AN INVESTIGATION OF CLINICAL ASSESSMENT PROCESSES OF STUDENT NURSES IN JAKARTA, INDONESIA

Submitted by

DESSIE WANDA, BSN., PGrad. Dipl (Nursing)

A thesis submitted in partial fulfillment of the requirements of the degree of

MASTER OF NURSING (RESEARCH)

SCHOOL OF NURSING AND MIDWIFERY FACULTY OF HEALTH SCIENCES

Australian Catholic University Research Services Locked Bag 4115, Fitzroy, Victoria 3065 Australia

11 September 2007

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 of diploma.

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

This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

All research procedures reported in the thesis received the approval of the relevant Ethics Committee.

Candidate's Name: DESSIE WANDA

Candidate's Signature:

Date:

11 September 2007

ACKNOWLEDGMENTS

I would like to express gratitude to my gracious supervisors, Ms Maria Miller and Dr Colleen Rolls, who were willing to guide and support me through my study period at ACU National. Without their support, I was not able to finish this thesis.

I would also like to express my appreciation to all clinical instructors and student nurses in this study, for their willingness spending their time to involve in this research.

I would like to thank Faculty of Health Sciences ACU National who gave me financial support to travel to Indonesia to do the data collection.

I gratefully acknowledge Patricia Hacker and Zuleika Arashiro for their generosity in reading my work to make it more understandable in English, and Ivankie who let me used his computer for a period of time.

To my husband, Khreshna, this thesis is dedicated to you. You always encourage me to continue my study. I cannot imagine how I can finish writing up this thesis without your support. For my lovely beautiful kids, Nabil, Syabil and Hanin, please forgive your mom, who was often busy with herself during her study period. I promise that I will play with you more in the future.

ABSTRACT

Nursing in Indonesia is attempting to achieve a higher standard of education to enable nurses to migrate to global areas of nursing shortages. Assessment of nursing practice during undergraduate nursing education in Indonesia requires investigation to assist in achieving a higher standard of education. For assessment to occur, there are several variables reported in the literature that must be included in the process of assessment, that is assessors, students, methods and tools of measurement as well as clinical environment. It is acknowledged that those factors influence the successfulness of the clinical assessment process.

The purpose of this descriptive exploratory study utilising a self report clinical instructor and student nurse questionnaire was to investigate the clinical assessment of Indonesian student nurses undertaking the professional stage of the undergraduate nursing course. Specifically, the study investigated how clinical teachers assess student nurses and how students perceive the clinical assessment process. Data were collected from four nursing institutions in Jakarta, Indonesia during July 2006. Quantitative and qualitative data analysis were undertaken to meet the purpose and objectives of the study. Quantitative data analysis utilised frequency tables, cross tabulations and ANOVA. Participants' responses to open-ended items were analysed using content analysis procedures.

The findings of this study have shown that there are many important issues surrounding the assessment of Indonesian student nurses, such as the model of assessment process employed and the characteristics of clinical instructors, students and clinical environment. From this study, it was revealed that the assessment of student nurses employed skilledbased assessment, despite the global trends towards competency-based assessment. Findings from this study also illustrate that nursing education development has been occurring in Indonesia with already half of the clinical instructor participants being educated to master's level and most student nurse participants held diploma III qualifications prior to their Bachelor of Nursing course, which means that they want to continue their study to a higher level. However, improvement in nursing curriculum which focuses on competency-based curriculum is needed. Improvement in the nursing curriculum will lead to improvements in the nursing profession. That is a higher standards of professionalism for nursing and nurses in Indonesia.

Recommendations from the study include promoting changes in curriculum, particularly regarding the assessment process to employ competency-based assessment for student nurses. This study also endorses the use of a standardized assessment in clinical setting. In addition, further research related to replication of the study at a national level and comparison of clinical assessment in other countries should be conducted.

