

If an alternate service attended this development screen, was your baby:

- Bare weighed  
 Hips checked  
 Measured  
 Questions about their developmental milestones  
 Check eyes

- Listen to their chest
- Place them on their tummy

Infant Nutrition and Childhood Obesity

7. Are you still breastfeeding? (Only ask if BF on last questionnaire)

- Yes
- No

8. If no, when did you cease and why?

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*Formula being used:*

- Cow's milk Formula (Karicare / S26)
- Lactose free formula
- Soy formula
- Other (HA or AR)

*Volume / Brand* \_\_\_\_\_

Why have you chosen this formula? (Only ask if changed or just weaned)

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9. Which foods and textures is your toddler on?

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10. In the initial interview we asked you whether you were concerned regarding childhood obesity. Has your opinion changed on this topic through out the past year? Is so, what has altered this opinion?

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Disease Prevention and Health Promotion

11. Where does your baby to sleep?

- Cot
- In our bed
- Bassinette
- Other:  
\_\_\_\_\_

12. Have you accessed any of the following groups / services, since we last spoke?

- Parent Education Group
- Lactation Clinic
- Day Stay Centre
- Positive Parenting Programme
- Postnatal depression group
- Other: \_\_\_\_\_

Are you aware of the Positive Parenting Programme?

- Yes
- No

13. Has the nurse in the Open Plan Clinic talked to you about caring for your baby's teeth?  
(only if 'no' at last questionnaire)

- Yes
- No

14. Do you have any behaviour issues with your toddler?

- Yes
- No

If so, which one are you concerned about the most?

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15. Where will you access information / education / support to assist you with your management of your children's behaviour?

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Child Safety and Parental Supports

19. How do you feel about your baby?

- Happy
- Loving
- Stressed
- Unhappy
- Scared
- Caring
- Other: \_\_\_\_\_

20. Has the nurse in the Open Plan Clinic talked to you about you communicate and respond to your baby? (eg, baby's cues, how to play with them)

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21. Who have been the most helpful supports to you (top three) over the past couple of months?

- Child Health Nurse
- Doctor
- Partner
- Parents

- Friend
- Neighbour
- Playgroup mothers
- Community group (eg, church or NGO)
- Other:

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Why have they been the most helpful?

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# Questionnaire Seven

*(Conducted via telephone interview when infant is 15-16 months old)*

## Service evaluation questions

1. How often have you attended the Open Plan Clinic since we last spoke?

- Weekly
- Fortnightly
- Monthly
- Occasionally (1-2 times last 3 months)
  
- Not at all
- Number of times**  
\_\_\_\_\_

2. Why did you attend?

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3. Have you accessed any other services for child health information / services?

- Pharmacy
- Doctor
- Family Member
- Maternity
- Friend
- Hospital
- 24 hour telephone helpline
- Advice call – Ipswich CHS
- Other

4. Why have you chosen to access these other means of information / service?

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Infant Nutrition and Childhood Obesity

5. Are you still breastfeeding?

Yes

No

6. If no, when did you cease and why?

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7. Please describe the solids / liquids your baby is on, including amounts, types, textures and frequency

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Disease Prevention and Health Promotion

11. Where does your baby usually sleep?

Cot

In our bed

Bassinette

Other:  
\_\_\_\_\_

12. Have you accessed any of the following groups / services, since we last spoke?

Parent Education Group

Lactation Clinic

Day Stay Centre

Positive Parenting Programme

- Postnatal depression group
- Other: \_\_\_\_\_

Are you aware of the Positive Parenting Programme?

- Yes
- No

13. Has the nurse in the Open Plan Clinic talked to you about caring for your baby's teeth?  
(only if 'no' at last questionnaire)

- Yes
- No

14. Do you have any behaviour issues with your toddler?

- Yes
- No

If so, which one are you concerned about the most?

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15. Where will you access information / education / support to assist you with your management of your children's behaviour?

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Child Safety and Parental Supports

19. How do you feel about your toddler?

- Happy
- Loving
- Frustrated
- Stressed
- Unhappy
- Caring
- Other: \_\_\_\_\_

20. Has the nurse in the Open Plan Clinic talked to you about your relationship with your baby? (eg, baby's cues, how to play with them)

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21. Who have been the most helpful supports to you (top three) over the past couple of months?

- Child Health Nurse
- Doctor
- Partner
- Parents
- Friend
- Neighbour
- Playgroup mothers
- Community group (eg, church or NGO)
- Other:

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Why have they been the most helpful?

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# Questionnaire Eight

(Conducted via telephone interview when infant is 17-18 months old)

## Service evaluation questions

1. How often have you attended the Open Plan Clinic since we last spoke?

- Weekly
- Fortnightly
- Monthly
- Occasionally (1-2 times last 3 months)
- Not at all
- Number of times**  
\_\_\_\_\_

2. Why did you attend?

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3. Have you accessed any other services for child health information / services?

- Pharmacy
- Doctor
- Family Member
- Maternity
- Friend
- Hospital
- 24 hour telephone helpline
- Advice call – Ipswich CHS
- Other

4. Why have you chosen to access these other means of information / service?

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5. Has your baby had their 18 month immunisations?

- Yes       No       Appointment booked

If no, why hasn't your baby been immunised?

- Harmful side effects  
 Financial  
 Haven't had time  
 Baby's been sick  
 Conscientious objection  
 Other: \_\_\_\_\_

6. Has your baby had their 18 month development screen attended in their personal health record (PHR)?

- Yes       No       Appointment booked

If no, why hasn't your baby been screened?

- Not important  
 Didn't know they needed it  
 Have no concerns  
 Haven't had time  
 Other: \_\_\_\_\_

If "Yes" where did you have this attended?

- Drop-in Clinic       GP       Pharmacy       Other

If an alternate service attended this development screen, was your baby:

- Measured  
 Weighed  
 Questions about their developmental milestones

Infant Nutrition and Childhood Obesity

7. Are you still breastfeeding?

- Yes  No

8. If no, when did you cease and why?

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9. Please describe the solids your baby is on, including amounts, types, textures and frequency

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10. At the 12 month interview we asked you whether you were concerned regarding childhood obesity. Has your opinion changed on this topic through out the last 6 months?

- Yes  
 No

If so, what has altered this opinion?

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Disease Prevention and Health Promotion

11. Where does your baby usually sleep?

- Cot  
 In our bed  
 Bassinette  
 Other:

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12. Have you accessed any of the following groups / services, since we last spoke?

- Parent Education Group
- Lactation Clinic
- Day Stay Centre
- Positive Parenting Programme
- Postnatal depression group
- Other: \_\_\_\_\_

Are you aware of the Positive Parenting Programme?

- Yes
- No
- 

13. Has the nurse in the Open Plan Clinic talked to you about caring for your baby's teeth?  
(only if 'no' at last questionnaire)

- Yes
- No

14. Do you have any behaviour issues with your toddler?

- Yes
- No

If so, which one are you concerned about the most?

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15. Where will you access information / education / support to assist you with your management of your children's behaviour?

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Child Safety and Parental Supports

16. How do you feel about your baby?

- Happy
- Loving
- Frustrated
- Stressed
- Unhappy
- Caring
- Other: \_\_\_\_\_

17. Has the nurse in the Open Plan Clinic talked to you about your relationship with your baby? (eg, baby's cues, how to play with them)

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18. Who have been the most helpful supports to you (top three) over the past couple of months?

- Child Health Nurse
- Doctor
- Partner
- Parents
- Friend
- Neighbour
- Playgroup mothers
- Community group (eg, church or NGO)
- Other:  
\_\_\_\_\_

Why have they been the most helpful?

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19. Could you please describe to me what are the key concerns / challenges that you currently have been experiencing with your toddler?

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20. Any other comments? \_\_\_\_\_

**Appendix H: Letter of ethics approval (Queensland Health, ACU National)**



**Queensland  
Government**  
Queensland Health

**WEST MORETON HEALTH SERVICE DISTRICT  
HUMAN RESEARCH ETHICS COMMITTEE**

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**To:** Lorrie Howlett  
Child & Family Health Services  
West Moreton Health Service District  
Ipswich Health Plaza  
IPSWICH 4305

**From:** Steve Lewis  
Ethics Officer WMHSD  
Human Research Ethics Committee  
The Park – Centre for Mental Health  
WACOL 4076

**Contact No:** (07) 3271 8674  
**Facsimile No:** (07) 3271 8698  
**email:** ethics@qcmhr.uq.edu.au

**Subject:** Evaluation of Child Health Services to support effective parenting services of 'low risk' families with infants aged 0-18months.

**Approval number:** 4/05N

**Approval period:** 20 September 2005 – 30 September 2008

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The Executive Director of Medical Services, Ipswich Hospital has now given formal approval for your study to commence.

**IMMEDIATE NOTIFICATION**

As a condition of approval, the Committee requires investigators to promptly report to the Ethics Officer anything which might affect ethical acceptance of the study, including:

- proposed changes in the protocol.
- unforeseen events that might affect continued ethical acceptability of the study eg adverse effects on participants.
- any complaints or expressions of concern made in relation to the study.

You are also required to notify the Committee on completion or cessation of the study.

## **DATA COLLECTION**

When conducting research within District facilities:

- you are required to have this letter in your possession, as it is validation of research approval.
- an ID needs to be worn;
- the first point of contact on commencing research is the senior clinical staff person in the facility area.

## **MONITORING and REVIEW**

An NHMRC requirement is that ethics committees monitor approved research:

- a short questionnaire will be sent to you every 12 months after initial approval and you are required to complete and return this in order to maintain the approval
- a report is required on completion of your research, this may take the form of a brief summary of findings or a paper submitted for publication
- the ethics committee may choose to conduct an interim audit of your research.

If the results of your project are to be published, please ensure that a copy of any publication or thesis is forwarded to the West Moreton Health Library for future reference.

You are required to sign the duplicate copy attached to this approval stating that you will follow all the conditions listed and return the form to the Ethics Officer, Human Research Ethics Committee, The Park – Centre for Mental Health.

We wish you every success in your work.

*Steve Lewis*

Steve Lewis  
Ethics Officer WMHSD  
Human Research Ethics Committee  
26 September 2005

Enquiries to: DDWMHSD HREC  
Telephone: 07 3271 8656  
Facsimile: 07 3271 8634

23 August 2010

To Whom It May Concern;

**HREC Protocol number:** 4/05N

**Project title:** Evaluation of Child Health Services to support effective parenting services of 'low risk' families with infants aged 0-18months (PI -Lorrie Howlett, student, PhD candidate- research assistant -Lauren Kearney, Child & Family Health Services

**Subject:** PhD candidate- research assistant -Lauren Kearney

The DDWMHSD HREC EC00184 is writing this letter to confirm that Lauren Kearney; student, PhD candidate acted as the research assistant for the above ethically approved research protocol. It was understood that Ms Kearney's work and the research study findings would be used as part of the requirements for her Doctor of Philosophy thesis.

Yours sincerely

*Jacqueline Robinson*

Jacqueline Robinson

Co-Chair, Ethics Officer & RGO

Darling Downs -West Moreton Health Service District/ Human Research Ethics Committee

Human Research Ethics Committee

Committee Approval Form

**Principal Investigator/Supervisor:** Professor Paul Fulbrook Brisbane Campus

**Co-Investigators:** Dr Karen Flowers Brisbane Campus

**Student Researcher:** Ms Lauren Kearney Brisbane Campus

**Ethics approval has been granted for the following project:**

Child Health Services: Evaluation of support of 'low risk' families with infants aged 0-18 months

**for the period:** 15 March 2007 to 31 July 2007

**Human Research Ethics Committee (HREC) Register Number:** Q200607 9

The following standard conditions as stipulated in the *National Statement on Ethical Conduct in Research Involving Humans (1999)* apply:

- (i) that Principal Investigators / Supervisors provide, on the form supplied by the Human Research Ethics Committee, annual reports on matters such as:
  - security of records
  - compliance with approved consent procedures and documentation
  - compliance with special conditions, and
- (ii) that researchers report to the HREC immediately any matter that might affect the ethical acceptability of the protocol, such as:
  - proposed changes to the protocol
  - unforeseen circumstances or events
  - adverse effects on participants

The HREC will conduct an audit each year of all projects deemed to be of more than minimum risk. There will also be random audits of a sample of projects considered to be of minimum risk on all campuses each year.

Within one month of the conclusion of the project, researchers are required to complete a *Final Report Form* and submit it to the local Research Services Officer.

If the project continues for more than one year, researchers are required to complete an *Annual Progress Report Form* and submit it to the local Research Services Officer within one month of the anniversary date of the ethics approval.



Signed:

Date: 15 March 2007  
(Research Services Officer, McAuley Campus)

## **Reference List**



- Acs, G., Shulman, R., Ng, M., & Chussid, S. (1999). The effect of dental rehabilitation on the body weight of children with early dental caries. *Pediatric Dentistry*, 21, 109-113.
- Adami, M. & Kiger, A. (2005). The use of triangulation for completeness purposes. *Nurse Researcher*, 12(4), 19-29.
- American Dental Association. (2004). From baby bottle to cup: choose training cups carefully, use them temporarily. *Journal of the American Dental Association*, 135, 387.
- Andrew, S. & Halcomb, E. (2009). *Mixed Methods Research for Nursing and the Health Sciences*. West Sussex, UK: Wiley-Blackwell.
- Anells, M. (1999). Evaluating phenomenology: usefulness, quality and philosophical foundations. *Nurse Researcher*, 6(3), 5-19.
- Apker, J., Propp, K., Ford, W. & Hofmeister, M. (2006). Collaboration, credibility, compassion and coordination: professional nurse communication skill sets in health care team interactions. *Journal of Professional Nursing*, 22(3), 180-189.
- Arborelius, E., & Bremberg, S. (2003). Supportive and nonsupportive qualities of child health nurses' contacts with strained infant mothers. *Scandinavian Journal of Caring Sciences*, 17, 169-175.
- Armstrong, J., & Reilly, J. (2002). Breastfeeding and lowering the risk of childhood obesity. *Lancet*, 359, 2003-2004.
- Ashurst, A. (2008). Career development: time-management. *Nursing & Residential Care*, 10(7), 354-356.
- Armstrong, K., Fraser, J., Dadds, M., & Morris, J. (1999). A randomised, controlled trial of nurse home visiting to vulnerable families with newborns. *Journal of Pediatrics and Child Health* 35, 237-244.
- Australian Bureau of Statistics. (2006). National Regional Profile: Ipswich. Retrieved from: [www.abs.gov.au](http://www.abs.gov.au) on 6th March, 2009.
- Australian Bureau of Statistics. (2007). Australian Social Trends: Australia's Babies. Downloaded from: [http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/3B2ACB4C166455CFCA25732F001C9207/\\$File/41020 Australia's%20babies 2007.pdf](http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/3B2ACB4C166455CFCA25732F001C9207/$File/41020%20Australia's%20babies%202007.pdf) on 18<sup>th</sup> August, 2010.
- Australian Bureau of Statistics (2010). Downloaded current statistic for South East Queensland from: <http://www.abs.gov.au/ausstats/abs@.nsf/Products/3218.0~2008-09~Main+Features~Queensland?OpenDocument> on 29.5.10 at 3.40pm
- Australian Government. (2009). *A Healthier Future for All Australians*. Canberra: National Health and Hospitals Reform Commission.
- Australian Institute of Health and Welfare. (2007). Registered Nurses – demographic overview. Retrieved from: [www.aihw.gov.au/publications/hwl/hwl-44-10724/hwl-44-10724\\_2\\_registered\\_nurses\\_demographic.xls](http://www.aihw.gov.au/publications/hwl/hwl-44-10724/hwl-44-10724_2_registered_nurses_demographic.xls) - 2010-04-19
- Australian Institute of Health and Welfare. (2008). *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*. Canberra: Commonwealth of Australia.
- Australian Institute of Health and Welfare (2004). *Making Progress: The health, development and wellbeing of Australia's children and young people*. Canberra: Australian Government.