TABLE OF CONTENTS

STATEMENT OF AUTHORSHIP AND SOURCES	ii
ACKNOWLEDGEMENTS	iii
ABSTRACT	iv

CHAPTER ONE: INTRODUCTION AND LITERATURE REVIEW

1.1	Introduction	1
1.1.1	Indonesia	1
1.1.2	Historical Overview: Nursing Education in Indonesia	2
1.2	Background of the Study	5
1.3	Research Purpose	7
1.4	Definitions of Terms	8
1.5	Significant of the Study	11
1.6	Literature Review	12
1.6.1	Nursing Education	12
1.6.2	Factors that Influence the Clinical Assessment Processes	13
1.7	Summary of Chapter One	34

CHAPTER TWO: METHODOLOGY

2.1	Introduction	35
2.2	Nursing Research	36
2.2.1	Descriptive Exploratory Research	38
2.2.2	Survey Design	39
2.3	Study Setting	41
2.4	Sampling Method	44
2.5	Sample	45
2.6	Data Collection Instrument	47
2.6.1	Clinical Instructor Questionnaire	49
2.6.2	Student Nurse Questionnaire	50
2.7	Validity	52

TABLE OF CONTENTS (Cont')

2.8	Data Collection Process	54
2.9	Data Analysis	55
2.10	Ethical Considerations	56
2.11	Summary of Chapter Two	57

CHAPTER THREE: FINDINGS AND RESULTS

3.1	Introduction	58
3.2	Clinical Instructors' and Student Nurses' Demographic Data	59
3.2.1	Clinical Instructors' Demographic Data	59
3.2.2	Student Nurses' Demographic Data	61
3.3	Clinical Assessment	62
3.3.1	Number of Students being Assessed	63
3.3.2	Number of Assessors and Number of Assessment	65
3.3.3	Duration of the Assessment Process	67
3.3.4	Minimum Mark to Pass	68
3.3.5	Students' Grades	70
3.3.6	Clinical Instructors' Preparation for the Clinical Assessment	71
3.3.7	Student Nurses Assessment Process	76
3.3.8	Clinical Instructors' Perception on Adequate Time to Assess Student	78
3.3.9	Variations on Assessment Methods in Each Area of Nursing Specialty	78
3.3.10	Clinical Instructors' Action when Students Failed	82
3.3.11	Factors Determining a Re-Test	83
3.3.12	Other Components for Students' Final Mark	83
3.4	Characteristics of the Clinical Assessment Environment	90
3.5	Method of Clinical Assessment in Each Clinical Setting	94
3.6	Clinical Assessment Tools Used	97
3.7	Clinical Instructors' and Student Nurses Perception of Clinical	101
	Assessment Process	
3.7.1	Participants' Perceptions on Adequate Time in Assessment Process	102
3.7.2	Participants' Satisfaction in Assessment Process	103

TABLE OF CONTENTS (Cont')

3.7.3	Clinical Instructors' Feelings if Students Failed	104
3.7.4	Workload Factors that Hinder Assessment of Student Nurses	105
3.7.5	Factors that Effect the Clinical Assessment Process	107
3.8	Summary of Chapter Three	111

CHAPTER FOUR: DISCUSSION AND CONCLUSION

4.1	Introduction	115
4.2	Indonesian Clinical Assessment Processes	118
4.3	Indonesian Clinical Instructors and Student Nurses	122
4.4	Issues related to Clinical Instructors and Student Nurses	124
4.5	Clinical Assessment Environment	126
4.6	Assessment Tools	127
4.7	Limitations of the Study	129
4.8	Conclusion	130
4.9	Recommendations	131

MY REFLECTIVE DIARY

APPENDIX A. Self-reported questionnaire for clinical instructor (in English) 134 **APPENDIX B.** Self-reported questionnaire for student nurse (in English) 140 APPENDIX C. Self-reported questionnaire for clinical instructor (in Bahasa Indonesia). 147 APPENDIX D. Self-reported questionnaire for student nurse (in Bahasa Indonesia) 153 **APPENDIX E.** Letter of information for participants (in English) 159 **APPENDIX F.** Letter of information for participants (in Bahasa Indonesia) 161 APPENDIX G. ACU Human Research Ethics Committee Approval Form 163 APPENDIX H. Letter of permission from nursing institutions in Indonesia 164