- Australian Nursing and Midwifery Council (ANMC). (2008). Code of Professional Conduct. Dickson, ACT: ANMC
- Australian Primary Health Care Research Institute (APHCRI). (2009). *Primary Health Care Reform in Australia: Report to Support Australia's First National Primary Health Care Strategy*. Downloaded from: [http://www.phcris.org.au/infobytes/about\\_phc.php](http://www.phcris.org.au/infobytes/about_phc.php) on January 13th, 2011.
- Bai, Y., Middlestadt, S., Peng, C. & Fly, A. (2009). Psychosocial factors underlying the mother's decision to continue exclusive breastfeeding for six months: an elicitation study. *Journal of Human Nutrition and Dietetics*, 22(2), 134-140.
- Bailey, A. & Hutter, I. (2008). Qualitative to quantitative: linked trajectory of method triangulation in a study on HIV/AIDS in Goa, India. *AIDS Care*, 20(9), 1119-1124.
- Baldwin, K. (2006). Comparison of selected outcomes of CenteringPregnancy versus traditional prenatal care. *Journal of Midwifery and Women's Health*, 54(4), 266-272.
- Bamberger, M., Rugh, J. & Mabry, L. (2006). *Real World Evaluation*. Thousand Oaks, CA: Sage.
- Barbour, R. (1999). The case for combining qualitative and quantitative approaches in health services research. *Journal of Health Services Research Policy*, 4, 39-43.
- Barlow, J., & Coren, E. (2005). Parent-training programmes for improving maternal psychosocial health. *The Cochrane Database of Systematic Reviews*, 4.
- Barlow, J., & Parsons, J. (2003). Group-based parent-training programmes for improving emotional and behavioural adjustment in 0-3 year old children. *The Cochrane Database of Systematic Reviews*, 2.
- Barlow, J., Parsons, J., & Stewart-Brown, S. (2005). Preventing emotional and behavioural problems: the effectiveness of parenting programmes with children less than 3 years of age. *Child: Care, Health and Development*, 31(1), 33-42.
- Barnes, M., Courtney, M., Pratt, J., & Walsh, A. (2003). Contemporary child health nursing practice: services provided and challenges faced in metropolitan and outer Brisbane areas. *Collegian*, 10(4), 14-19.
- Barnes, M., Pratt, J., Findlayson, K., Courtney, M., Pitt, B. & Knight, C. (2008). Learning about baby; What new mothers would like to know. *Journal of Perinatal Education*, 17(3), 33-41.
- Barnes, M., & Rowe, J. (Eds.). (2007). *Child, Youth and Family Health: Strengthening Communities*. Sydney: Churchill Livingstone.
- Baughcum, A., Chamberlin, L., Deeks, C., Powers, S., & Whitaker, R. (2000). Maternal perceptions of overweight preschool children. *Pediatrics*, 106, 1380-1385.
- Benson, L., Cohn, R. & Kaelber, D. (2009). The association of continuity of care on the diagnosis of hypertension in children and adolescents. *Journal of Child Health Care*, 13(4), 361-369.
- Beyond Blue. (2010). Postnatal depression. Downloaded from: [http://www.beyondblue.org.au/index.aspx?link\\_id=94](http://www.beyondblue.org.au/index.aspx?link_id=94) on 22<sup>nd</sup> August, 2010.
- Bowers, B., Luring, C. & Jacobson, N. (2001). How nurses manage time and work in long-term care. *Journal of Advanced Nursing*, 33(4), 484-491.

- Bradbury-Jones, C., Sambrook, S. & Irvine, F. (2009). The phenomenological focus group: An oxymoron? *Journal of Advanced Nursing*, 65(3), 663-671.
- Blair, P., Fleming, P., Smith, I., Ward Platt, M., Young, J., Nadin, P., et al. (1999). Babies sleeping with parents: case-control study of factors influencing the risk of the sudden infant death syndrome. *BMJ*, 319, 1457-1462.
- Blank, D. (2003). Well-child care today: an evidence-based review. *Journal de Pediatria* 79(1), 13-33.
- Bondas-Salonen, T. (1998). New mothers' experiences of postpartum care – a phenomenological follow-up study. *Journal of Clinical Nursing*, 7(2), 165-174.
- Britton, C., McCormick, F., Renfrew, M., Wade, A. & King, S. (2007). Support for breastfeeding mothers. *Cochrane Database of Systematic Reviews* 2007, Issue 1. Art. No.: CD001141. DOI: 10.1002/14651858.CD001141.pub3.
- Brennan, S. (1998). Nursing and motherhood constructions: implications for practice. *Nursing Inquiry*, 5(1), 11-17.
- Brodribb, W. (2004). *Breastfeeding Management* (3rd ed.). East Malvern, VIC: Australian Breastfeeding Association.
- Brodribb, W., Fallon, A., Jackson, C. & Hegney, D. (2008). Breastfeeding and Australian GP registrars: their knowledge and attitudes. *Journal of Human Lactation*, 24(4), 422-430.
- Brooks, L. Fickling, C., Thornton, C. & Walker, C. (1993). Group child health assessments. *Health Visitor*, 66(8), 287-288.
- Brooks, N. & Moriarty, A. (2009). Implementation of a peer-support system in a clinical setting. *Nursing Standard*, 23(27), 35-39.
- Brown, S., Small, R., Argus, B., Davis, P. & Krastev, A. (2002). Early postnatal discharge from hospital for healthy mothers and term infants. *Cochrane Database of Systematic Reviews* 2002, Issue 3. Art. No.: CD002958. DOI: 10.1002/14651858.CD002958.
- Brown, S., Small, R., Faber, B., Krastev, A., & Davis, P. (2002). Early postnatal discharge from hospital for healthy mothers and term infants. Issue 2, *Cochrane Database of Systematic Reviews*.
- Bryanton, J. & Beck, C. (2010). Postnatal parental education for optimizing infant general health and parent-infant relationships. *Cochrane Database of Systematic Reviews*, 1. Art. No.: CD004068. DOI: 10.1002/14651858.CD004068.pub3.
- Buchanan, K. (2007). Parent focused issues about infant sleep problems: a maternal and child health perspective. *The Australian Journal of Family Health Nursing*, 4(1), 14-18.
- Caelli, K. (2000). The changing face of phenomenological research: traditional and American phenomenology in nursing. *Qualitative Health Research*, 10, 366-377.
- Callahan Churchill, A. & Davis, C. (2010). Realistic orientation and the transition to motherhood. *Journal of Social & Clinical Psychology*, 29(1), 39-67.
- Campbell, K., Hesketh, K., Crawford, D., Salmon, J., Ball, K., & McCallum, Z. (2008). The infant feeding activity and nutrition trial (INFANT) and early intervention to prevent childhood obesity: Cluster-randomised controlled trial. *BMC Public Health*, 8, 103-112.
- Casey, D. & Murphy, K. (2009). Issues in using methodological triangulation in research. *Nurse Researcher*, 16(4), 40-55.

- Chang, E., Hancock, R., Johnson, A., Daly, J. & Jackson, D. (2005). Role stress in nurses: review of related factors and strategies for moving forward. *Nursing and Health Sciences*, 7(1), 57-65.
- Chenton, D., Benton, A. & Kim, H. (2009). The influence of supervisor support, peer support and organisational culture among early career social workers in child welfare services. *Child Welfare*, 88(5), 129-142.
- Child and Youth Health Intergovernmental Partnership (2003). *Promoting the development of children's health in Australia: a population health perspective*. Melbourne: National public health partnership.
- Christakis, D., Mell., Koepsell, T. Zimmermann, F. & Connell, F. (2001). Association of lower continuity of care with greater risk of emergency department use and hospitalisation in children. *Pediatrics*, 107(3), 524-529.
- Clancy, C. & Hughes, R. (2009). The stress of the care environment. *AORN Journal*, 89(4), 751-753.
- Cohen, M. (1987). A historical overview of the phenomenologic movement. *Image: Journal of Nursing Scholarship*, 19(1), 31-34.
- Cohen, J. (1977). *Statistical Power Analysis for the Behavioural Sciences*. New York: Academic Press.
- Coker, T., Lawrence, P., Casalino, G., Alexander, C., & Lantos, J. (2006). Should our well child care system be redesigned? A national survey of pediatricians. *Pediatrics*, 118, 1852-1857.
- Colver, A. (1996). Overview of community child health in the UK 1970 onwards. *Health and Social Care in the Community*, 4(1), 67-72.
- Conneeley, A. (2005). Study at master's level: a qualitative study exploring the experience of students. *British Journal of Occupational Therapy*, 68(3), 104-109.
- Connelly, L. (2010). What is phenomenology? *MEDSURGNursing*, 19(2), 127-128.
- Cooklin, A., Donath, S., & Amir, L. (2008). Maternal employment and breastfeeding: results from the longitudinal study of Australian children. *Acta Paediatr*, 97(5), 620-623.
- Corben, V. (1999). Misusing phenomenology in nursing research: identifying the issues. *Nurse Researcher*, 6(3), 52-66.
- Coutinho, S., de Lira, P., de Carvalho, M., & Ashworth, A. (2005). Comparison of the effect of two systems for the promotion of exclusive breastfeeding. *Lancet*, 366, 1094-1100.
- Cowley, S. & Bidmead, C. (2009). Controversial questions (part-three): Is there randomised controlled trial evidence for health visiting? *Community Practitioner*, 82(8), 24-28.
- Cranley, L., Doran, D., Tourangeau, A., Kushniruk, A. & Nagle, L. (2009). Nurses' uncertainty in decision-making: a literature review. *Evidence-based Nursing*, 6(1), 3-15.
- Crotty, M. (1996). *Phenomenology and nursing research*. Melbourne: Churchill Livingstone.
- Davis, H., Day, C., & Bidmead, C. (2002). *Working in Partnership with Parents: The Parent Adviser Model*. London: The Psychological Corporation Ltd.
- Dennis, C. (2006). Identifying predictors of breastfeeding self-efficacy in the immediate postpartum period. *Research in Nursing & Health*, 29, 256-268.