REFERENCES

167

132

LIST OF TABLES

Table 3.1	Clinical instructors' demographic data .	60
Table 3.2	ANOVA for clinical instructors' age between four nursing institutions	60
Table 3.3	ANOVA for length of experience being a clinical instructors between four nursing institutions	61
Table 3.4	Student nurses' demographic data	61
Table 3.5	Number of assessment each area of nursing specialty supervision	67
Table 3.6	Minimum mark to pass the assessment	69
Table 3.7	Cross tabulation of minimum mark to pass by the four institutions	70
Table 3.8	Clinical instructors' preparation before students' clinical assessment	72
Table 3.9	Assessment method of each area of nursing specialty	79
Table 3.10	Clinical instructors' action when student nurses failed	82
Table 3.11	Components to determine students' final mark for maternity nursing	84
Table 3.12	Components to determine students' final mark for paediatric nursing	85
Table 3.13	Components to determine students' final mark for medical surgical and emergency nursing	86
Table 3.14	Components to determine students' final mark for psychiatric nursing	87
Table 3.15	Components to determine students' final mark for gerontic, family and community nursing	88
Table 3.16	Components to determine students' final mark for nursing management	89
Table 3.17	Types of students experiences and number of patients allocated	91
Table 3.18	Methods of assessment for cognitive learning	95
Table 3.19	Methods of assessment for psychomotor learning	96
Table 3.20	Methods of assessment for affective learning	96
Table 3.21	Tools of measurement to assess student nurses	98
Table 3.22	List of tools of measurement being used in Institution A and Institution C	99
Table 3.23	Clinical instructors' feeling if student failed the assessment	105
Table 3.24	Workload factors that hinder the assessment process	105
Table 3.25	Factors that effect the clinical assessment process	108

LIST OF FIGURES

Figure 1.1	The framework of student nurses assessment processes	33
Figure 3.1	Number of students being assessed in hospital setting	64
Figure 3.2	Number of students being assessed in community setting	65
Figure 3.3	Student nurses' grades for each area of nursing specialty	71
Figure 3.4	Number of students in hospital setting	92
Figure 3.5	Number of students in community setting	93
Figure 3.6	Clinical instructors' and student nurses' perceptions of adequate time to assess the students	103
Figure 3.7	Participants' satisfaction on clinical assessment process	104

CHAPTER 1

INTRODUCTION AND BACKGROUND

1.1 Introduction

The education of a nurse to be a competent practitioner is essential for the health industry and society in general worldwide. This research study explores an aspect of the education of nurses that is assessment in the clinical environment. The study was undertaken in Indonesia, the mother country of the student investigator.

1.1.1 Indonesia

Geographically, Indonesia is the world's largest archipelago and one of the world's most multicultural countries. Situated between two continents, Asia and Australia, and two oceans, the Indian and Pacific, it consists of 13,000 islands lying across the equator. The five largest islands are Sumatra, Java, Kalimantan, Sulawesi, and Papua. Java, the main island, is the most densely populated island in Indonesia (Badan Pusat Statistik [BPS], 2000).

The total population of Indonesia is estimated to be 222,781,000 (World Health Organization [WHO], 2006) making Indonesia the fourth highest populated country in the world. The large population and the economic condition of the country create many health and health related problems. According to the Bureau of Statistics Centre for The Republic of Indonesia (BPS, 2003), 24.41 % of the population experience health problems every month. Poverty, lack of access to good sanitation, low housing quality and lack of

infrastructure contribute to the poor health of the population. In addition, access to public health resources is restricted due to high demand and limited resources (Shields & Hartati, 2003).

As mentioned above, the problem of access to health care is further compounded by the small quantity and low quality of health personnel. According to WHO (2006), the ratio of physicians to nurses for 100,000 civilians in Indonesia respectively are 13 and 62. In comparison to Australia where the ratio of physicians to nurses is 247 and 971 respectively. Based on these statistics, it can be assumed that in Indonesia one physician must take care of around 7,700 civilians and one nurse must take care of 1,600 civilians.

Not only is the quantity of health personnel limited, but the quality of health personnel is also a problem in Indonesia. Nurses in Indonesia have many different educational backgrounds. Some of them graduate from Sekolah Perawat Kesehatan (nursing education at the level of senior high school), while others are educated to diploma and bachelor level. Sixty percent (60%) of nurses who work in hospitals have graduated from the SPK (Pusat Pendidikan Tenaga Kesehatan, 2000). The variations in educational background impact upon the standard of nursing care provided to Indonesian citizens. Therefore, the quality of nursing care provided is influenced by the standard and level of educational preparation, and is inconsistent across the country.

1.1.2 Historical Overview: Nursing Education in Indonesia

To overcome the problem of the lack of nursing expertise, in 1962, the Indonesian Ministry of Health initiated higher education for nurses by founding a nursing institution to conduct courses at diploma level. Then, in 1983, the Consortium of Health Sciences developed a nursing curriculum at tertiary level. The development of higher nursing education in Indonesia has been influenced by several developed countries. With assistance from WHO consultants, nursing education in Indonesia began to change aiming to improve nursing standards of care (Gartinah, Sitorus, & Irawaty, 2006). Several nursing consultants from developed countries were invited to visit Indonesia, bringing their experiences of nursing education and especially their experiences related to assessment processes. Then, Indonesian nursing scholars employed what they had gained from the consultants.

In 1985, Faculty of Medicine, University of Indonesia introduced a tertiary nursing program called Program Studi Ilmu Keperawatan (PSIK). There are now two bachelor programs on offer for senior high school and diploma III graduates. In 1995, the PSIK became the Faculty of Nursing University of Indonesia (FoN UI). The main goal of FoN UI is to produce nursing graduates who are equipped to provide professional nursing care and further develop nursing science and technological knowledge. Today, there are approximately 33 tertiary institutions that offer a Bachelor of Nursing Program in Indonesia (Asosiasi Institusi Pendidikan Ners Indonesia [AIPNI], 2005). In addition, nursing education in Indonesia has continued to expand and now includes several postgraduate nursing courses such as the Master of Nursing Leadership and Management, and nursing specialist programs with specialisation streams such as maternity, community, psychiatric and medical surgical streams. Fon UI is also developing a doctoral nursing program.

Since 1998, FoN UI and other nursing institutions offered Bachelor of Nursing programs have implemented "Kurikulum Ners", a national curriculum for nursing students that consists of two stages, namely the academic and professional stages. During the academic stage, all teaching and learning is conducted in the classroom and laboratory. Then, during the professional stage, nursing students undertake clinical practice. Each of the nursing institutions has the right to add some local contents into the curriculum. For example, FoN UI, situated in Jakarta, added local subjects that related to health problems specific to a metropolitan location, whereas one nursing institution in a rural area added local subjects that focused on community primary health services.

Clinical learning for student nurses in Indonesia usually starts at the academic stage, semester IV, for students graduated from senior high school and semester II for students graduated from Diploma III Nursing. At this time, students' clinical learning is limited to observation, and they are not allowed to give nursing care to patients. During the professional stage, a student can practice as a nurse under the supervision of a clinical instructor. Each student in the professional stage undertakes clinical nursing practice in nine (9) different clinical settings with differing lengths of practice periods. There is a four-week clinical practice period for psychiatric, maternity, paediatric, geriatric, and emergency nursing, and an eight-week practice period for family and community nursing and medical surgical nursing. At the end of the year, students undertake a clinical practice placement for four weeks, focusing on nursing management in his/her chosen nursing specialty.

In line with nursing education and practice globally, Indonesia is developing competency assessment processes. Competency means "the combination of skills, knowledge, attitudes, values and abilities that underpin effective and/or superior performance in a profession/occupational area" (ANMC, 2005, p. 8). For each clinical specialty, there is a set of competencies for student nurses to achieve. These competencies were designed by experts from each nursing specialty in the nursing institutions. Currently, FoN UI has started to formulate graduate nurses competencies based on those already designed by the International Council of Nurses and the Indonesian National Nurses Association (INNA). There will be a set of competencies for nurses graduating from the bachelor degree. This set of competencies will be brought to a national conference/discussion between the Association of Indonesian Nurse Education Centre (Asosiasi Institusi Pendidikan Ners Indonesia [AIPNI]) and the Indonesian National Nurses Association (INNA). It is proposed that the resulting set of competencies will be used by nursing education providers nationally.

1.2 Background of the Study

Clinical placement is essential for student nurses to apply the nursing knowledge that they have learnt in the classroom and nursing laboratory. Exposure to the clinical setting and having direct experience with the real world of nursing consolidates their nursing expertise and competency. Clinical experiences are critically important to determine that nursing graduates can become competent professional practitioners after completing their degree (Reilly & Oermann, 1992). Like all education processes, clinical learning needs to be assessed. However, academics in nursing education institutions continue to struggle with many issues related to assessment, arising from who should be the assessor, how to assess students, what aspects have to be assessed and where the assessment should be carried out. According to IP and Chan (2004), different countries may have different methods of clinical assessment. It is acknowledged that clinical assessment should be appropriate to the specific clinical environment. Different environments can create different problems regarding valid assessment for student nurses. Variables reported in the literature that impact on the reliability of the clinical practice assessment include measurement tools, the environment and the assessor's personal background (Calman, Watson, Norman, Redfern, & Murrels, 2002; Chambers, 1998; Dolan, 2003; Gibbs, Lucas, & Spouse, 1997; Hager, Gonczi, & Athanasou, 1994; Mahara, 1998). All of which may contribute to a lack of objectivity in clinical practice assessment.