- Dennison, B., Edmunds, L., Stratton, H. & Pruzek, R. (2006). Rapid infant weight gain predicts childhood overweight. *Obesity*, 14(3), 491-499.
- Department of Health. (2004). *Infant Feeding Survey*. London: Department of Health.
- Department of Health and Ageing. (2007). *The Best Start: Report on the Inquiry into the Health Benefits of Breastfeeding*. Canberra: Commonwealth of Australia.
- Deshpande, W. (2008). Exclusive breastfeeding for the first six months: concerns over exclusive breastfeeding need to be understood so that they may be pre-empted and addressed effectively. *Community Practitioner*, 81(5), 34-36.
- Dinkel, S. (2005). Phenomenology as a nursing research method. *The Kansas Nurse*, 80(5), 7-10.
- Doak, C., Visscher, T., Renders, C., & Seidell, J. (2006). The prevention of overweight and obesity in children and adolescents: A review of interventions and programmes. *Obesity Reviews*, 7(1), 111-136.
- Doering Runquist, J., Morin, K. & Stetzer, F. (2009). Severe fatigue and depressive symptoms in lower-income urban postpartum women. *Western Journal of Nursing Research*, 31(5), 599-612.
- Donaldson, N. (1991). A review of nursing intervention research on maternal adaption in the first 8 weeks postpartum. *Journal of Perinatal & Neonatal Nursing*, 4(4), 1-11.
- Donalek, J. (2004). Phenomenology as a qualitative research method. *Urologic Nursing*, 24(6), 516-517.
- Donath, S., & Amir, L. (2000). Rates of breastfeeding in Australia by State and socio-economic status: evidence from the 1995 national health survey. *Breastfeeding Review*, 8(3), 23-27.
- Dowling, M. (2007). From Husserl to van Manen. A review of different phenomenological approaches. *International Journal of Nursing Studies*, 44(1), 131-142.
- Dowling, M. (2006). Approaches to reflexivity in qualitative research. *Nurse Researcher*, 13(3), 7-21.
- Doyle, L., Brady, A. & Byrne, G. (2009). An overview of mixed methods research. *Journal of Research in Nursing*, 14(2), 175-185.
- Drew, N. (2001). Meaningfulness as an epistemologic concept for explicating the researcher's constitutive part in phenomenologic research. *Advances in Nursing Science*, 23, 16-31.
- Duffin, C. (2009). Community nurses find an extra five hours. *Primary Health Care*, 19(10), 8-9.
- Dyson, L., McCormick, F. & Renfrew, M. (2005). Interventions for promoting the initiation of breastfeeding. *Cochrane Database of Systematic Reviews*, 2. Art. No.: CD001688. DOI: 10.1002/14651858.CD001688.pub2.
- Eckstein, K., Mikhail, L., Adolfo, A., Thomson, S., Millard, S., & Binns, H. (2006). Parents' perceptions of their child's weight and health. *Pediatrics* 117(3), 681-690.
- Ellett, M., Appleton, M. & Sloan, R. (2009). Out of the abyss of colic: a view through fathers' eyes. *MCN: The American Journal of Maternal Child Nursing*, 34(3), 164-171.

- Ellis, K., Chang, C., Bhandari, S., Ball, K., Geden, E., Everett, K. & Bullock, L. (2008). Rural mothers experiencing the stress of intimate partner violence or not: their newborn health concerns. *Journal of Midwifery and Women's Health*, 53(6), 556-562.
- Fagerskiold, A., & Ek, A. (2003). Expectations of the child health nurse in Sweden: two perspectives. *International Nursing Review*, 50, 119-128.
- Firkins, A. & Candlin, C. (2006). Framing the child at risk. *Health, Risk & Society*, 8(3), 273-291.
- Fletcher, R. (2006). Addressing depression and anxiety among new fathers. *Medical Journal of Australia*, 185(8), 461-463.
- Fletcher, R., Matthey, S. & Marley, C. (2006). Addressing depression and anxiety among new fathers. *Medical Journal of Australia*, 185(8), 461-463.
- Fletcher, R. (2009). Promoting infant well-being in the context of maternal depression by supporting the father. *Infant Mental Health Journal*, 30(1), 95-102.
- Flick, U. (1998). *An Introduction to Qualitative Research*. London: Sage.
- Flick, U. (1992). Triangulation revisited: strategy of validation or alternative? *Journal of Theory of Social Behaviour*, 22, 175-179.
- Flood, A. (2010). Understanding phenomenology. *Nurse Researcher*, 17(2), 7-15.
- Flowers, K. (2008). An exploration of child health nursing practice in pharmacy baby clinics. *Neonatal, Paediatric and Child Health Nursing*, 11(2), 18-25.
- Forrest, C., & Starfield, B. (1998). Entry into primary care and continuity: The effects of access. *American Journal of Public Health*, 88(9), 1330-1336.
- Foss, C. & Ellefsen, B. (2002). The value of combining qualitative and quantitative approaches in nursing research by means of method triangulation. *Journal of Advanced Nursing*, 40(2), 242-248.
- France, K., Blampied, N., & Henderson, J. (2003). Infant sleep disturbance. *Current Pediatrics*, 13, 241-246.
- Fraser, J., Armstrong, K., Morris, J., & Dadds, M. (2000). Home visiting intervention for vulnerable families with newborns: follow-up results of a randomised controlled trial. *Child Abuse and Neglect*, 24(11), 1399-1429.
- Fraser, J., Barnes, M., Biggs, H. & Kain, V. (2007). Caring, chaos and the vulnerable family: experiences in caring for newborns of drug dependent parents. *International Journal of Nursing Studies*, 44(8), 1363-1370.
- Gadamer, H.G. (1976). *Philosophical Hermeneutics*. University of California Press: Berkley, CA.
- Garner, P., Panpanich, R. & Logan, S. (2000). Is routine growth monitoring effective? A systematic review of trials. *Archives of Disease in Childhood*, 82(3), 197-201.
- Giddings, L. (2006). Mixed methods research: positivism dressed in drag? *Journal of Research in Nursing*, 11(3), 195-203.
- Gilbert, T. (2006). Mixed methods and mixed methodologies: the practical, the technical and the political. *Journal of Research in Nursing*, 11(3), 205-217.

- Giorgi, A. (2000). The status of Husserlian phenomenology in caring research. *Scandinavian Journal of Caring Sciences*, 14, 3-10.
- Glascoe, F. (1997). Parent's concerns about children's development: pre-screening technique or screening tests. *Pediatrics*, 99, 522-528.
- Goldfeld, S. (2007). Oral health: An important determinant of the health of children. *Journal of Paediatrics and Child Health*, 43, 99-100.
- Goldfeld, S. & Oberklaid, F. (2005). Maintaining an agenda for children: the role of data in linking policy, politics and outcomes. *Medical Journal of Australia*, 183(4), 209-211.
- Goldfeld, S., Wright, M., & Oberklaid, F. (2003). Parents, infants and health care: utilization of health services in the first 12 months of life. *Journal of Paediatrics and Child Health*, 39, 249-253.
- Goldman, S., & Owen, M. (1994). The impact of parental trait anxiety on the utilization of health care services in infancy: a prospective study. *Journal of Pediatric Psychology*, 19, 369-381.
- Goldfeld, S. & Kilpatrick, N. (2007). Oral health: an important determinant of the health of children. *Journal of Paediatrics and Child Health*, 43(3), 99-100.
- Goldfeld, S., Wright, M., & Oberklaid, F. (2003). Parents, infants and health care: utilisation of health services in the first 12 months of life. *Journal of Paediatrics and Child Health*, 39, 249-253.
- Gomby, S., Culross, P., & Behrman, R. (1999). Home visiting: recent programme evaluations - analysis and recommendations. *The Future of Children*, 9(1), 4-26.
- Grbich, C. (1999). *Qualitative research in health: An introduction*. St Leonards, NSW: Allen & Unwin.
- Guest, E. & Keatinge, D. (2009). The value of new parent groups in child and family health nursing. *Journal of Perinatal Education*, 18(3), 12-22.
- Hahn, J. (2005). Building a breastfeeding centre of excellence. *AWHONN Lifelines*, 9(4), 306-311.
- Hauck, Y., Hall, W. & Jones, C. (2007). Prevalence, self-efficacy and perception of conflicting advice and self-management: effect of a breastfeeding journal. *Journal of Advanced Nursing*, 57(3), 306-317.
- Hailes, J. & Wellard, F. (2000). Support for breastfeeding women in the first postpartum month: perceptions of breastfeeding women. *Breastfeeding Review*, 8(3), 5-9.
- Halcomb, E. & Andrew, S. (2005). Triangulation as a method for contemporary nursing research. *Nurse Researcher*, 13(2), 71-82.
- Hall, D. & Elliman, D. (2006). *Health For All Children*. (4<sup>th</sup> ed.). Oxford: Oxford University Press.
- Hamill, M. & Bigger, M. (2005). Debating the role of health visitors in primary care services. *Journal of Community Nursing*, 19(12), 10-14.
- Hanif, F., Read, J., Goodacre, J., Chaudhry, A & Gibbs, P. (2009). The role of quality tools in assessing reliability of the internet for health information. *Informatics for Health and Social Care*, 34(4), 231-245.