Within Indonesia, anecdotal evidence suggests that complaints arise not only from students but also from clinical instructors about clinical assessment. Students report that the assessor's subjectivity sometimes influences his/her judgements. Students also report experiencing stress before assessments because of uncertainty about the assessment methods. From the assessors' point of view, complaints related to the lack of uniformity in the marking of students. Based on discussions with clinical instructors and the researcher in Jakarta, it is acknowledged that assessors often grade student's clinical assessment according to different criteria and/or standards. Such problems occur during clinical examination. It was noted in the discussion that clinical examination is the main part of clinical assessment of student nurses in Indonesia. This implies that the clinical examination processes reflects the clinical assessment processes. However, there is currently limited documented evidence or discussion in the literature regarding student assessment in Indonesia.

In light of this, a study to explore the process of clinical assessment of student nurses in Indonesia is warranted, as nursing education institutions in Indonesia are now at a stage where they want to be recognized internationally. This research will inform the nursing education system and hopefully lead to improvements in the clinical assessment of student nurses. In addition, improvements in clinical assessment will ensure the further development of nursing in Indonesia, since it will give students, as future professional nurses, the opportunity to have better teaching and learning processes, including assessment processes, during their study period. Furthermore, there is a worldwide shortage of professional nurses in several countries, which means that the opportunity for graduates to work and have experiences in other countries is increasing. Therefore, better nursing education processes for students in Indonesia, may enable more nurses to be educated with internationally recognized qualifications.

1.3 Research Purpose

The purpose of this research was to investigate the clinical assessment of Indonesian student nurses undertaking the professional stage of the undergraduate nursing course. Specifically, the study aims to investigate how clinical teachers assess student nurses and how students perceive the clinical assessment process. The objectives were formed following an extensive review of the available literature, unfortunately there was little in the literature regarding the topic from an Indonesian perspective and this added to the rationale for undertaking a descriptive study to establish the processes of clinical assessment in that country.

Research Objectives:

The research objectives of this research were to:

- 1. identify clinical instructors' and student nurses' demographic data;
- 2. explore the process of the nursing clinical assessment in Jakarta, Indonesia;
- 3. explore the characteristics of the clinical assessment environment in Jakarta, Indonesia;
- 4. identify the method of clinical assessment in each clinical setting;
- assess and analyse clinical assessment tools being used in nursing education institutions in Jakarta, Indonesia and
- describe clinical instructors' and student nurses' perceptions of the clinical assessment process.

1.4 Definition of Terms

For the purpose of the study, key terms and phrases are defined.

Academic stage:

The academic stage is the stage where teaching and learning processes occur in the classroom and laboratory.

Assessment:

Assessment has been defined as a measurement of student learning and achievement within a certain period (Billing & Halstead, 2005).

Assessment of students in the professional stage:

Assessment for students in the professional stage consists of several forms, such as clinical examination, clinical performance evaluation, nursing care reports, and case presentation. Each assessment contributes to the student's final mark. In most areas of nursing specialty, a clinical examination is the most important assessment item and it makes up the biggest percentage of students' final mark.

Assessor:

An assessor is someone who has the responsibility of assessing student nurses. It can be a clinical instructor in the clinical setting or a faculty academic or both.

Clinical examination:

Clinical examination is done in the clinical setting (hospital or community) and laboratory. In the study, this term is sometimes used interchangeably with assessment.

Clinical instructor:

A qualified faculty academic or a skilled practitioner who teaches, supervises and assesses student nurses in the hospital and or community setting.

Clinical setting:

Clinical setting refers to places where students do clinical practice. It could be a ward in a hospital, a clinic, a nursing home, a house or a community setting.

Professional stage:

The professional stage is the period of time following the academic stage when students are responsible for providing nursing care under the supervision of a clinical instructor.

Type A Hospital:

A hospital that provides the greatest number of medical specialities and number of beds available. This hospital also functions as a major referral and teaching hospital. They are located in the capital city of Indonesia, Jakarta (Shields & Hartati, 2003).

Type B Hospital:

A hospital that has quite similar characteristics to type A hospital, except the number of medical specialities and number of beds available are less than type A hospital (Shields & Hartati, 2003).

Type C Hospital:

A regional hospital that offers some specialist services only (Shields & Hartati, 2003).

Type D Hospital:

A regional hospital that does not have any specialist services available (Shields & Hartati, 2003).

1.5 Significance of the Study

There are a number of obstacles to the professional development of nurses in Indonesia such as limited education, a shortfall in trained nurses and a lack of a central nurse regulatory body. The consequence reported in the literature is that nurses practice with a lack of professionalism and have no standards of care (Hennessy, Hicks, Hilan, Kawonal, 2006). As a result, nurses in Indonesia are not considered professionals whereas they are in other countries. Based on a study conducted by the Department of Health and the University of Indonesia at Puskesmas, health service centres, in 10 Indonesian provinces, nurses do not receive a reward system from the government (INNA, 2006a). In Indonesia, a reward system refers to incentives that someone receives based on his/her job. For instance, a doctor will receive incentives when he/she visits a patient, but a nurse never receives any incentives when he/she performs nursing care for a patient. Nurses often perform tasks that do not relate to nursing care such as cleaning and the administration of the Puskesmas. Another study conducted by INNA (2006a) also gives another illustration of nurses' conditions. INNA's study found that in four provinces in Indonesia 50.9% of Indonesian nurses experience stress and headaches during work time. Nurses had a high workload, despite a low income with no incentives.

One solution to solve the problem is to improve the quality of nursing education. Nursing education institutions must improve the quality of teaching and learning so they can educate professional nurses who have advanced nursing knowledge and competency skills. Nursing institutions in Indonesia are now at a stage where they want to be recognized internationally. For this to happen, and for the Indonesian nursing profession to develop, improvements in the assessment of clinical practice must occur. Research in this area will therefore provide basic information about how assessment in clinical practice is currently conducted and will inform and provide suggestions for improvement in the clinical assessment of student nurses.

The result of this study may benefit student nurses and clinical instructors since hopefully it will encourage the implementation of better teaching and learning processes, including assessment activities, within nursing education institutions in Indonesia.

1.6 Literature Review

This review analyses issues in the clinical assessment of student nurses. Computer database searches of relevant literature were carried out using CINAHL (1982-2006), ERIC (1966-2006), MEDLINE (1966-2006), and EBSCO Host database and frequently used key search words included Indonesia and Asia, nursing education, clinical assessment, competency assessment, student nurses assessment, clinical teacher or clinical instructor, fairness, validity, methods and tools of assessment. Most of the literature found was in the form of research articles. However, this review also cites relevant nursing education theory from nursing textbooks.

1.6.1 Nursing Education

This review was undertaken focusing on nursing education in Indonesia and Asia. However, minimal literature was available so the review was expanded to include nurse assessment globally, drawing from publications found in the international literature. The reason why not many papers regarding clinical education, in particular clinical assessment, were available from Indonesia is probably because Indonesian research papers are not published in accessible databases. The articles are most likely to be only available in hard copies. However, within Asia as a whole, other countries such as Hong Kong, Thailand and Philippines have published many papers regarding clinical education. Such articles will be discussed later to enrich the literature review section.

1.6.2 Factors that Influence the Clinical Assessment Processes

For student nurse clinical assessment to occur, there are several factors that must be included in the process. These include clinical instructors, students, clinical environment, methods of assessment and tools for measurement (Chambers, 1998; Dolan, 2003; Nicklin & Lankshear, 2000; Vollmann, 1990). It is acknowledged that these factors influence the success or failure of the clinical assessment process.

1.6.2.1 Issues Related to Clinical Instructors

Issues that relate to the clinical instructors in clinical assessment include clinical instructors' roles during clinical practice (Neary, 1997), the objectivity of the clinical instructor (Duffield & Spencer, 2002; Hager, et al., 1994; Ramsden, 2003), the assessors' preparation for the assessment (Calman, et al., 2002) and the effect of the personal background of the clinical instructors (Dolan, 2003). Such issues will all be discussed in turn.