- Hanna, B. (2001). Negotiating motherhood: the struggles of teenage mothers. *Journal of Advanced Nursing*, 34(4), 456-464.
- Harvey-Jordan, S., & Long, S. (2002). Focus groups for community practitioners: a practical guide. *Community Practitioner*, 75(1), 19-21.
- Hart, B., Brinkman, S., & Blackmore, S. (2003). *How well are we raising our children in the north metropolitan area? Results of the early development instrument*. Perth: North Metropolitan Health Service.
- Hatem, M., Sandell, J., Devane, D., Soltani, H. & Gates, S. (2008). Midwife-led versus other models of care in childbearing women. *Cochrane Database of Systematic Reviews*, 4.
- Hawes, R. (2005). Therapeutic relationships with children and families. *Pediatric Nursing*, 17(6), 15-18.
- Hawkins, S., Griffiths, L., Dezateaux, C., & Law, C; Millennium Cohort Study Child Health Group. (2007). The impact of maternal employment on breastfeeding duration in the UK Millennium Cohort Study. *Public Health Nutrition*, 10(9), 891-896.
- Hector, D., Webb, K., & Lymer, S. (2004). *Report on breastfeeding in NSW 2004*. Retrieved March 9th, 2006.
- Hegney, D., Eley, R., Plank, A., Buikstra, E., & Parker, V. (2006). Workforce issues in nursing in Queensland: 2001 and 2004. *Journal of Clinical Nursing*, 15, 1521-1530.
- Heidegger, M. (1962). *Being and Time*. HarperOne, New York.
- Heining, M., Nommsen, L., Peerson, J., & Dewey, K. (1993). Intake and growth of breastfed and formula fed infants in relation to the timing of introduction of complementary foods: the DARLING study. *Acta Paediatrica*, 82(12), 999-1006.
- Henderson, A., & Brouse, A. (1991). The experiences of new fathers during the first 3 weeks of life. *Journal of Advanced Nursing*, 16, 293-298.
- Henrichs, J., Schenk, J., Schmidt, H., Velders, F., Hofman, A., Jaddoe, V., Verhulst, F. & Tiemeier, H. (2009). Maternal pre- and postnatal anxiety and infant temperament. The generation R study. *Infant & Child Development*, 18(6), 556-572.
- Hertzman, C. (2002). *An early child development strategy for Australia. Lessons from Canada*. Commission for Children and Young People: Queensland Government.
- Hertzman, C., & Wiens, M. (1996). Child development and long-term outcomes: A population health perspective and summary of successful interventions. *Social Science and Medicine*, 43(7), 1083-1095.
- Hildingsson, T., Tingvall, M. & Rubertsson, C. (2008). Partner support in the childbearing period – a follow up study. *Women & Birth*, 21(4), 141-148.
- Hilton, S., Bedford, H., Calnan, M., & Hunt, K. (2009). Competency, confidence and conflicting evidence: key issues effecting health visitors' use of research evidence in practice. *BMC Nursing*, 8.
- Hiscock, H., Bayer, J., Hampton, A, et al. (2008). Long-term mother and child mental health effects of a population-based infant sleep intervention: cluster-randomized controlled trial. *Pediatrics*, 122, 621-627.
- Hoghugh, M. (1998). The importance of parenting in child health. *BMJ*, 316, 1545.



- Hollis, V., Openshaw, S., & Goble, R. (2002). Conducting focus groups: purpose and practicalities. *British Journal of Occupational Therapy*, 65(1), 2-8.
- Holloway, I., & Wheeler, S. (2002). *Qualitative research in nursing* (2nd ed.). Oxford: Blackwell Science.
- Hurworth, R. (1996). Qualitative methodology: common questions about running focus groups during evaluations. *Evaluation, News and Comment*, 5(1), 48-50.
- Hudson, D., Elek, S. & Fleck, M. (2001). First-time mothers' and fathers' transition to parenthood: infant care self-efficacy, parenting satisfaction, and infant sex. *Issues in Comprehensive Pediatric Nursing*, 24(1), 31-43.
- Hyde, M., Jakub, H., Melchoir, M., Van Oort, F. & Weyers, S. (2006). Comparison of the effects of low childhood socioeconomic position and low adult socioeconomic position on self rated health in four European studies. *Journal of Epidemiology and Community Health*, 60(10), 882-226.
- Jack, S., DiCenso, A., & Lohfeld, L. (2005). A theory of maternal engagement with public health nurses and family visitors. *Journal of Advanced Nursing*, 49(2), 182-190.
- Jackson, D., Mannix, J., Faga, P., & Gillies, D. (2005). Raising families: Urban women's experiences of requiring support. *Contemporary Nurse*, 18(2), 97-107.
- Järvinen, R., Åstedt-Kurki, P., Tarkka, M. & Paavilainen, E. (2000). Supporting the everyday life of families with young children: experiences of parental groups in a child welfare clinic. *Hoitotiede*, 12(5), 270-280.
- Jee, S. & Cabane, M. (2006). Indices for continuity of care: a systematic review of the literature. *Medical Care Research and Review*, 63(2), 15-188.
- Jick, T. (1983). Mixing qualitative and quantitative methods: triangulation in action. In van Manen, J (Ed.). *Qualitative Methodology*. California: Sage.
- Jones, A. & Bugge, C. (2006). Improving understanding and rigour through triangulation: an exemplar based on patient participation in interaction. *Journal of Advanced Nursing*, 55(5), 612-621.
- Jootun, D., McGhee, G. & Marland, G. (2009). Reflexivity: promoting rigour in qualitative research. *Nursing Standard*, 23(23), 42-46.
- Kardamanidis, K., Kemp, L. & Schmied, V. (2009). Uncovering psychosocial needs: perspectives of Australian child and family health nurses in a sustained home visiting trial. *Contemporary Nurse*, 33(1), 50-58.
- Keane, V. (1988). Do solids help baby sleep through the night? *American Journal of Diseases in Children*, 142, 404-405.
- Kearney, L., Fulbrook, P., & Howlett, L. (2008). 'Drop-in' clinics compared with individual appointment clinics: An outcome evaluation of an innovative group model of care for parents with infants aged 0-18 months. *The Australian Journal of Child and Family Nursing*, 5(1), 8-16.
- Kearney, M., York, R., & Deatrick, J. (2000). Effects of home visits to vulnerable young families. *Journal of Nursing Scholarship*, 32(4), 369-376.
- Kearney-Schenk, L., Kelley, J. & Schenk, M. (2005). Models of maternal-infant attachment: a role for nurses. *Pediatric Nursing*, 31(6), 514-517.

- Keating, D., & Hertzman, C. (1999). *Developmental Health and the Wealth of Nations: Social, Biological and Educational Dynamics*. New York: Guilford Press.
- Keatinge, D. (2006). Parents' preferred child health information sources: implications for nursing practice. *Australian Journal of Advanced Nursing*, 23(3), 13-18.
- Keatinge, D., Bellchambers, H., Bujack, E., Cholowski, K., Conway, J., & Neal, P. (2002). Communication: principal barrier to nurse-consumer partnerships. *International Journal of Nursing Practice*, 8, 16-22.
- Keleher, H. (2001). Why primary health care offers a more comprehensive approach to tackling health inequalities than primary care. *Australian Journal of Primary Health*, 7(2), 57-61.
- Kendrick, D., Elkan, R., Hewitt, M., & al, e. (2000). Does home visiting improve parenting and the quality of the home environment? A systematic review and meta-analysis. *Archives of Disease in Childhood*, 82, 443-451.
- Kemp, L., Harris, E., & Chavez, R. (2006). Knowledge of sudden infant death syndrome prevention strategies in a multicultural, disadvantaged community. *Journal of Paediatrics and Child Health*, 42, 441-444.
- Kilma, C., Norr, K, Vonderheid, S. & Handler, A. (2009). Introduction of CenteringPregnancy in a public health clinic. *Journal of Midwifery and Women's Health*, 54(1), 27-34.
- Koch, T. (1995). Interpretive approaches in nursing research: the influence of Husserl and Heidegger. *Journal of Advanced Nursing*, 21, 827-836.
- Koch, T. (1999). An interpretive research process: revisiting phenomenological and hermeneutical approaches. *Nurse Researcher*, 6(3), 20-34.
- Koch, T. (1996). Implementation of a hermeneutic inquiry in nursing: philosophy, rigour and representation. *Journal of Advanced Nursing*, 24(1), 174-184.
- Koch, T. (2006). Establishing rigour in qualitative research: the decision trail. *Journal of Advanced Nursing*, 53(1), 91-103.
- Kohorn, I., Corwin, M., Rybin, D., Heeren, T., Lister, G. & Colson, E. (2010). Influence of prior advice and beliefs of mothers on infant sleep position. *Archives of Pediatrics and Adolescent Medicine*, 164(4), 363-369.
- Krueger, R. (1998). *Moderating focus groups* (Vol. 4). Thousand Oaks, CA: Sage.
- Kruske, S., Schmied, V., Sutton, V., & O'Hare, J. (2004). Mothers' experiences of facilitated peer support groups and individual child health nursing support: a comparative evaluation. *The Journal of Perinatal Education*, 13(3), 31-38.
- Larkin, M. (2000). Online support groups gaining credibility. *Lancet*, 355, 1834.
- Lawler, J. (1998). Phenomenologies as research methodologies for nursing: from philosophy to researching practice. *Nursing Inquiry*, 5(2), 104-111.
- Lee, A., Parker, G. & Townsend, D. (2003). Conducting routine health surveillance checks for two year olds by group assessment. *Journal of Family Health Care*, 13(3), 75-79.
- Lefebvre, C., Midmer, D., Boyd, J., Ordean, A., Graves, L., Kahan, L. & Pantea, L. (2010). Participant perception of an integrated program for substance abuse in pregnancy. *JOGGN*, 39(1): 46-52.

- LeVasseur, J. (2003). The problem of bracketing in phenomenology. *Qualitative Health Research, 13*, 408-420.
- Li, R., Fein, S., Chen, J., & Grummer-Strawn, L. (2008). Why mothers stop breastfeeding: Mothers' self-reported reasons for stopping during the first year. *Pediatrics, 122*(2), s69-s76.
- Lincoln, N., & Denzin, Y. (2005). *The sage handbook of qualitative research* (3rd ed.). Thousand Oaks, CA: Sage.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills: Sage.
- Lindsay, J., Smith, A. & Rosenthal, D. (1999). Conflicting advice? Australian adolescents' use of condoms or the pill. *Family Planning Perspectives, 31*(4), 190-195.
- Litchfield, C. & Chater, K. (2008). Can I do everything? Time management in neonatal unit. *Australian Journal of Advanced Nursing, 25*(2), 36-45.
- Logsdon, K., Wisner, B., Hanusa, H. & Phillips, A. (2003). Role functioning and symptom remission in women with postpartum depression after antidepressant treatment. *Archives of Psychiatric Nursing, 17*, 276-283.
- Lopez, K. & Willis, D. (2004). Descriptive versus interpretive phenomenology: their contributions to nursing knowledge. *Qualitative Health Research, 14*(5), 726-735.
- Lowe, R. (2007). *Facing the Future: A review of the role of Health Visitors*. London: Crown.
- Lutz, K., Anderson, L., Pridham, K., Riesch, S. & Becker, P. (2009). Furthering the understanding of parent-child relationships: a nursing scholarship review series. Part 1: Introduction. *Journal for Specialists in Pediatric Nursing, 14*(4), 256-261.
- Magarey, A., Daniels, L., & Boulton, T. (2001). Prevalence of overweight and obesity in Australian children and adolescents: reassessment of 1985 and 1995 data against new standard international definitions. *Medical Journal of Australia, 174*, 561-564.
- Magnusson, M., Persson, K., & Sundelin, C. (2001). The effectiveness of routine health examinations at 2, 6, 9 and 12 months of age: experiences based on data from a Swedish county. *Child: Care, Health and Development, 27*(2), 117-131.
- Magnusson, M., Sundelin, C., & Westerlund, M. (2006). Identification of health problems at 18 months of age - a task for physicians or child health nurses? *Child: Care, Health and Development, 32*(1), 47-54.
- Mbwili-Muleya, C., Gunn, J., & Jenkins, M. (2000). General practitioners: Their contact with maternal and child health nurses in postnatal care. *Journal of Paediatrics and Child Health, 36*(2), 159-163.
- McCann, T. & Baker, H. (2003). Models of mental health nurse - general practitioner liaison: promoting continuity of care. *Journal of Advanced Nursing, 41*(5), 471-479.
- McDonald, R. & Brown, P. (2008). Exploration of social support systems for older adults: a preliminary study. *Contemporary Nurse, 29*(2), 184-194.
- McKellar, L., Pincombe, J. & Henderson, A. (2006). Insights from Australian parents into educational experiences in the early postnatal period. *Midwifery, 22*(4), 356-364.
- McKie, A., Young, D., & Macdonald, P. (2006). Does monitoring newborn weight discourage breastfeeding? *Archive of Disease in Childhood, 91*, 44-46.

- McLaren, L., Kuh, D., Hardy, R. & Mishra, G. (2007). Postnatal depression and the original mother-child relationship: A prospective cohort study. *Journal of Affective Disorders*, 100, 211-219.
- McQueen, A. & Mander, R. (2003). Tiredness and fatigue in the postnatal period. *Journal of Advanced Nursing*, 42(5), 463-469.
- McVeigh, C. (1997). Motherhood experiences from the perspective of first-time mothers. *Clinical Nursing Research*, 6(4), 335-345.
- Mein Smith, P. (1997). *Mothers and King Baby. Infant Survival and Welfare in an Imperial World: Australia 1880-1950*. London: Macmillan Press Ltd.
- Mercer, R., & Walker, L. (2006). A review of nursing interventions to foster becoming a mother. *JOGGN*, 35(5), 568-582.
- Miller, L., Fraser, A. & Moy, R. (2008). How does cot death prevention advice influence parents' behaviour? *Child: Care, Health & Development*, 34(5), 613-618.
- Morgan, D. (1998a). *The Focus Group Guidebook* (Vol. 1). Thousand Oaks, CA: Sage.
- Morgan, D. (1998b). *Planning Focus Groups* (Vol. 2). Thousand Oaks, CA: Sage.
- Mouradian, W. (2001). The face of a child: children's oral health and dental education. *Journal of Dental Education*, 65(9), 821-831.
- Mozingo, J., Davis, M., Droppleman, P., & Merideth, A. (2000). It wasn't working: Women's experiences with short-term breastfeeding. *The American Journal of Maternal/Child Nursing*, 25(3), 120-126.
- Munhall, P. (1994). *Revisioning phenomenology: nursing and health science research*. New York: National League for Nursing.
- National Health and Medical Research Council. (2002). Child health surveillance and screening: a critical review of the evidence. Available at <http://www.nhmrc.gov.au/publications/>.
- National Health and Medical Research Council (2003). *Food for health: A guide to healthy eating*. Canberra: Commonwealth department of health and ageing.
- National Health and Medical Research Council. (2007). *National Statement on Ethical Conduct in Human Research*. Retrieved 19.11.07 from [www.nhmrc.gov.au](http://www.nhmrc.gov.au).
- National Health and Medical Research Council. (2008). *Australian Immunisation Handbook*. (9<sup>th</sup> ed.). Canberra: Commonwealth of Australia.
- Näslindh-Ylispangar, A., Sihvonen, M. & Kekki, P. (2008). Health, utilisation of health services, 'core' information, and reasons for non-participation: a triangulation study amongst non-respondents. *Journal of Clinical Nursing*, 17, 2972-2978.
- Naylor, A., & Morrow, A. (2001). *Developmental Readiness of Normal Full Term Infants to Progress from Exclusive Breastfeeding to the Introduction of Complementary Foods: Linkages*/Wellstart International.
- Nelson, C., Wissow, L., & Cheng, T. (2003). Effectiveness of anticipatory guidance: recent developments. *Current Opinion Pediatrics*, 15, 630-635.
- Norrie-McCain, M., & Mustard, J. (1999). *Reversing the real brain drain: Early years study: Final report*. Toronto: Publications Ontario.

- Nystrom, K., & Ohrling, K. (2004). Parenthood experiences during the child's first year: literature review. *Journal of Advanced Nursing*, 46(3), 319-330.
- Oberklaid, F. (2000). Is developmental assessment worthwhile? *Australian Family Physician*, 29(8), 731-734.
- Oberklaid, F. & Efron, D. (2005). Developmental delay: identification and management. *Australian Family Physician*, 34(9), 739-742.
- Oberklaid, F., Goldfeld, S., & Moore, T. (2003). Community based services and the needs of families: Is there a mismatch? *Journal of Paediatrics and Child Health*, 39, 93-94.
- O'Brien, M., Fallon, A., Brodribb, W., & Hegney, D. (2007). Reasons for stopping breastfeeding: What are they, what characteristics relate to them, and are there underlying factors? *Birth Issues*, 15(3), 105-113.
- Oddy, W., Holt, P., Sly, P., Read, A., Landau, L., Stanely, F., et al. (1999). Association between breastfeeding and asthma in 6 year old children: Findings of a prospective birth cohort study. *BMJ* 319, 815-819.
- O'Donnell, M., Scott, D. & Stanley, F. (2008). Child abuse and neglect – is it time for a public health approach. *Australian and New Zealand Journal of Public Health*, 32(4), 325-330.
- O'Hara, M. (2009). Postpartum depression: what we know. *Journal of Clinical Psychology*, 65(12), 1258-1269.
- Olson, L., Inkelas, M., Halfon, N., Shuster, M., & O'Connor, K. (2004). Overview of the content of health supervision for young children: reports from parents and pediatricians. *Pediatrics*, 113, 1907-1916.
- Paley, J. (2005). Phenomenology as Rhetoric. *Nursing Inquiry*, 12(2), 106-116.
- Patient UK. (2010). Child Health Surveillance Programme. Downloaded from: <http://www.patient.co.uk/doctor/Child-Health-Promotion-Programme.htm> on 22nd August 2010.
- Patton, M. (2002). *Qualitative Research and Evaluation Methods*. (3rd ed.). Thousand Oaks, CA: Sage.
- Polit, D., & Beck, C. (2006). *Essentials of nursing research: methods, appraisal and utilization* (6th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Polit, D., Beck, C. & Hungler, B. (2001). *Essentials of Nursing Research: methods, appraisal and utilization*. (5<sup>th</sup> ed.). Philadelphia: Lippincott Williams & Wilkins.
- Polit, D. & Hungler, B. (1991). *Nursing Research: Principles and Methods*. (4th ed.). Philadelphia: Lippincott.
- Parahoo, K. (2006) *Nursing Research: Principles, Process and Issues*.(2nd ed.). Palgrave Macmillan, Hampshire.
- Playfair, C. (2010). Human relationships: an exploration of loneliness and touch. *British Journal of Nursing*, 19(2), 124-126.
- Pottie, K. (2007). Misinterpretation: language proficiency, recent immigrants and global health disparities. *Canadian Family Physician*, 53, 1899-1901.
- Priest, H. (2002). An approach to the phenomenological analysis of data. *Nurse Researcher*, 10(2), 50-63.

- Primeau, L. (2003). Reflections of self in qualitative research: stories of family. *American Journal of Occupational Therapy*, 57(1), 9-16.
- Queensland Health. (2010). Pregnancy Hand-held Health Record. Retrieved on 18.7.10 from: [http://pan.search.qld.gov.au/search/click.cgi?rank=2&collection=qld-gov&component=0&docnum=166815&url=http%3A%2F%2Fwww.health.qld.gov.au%2Fquality%2Fpublication%2Fszp%2FPregnancyHealthRecord.PDF&index\\_url=http%3A%2F%2Fwww.health.qld.gov.au%2Fquality%2Fpublication%2Fszp%2FPregnancyHealthRecord.PDF&search\\_referer=http%3A%2F%2Fwww.health.qld.gov.au%2F](http://pan.search.qld.gov.au/search/click.cgi?rank=2&collection=qld-gov&component=0&docnum=166815&url=http%3A%2F%2Fwww.health.qld.gov.au%2Fquality%2Fpublication%2Fszp%2FPregnancyHealthRecord.PDF&index_url=http%3A%2F%2Fwww.health.qld.gov.au%2Fquality%2Fpublication%2Fszp%2FPregnancyHealthRecord.PDF&search_referer=http%3A%2F%2Fwww.health.qld.gov.au%2F)
- Queensland Health. (2005). *Enhanced child health model of care for community health services (0-12 years)*. Retrieved 5.11.05.
- Queensland Health. (2008). *Universal Postnatal Contact Services Initiative*. Brisbane: Queensland Health.
- Queensland Health. (2009). *Personal Health Record*. Brisbane: Queensland Health.
- Queensland Health. (2005b). *Safe Infant Care to Reduce the Risk of Sudden Infant Death Syndrome*. Retrieved 8.11.07. from <http://www.health.qld.gov.au/publications/childhealth/>.
- Queensland Health: Paul, E., Johnston, S., Walker, J., Stanton, R., & Bibo, M. (2007). *Infant Nutrition Project 2006-2007: Measurement of exclusive breastfeeding*. Brisbane: Queensland Health.
- Queensland Public Health Forum (2002). *Eat well Queensland 2002-2012: Smart eating for a Healthier state*. Brisbane, Queensland Public Health Forum.
- Racher, F. (2003). Using conjoint interviews to research the lived experience of elderly rural couples. *Nurse Researcher*, 10(3), 60-72.
- Racher, F. & Robinson, S. (2003). Are phenomenology and post positivism strange bedfellows? *Western Journal of Nursing Research*, 25(5), 464-491.
- Ramprogus, V. (2005). Triangulation. *Nurse Researcher*, 12(4), 5-6.
- Rawnsley, M. (1998). Ontology, epistemology and methodology: a clarification. *Nursing Science Quarterly*, 11(1), 2-4.
- Razum, O. & Gerhardus, A. (1999). Methodological triangulation in public health research: advancement or mirage? *Tropical Medicine and International Health*, 4(4), 243-244.
- Rice, R., & Slater, C. (1997). An analysis of group versus individual child health supervision. *Clinical Pediatrics*, 36, 685-690.
- Rising, S., Kennedy, H. & Kilma, C. (2004). Redesigning prenatal care through CenteringPregnancy. *Journal of Midwifery and Women's Health*, 49, 398-404.
- Rowe, J., & Barnes, M. (2006). The role of child health nurses in enhancing mothering know how. *Collegian*, 13(4), 22-26.
- Royal New Zealand Plunket Society. (2008). Plunket on-line. Retrieved 10th January, 2008, from <http://www.plunket.org.nz>
- Rubertsson, C., Waldenström, U., Rådestad, I. & Hildingsson, I. (2005). Depressive mood in early pregnancy and postpartum: prevalence and women at risk in a national Swedish sample. *Journal of Reproductive and Infant Psychology*, 23(2), 155-166.

- Sahlsten, M., Larsson, I., Sjoström, B., Lindencrona, C., & Plos, K. (2007). Patient participation in nursing care: towards a concept clarification from a nurse perspective. *Journal of Clinical Nursing*, 16, 630-637.
- Salsberry, P. (1989). Phenomenological research in nursing: commentary and responses. *Nursing Science Quarterly*, 2(1), 9-19.
- Sandelowski, M. (1995). Triangles and crystals: on the geometry of qualitative research. *Research in Nursing and Health*, 18(6), 569-574
- Sandelowski, M. (2000). Combining qualitative and quantitative sampling, data collection, and analysis techniques in mixed-method studies. *Research in Nursing and Health*, 23(3), 246-255.
- Santrock, J. (2009). *Lifespan Development*. (12<sup>th</sup> ed.). New York: McGraw-Hill.
- Sarkadi, A., & Bremberg, S. (2005). Socially unbiased parenting support on the Internet: a cross-sectional study of users of a large Swedish parenting website. *Child: Care, Health and Development*, 31(1), 43-52.
- Sarkadi, A., Kristiansson, R., Oberklaid, F., & Bremberg, S. (2008). Fathers' involvement in children's developmental outcomes: a systematic review of longitudinal studies. *Acta Paediatr*, 97, 153-158.
- Scherman, S., Smith, J. & Davidson, M. (2008). The first year of a midwife-led model of care in Far North Queensland. *Medical Journal of Australia*, 188(2), 85-88.
- Schulz, M. (2003). *Promoting the development of children's health in Australia: a population health perspective*. Retrieved January, 2006.
- Scott, J., Aitkin, I., Binns, C., & Aroni, R. (1999). Factors associated with the duration of breastfeeding amongst women in Perth, Australia. *Acta Paediatr*, 88, 416-421.
- Scott, J., Binns, C., Graham, K. & Oddy, W. (2009). Predictors of the early introduction of solid foods in infants: results of a cohort study. *BMC Pediatrics*, 9(60).
- Scott, D., Brady, S. & Glynn, P. (2001). New mother groups as a social network intervention: consumer and maternal and child health nurse perspectives. *Journal of Advanced Nursing*, 18(4), 23-29.
- Sharp K (1998). The case for case studies in research: the problem of generalization. *Journal of Advanced Nursing* 27(4), 785-789.
- SIDS & KIDS. (2010). Safe sleeping strategies. Downloaded 18.8.10 from <http://www.sidsandkids.org/safe-sleeping/>
- Simons, J., Reynolds, J., Mannion, J. & Morison, L. (2003). How the health visitor can help when problems between parents add to postnatal stress. *Journal of Advanced Nursing*, 44(4), 400-411.
- Shih, F. (1998). Triangulation in nursing research: issues of conceptual clarity and purpose. *Journal of Advanced Nursing*, 28(3), 631-641.
- Shipman, S., Helfand, M., Moyer, V., & Yawn, B. (2006). Screening for developmental dysplasia of the hip: a systematic literature review for the US preventative services task force. *Pediatrics*, 117(3), 557-576.

- SIGNAL (2001). *National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan*. Canberra: National Public Health Partnership.
- Spichinger, E. (2009). Family experiences of hospital end-of-life care in Switzerland: an interpretive phenomenological study. *International Journal of Palliative Nursing*, 15(7), 332-337.
- Stettler, N., Stallings, V., Troxel, A., Zhao, J., Schinnar, R., Nelson, S., Ziegler, E. & Strom, B. (2005). Weight gain in the first week of life and overweight in adulthood: a cohort study of European American subjects fed infant formula. *Circulation*, 11(15): 1897-1903.
- Streubert Speziale, H. J., & Carpenter, D. (2007). *Qualitative research in nursing: Advancing the humanistic imperative* (4th ed.). Philadelphia: Lippincott, Williams and Wilkins.
- Summerbell, C., Waters, E., Edmunds, L., Kelly, S., Brown, T., & Campbell, K. (2005). Interventions for preventing obesity in children. *Cochrane Database of Systematic Reviews*, CD00187.
- Symonds, B. (2009). First contact: effective health care for children, young people and families. *Community Practitioner*, 82(8), 18-21.
- Szilagyi, P., Vann, J., Bordley, C., Chelminski, A., Kraus, R., Margolis, P., et al. (2005). Interventions aimed at improving immunisation rates. *The Cochrane Database of Systematic Reviews*, 2.
- Tammentie, T., Paavilainen, E., Tarkka, M. & Astedt-Kurki, P. (2009). Families' experiences of interaction with the public health nurse at the child health clinic in connection with mother's postnatal depression. *Journal of Psychiatric and Mental Health Nursing*, 16(8), 716-724.
- Tammentie, T., Tarkka, M., Åstedt-Kurki, P. & Paavilainen, E. (2002). Sociodemographic factors of families related to postnatal depressive symptoms of mothers. *International Journal of Nursing Practice*, 8(5), 240-246.
- Tarkka, M. (2003). Predictors of maternal competence by first-time mothers when the child is 8 months old. *Journal of Advanced Nursing*, 41(3), 233-240.
- Tarkka, M., Paunonen, M., & Laippala, P. (2000). First-time mothers and child care when the child is 8 months old. *Journal of Advanced Nursing*, 31(1), 20-26.
- Tarkka, M., Paunonen, M. & Laippala, P. (1999). Social support provided by public health nurses and the coping of first-time mothers in child care. *Public Health Nursing*, 16(2): 114-119.
- Tashakkori, A. & Creswell, J. (2007). Editorial: the new era of mixed methods. *Journal of Mixed Methods Research*, 1, 3-7.
- Thompson, C., McCaughan, D., Cullum, M., Sheldon, T. & Raynor, P. (2005). Barriers to evidence-based practice in primary care nursing – viewing decision making as context is helpful. *Journal of Advanced Nursing*, 52(4), 432-444.
- Thomson, W., Poulton, R., Milne, B., Caspi, A., Broughton, J. & Ayers, K. (2004). Socioeconomic inequalities in oral health in childhood and adulthood in a birth cohort. *Community Dentistry & Oral Epidemiology*, 32(5), 345-353.
- Thunstrom, M. (2000). A 2.5 year follow-up of infants treated for severe sleep problems. *Ambulatory Child Health*, 6, 225-235.



- Thurmond, V. (2001). The point of triangulation. *Journal of Nursing Scholarship*, 33(3), 253-258.
- Tong, L., Shinohara, R., Sugisawa, Y., Tanaka, E., Maruyama, A., Sawada, Y., Ishi, Y. & Anme, T. (2009). Relationship of working mothers' parenting style and consistency to early childhood development: a longitudinal investigation. *Journal of Advanced Nursing*, 65(10), 2067-2076.
- Tucci, J., Mitchell, J. & Goddard, C. (2007). *Children's Fears, Hopes and Heroes: Modern childhood in Australia*. Ringwood, VIC: Australian Childhood Foundation.
- Turnball, D., Baghurst, P., Collins, C., Cornwell, C., Nixon, A., Donnelan-Fernandez, R. & Antoniou, G. (2009). An evaluation of midwifery group practice. Part 1: clinical effectiveness. *Women & Birth*, 22, 3-9.
- Turner, K., Markie-Dadds, C., & Sanders, M. (1998). *Facilitator's Manual for Group Triple P*. Milton, QLD: Triple P International.
- Van Manen, M. (1990). *Researching Lived Experience*. Althouse Press: London.
- Van Pelt, F. (2008). Peer support: healthcare professionals supporting each other after adverse medical events. *Quality and Safety in Health Care*, 17(4), 249-252.
- Von Kries, R., Koletzko, B., Sauderwald, T., Von Mutius, B., Grunet, V., et al. (1999). Breast feeding and obesity: cross sectional study. *BMJ* 319, 147-150.
- Wade, S. (1995). Partnership in care: a critical review. *Nursing Standard*, 9(48), 29-32.
- Wade, D., Haining, S. & Day, A. (2009). Breastfeeding peer support: are there additional benefits? *Community Practitioner*, 82(12), 30-33.
- Wangberg, S., Andreassen, H., Kummervold, P., Wynn, R. & Sørensen, T. (2009). Use of internet for health purposes. *Scandinavian Journal of Caring Sciences*, 23(4), 691-696
- Wanzer, M., Wojtaszczyk, A. & Kelly, J. (2009). Nurses perceptions of physicians communication and the relationship among communication practice, satisfaction and collaboration. *Health Communication*, 24(8), 683-692.
- Warren, P. (2005). First-time mothers: social support and confidence in infant care. *Journal of Advanced Nursing*, 50(5), 479-488.
- Watson, K. (2005). Formulary for success. *Health Management Technology*, 26(12), 20-21.
- Webb, C. & Kevern, J. (2001). Focus groups as a research method: A critique of some aspects of their use in nursing research. *Journal of Advanced Nursing*, 33(6), 798-805.
- Welch, M. (2005). Pivotal moments in the therapeutic relationship. *International Journal of Mental Health Nursing*, 14, 161-165.
- Welsh, I. & Lyons, C. (2001). Evidence based care and the case for intuition and tacit knowledge in clinical assessment and decision making in mental health nursing practice: an empirical contribution to the debate. *Journal of Psychiatric and Mental Health Nursing*, 8(4), 299-305.
- Williams, J., & Holmes, C. (2004). Children of the 21st century: slipping through the net. *Contemporary Nurse*, 18(1), 57-66.
- Wilson, R. (2007). Walking the tightrope: Child health assessing family needs. *The Australian Journal of Child and Family Health Nursing*, 4(1), 18-22.

- Wojnar, D. & Swanson, K. (2007). Phenomenology: An exploration. *Journal of Holistic Nursing*, 25(3), 172-180.
- Wolcott, H. F. (2001). *Writing up qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.
- World Health Organisation. (1989). *Convention on the Rights of the Child*: World Health Organisation.
- World Health Organisation. (1998). *Evidence for the Ten Steps to Successful Breastfeeding*. Geneva: WHO Press.
- World Health Organisation.(2000). *Convention on Maternity Protection No. 183*. Geneva: WHO.
- World Health Organisation. (2001). *Guiding Principles for Complementary Feeding of the Breastfed Child*. Geneva: WHO Press.
- World Health Organisation. (2001). The World Health Report 2001. Mental health: new understanding, new hope. Geneva: World Health Organisation.
- World Health Organisation. (2003). *Global Strategy for Infant and Young Child Feeding*. Geneva: WHO.
- World Health Organisation. (2007). World Health Statistics 2007. Retrieved 10th January, 2008, from <http://www.who.int/whosis/database/core>
- World Health Organisation. (2008). *Indicators for Assessing Infant and Young Child Feeding Practices*. Geneva: WHO Press.
- World Health Organisation. (2008). World Health Organisation. Retrieved 10th January, 2008, from [http://www.who.int/child-adolescent-health/OVERVIEW/CHILD\\_HEALTH/map\\_00...](http://www.who.int/child-adolescent-health/OVERVIEW/CHILD_HEALTH/map_00...)
- Worobey, J., Lopez, M. & Hoffman, D. (2009). Maternal behaviour and infant weight gain in the first year. *Journal of Nutrition and Behavior*, 41(3), 169-175.
- Wright, C. (2000). Identification and management of failure to thrive: a community perspective. *Archives of Disease in Childhood*, 82, 5-9.
- Young, J., Schluter, P., & Francis, D. (2002). *Final report: Reducing the risk of sudden infant death syndrome: Nurses' knowledge, attitudes and practices*. Brisbane: Queensland Health.
- Young, J., Battistutta, D., & O'Rourke, P. (2002). *Final report: Infant care practices related to sudden infant death syndrome in Queensland*. Brisbane: Queensland Health.
- Zachariah, R. (1994). Perceived social support and social network of low-income mothers of infants and preschoolers: pre- and postparenting program. *Journal of Community Health Nursing*, 11(1), 11-20.
- Zubrich, S., Williams, A., Silburn, S., & Vimpani, G. (2000). *Indicators of social and family functioning*. Canberra: Dept of family and community services.