According to Vollman (1990), a clinical instructor carries out several major functions, starting from the beginning of the learning process in the clinical field, through to orientation and preparation of the nursing unit/ward to receive students. A clinical instructor is also expected to prepare the students for their clinical experiences and the instructional activities that students will undertake on the unit/ward (Kevin, 2006). At this time, a clinical instructor role's is as a mentor or a preceptor. As a mentor, the clinical instructor focuses on a relationship that facilitates students' skill development, whereas the preceptor's role enhances students' learning by teaching, instructing and role modelling (Morton-Cooper & Calmer, 1993). Monitoring and evaluating of students is included in the responsibilities of the clinical instructor which is carried out during or at the end of the clinical period.

The multiple roles and responsibilities of the clinical instructors contribute to a lack of clarity in the relationship between student and clinical instructor. Chambers (1998), a British educationist, did an extensive literature review regarding issues in the assessment of clinical practice. She organized the review starting with a definition of competence, which helps readers develop knowledge of competency. Then, she discussed the variables related to assessment of clinical practice such as assessor, tools and methods of measurement, as well as accountability for the assessment process. In regard to the assessor, Chambers asserts that the relationship between student and clinical teacher, as a mentor and an assessor, might contribute to the problem of lack of objectivity in the assessment process. Chambers acknowledges that this problem occurs due to a lack of clarity in the role and the relationship of clinical teachers and their students. A mentor's roles are mainly counselling and guiding, while an assessor's key roles are assessing and judging (Chambers, 1998).

With regard to the assessors' roles, Neary (1997) carried out a quantitative and qualitative study in three colleges in Wales, investigating the role of assessors, mentors or

both in relation to the assessment process. The researcher used focus group discussions to explore student perceptions of mentorship and assessors' points of view about themselves. One of the themes that emerged from the study was concern from students over whether assessors' and mentors' roles should be carried out by the same person. Fifty-nine percent of students indicated that they were not comfortable with the concentration of both roles in one person. Students felt their relationship with their mentors developed into 'friendship', and this relationship made students fell uncomfortable when the mentors became assessors.

From students' point of view, this phenomenon is called 'confusion of roles' because students fail to distinguish when the clinical instructor is functioning as a mentor or an assessor (Neary, 1997). On the other hand, from the clinical instructors' viewpoint, it might be difficult to ensure the objectivity of the assessment because of their knowledge of the students from the beginning of the learning process and their knowing the students' individual strengths and weaknesses (Neary, 1997). On the other hand, Kevin (2006) argues that a relationship formed with a student may help to avoid students' stress and anxiety during the assessment process. As a result, students may be able to perform better during the assessment process. However, Kevin concurred that such relationships may also lead to a lack of objectivity.

Clinical instructor's objectivity is a recurrent issue in the student's assessment process. The problem of lack of objectivity in the assessment process occurs since assessment involves assessing students' attitudes, knowledge and skills, which are difficult to be measured (Kevin, 2006) and is compounded by the involvement of value judgements from the assessors (Chambers, 1998). In order to increase the objectivity of clinical assessment, an assessor should be trained to measure standard criteria that have been established before the assessment is undertaken (Lankshear & Nicklin, 2000). This is also supported by Calman et al. (2002) who believes that preparation of the assessor has a positive affect on increasing objectivity in the assessment process.

Calman et al. (2002) conducted a study regarding assessors' preparation. Their study aimed to describe methods of measuring students' competency progress as well as the philosophy and approach to assessing students' competency. The participants in the study were nursing and midwifery students, as well as programme directors from all institutions in Scotland. The research methods employed by Calman et al. were postal questionnaires, interviews, and documentation review. One key finding identified from the study was related to the preparation of an assessor before assessment. Students reported that there was inconsistency on how to assess students because not all assessors attended the preparatory course. The preparatory course was 2-3 days in length, which provided detailed information about the students' programme, tools of measurement used and basic principles related to teaching and assessment processes. The study findings imply that it is essential for the assessors to attend a preparatory course. They recommended that the assessors' preparation was not only a focus on 'what' to assess, but also 'how' to assess.

Variation in 'what' and 'how' to assess may lead to different expectations of students being assessed, dependant on who is the assessor is (Kevin, 2006). This variation is likely to occur because of a lack of assessors' preparation prior to assessment. A study

designed to explore the assessors' preparation for the assessment of nursing students was conducted by Neary (1999). The study consisted of eight stages involving students and assessors in three colleges of nursing and midwifery in the United Kingdom. There were a few limitations to this study. For example, it is not clear whether the researcher employed the same participants for each of the eight stages, and the research methodology chosen was not clearly identified. However, Neary's study presented important insights about the preparation of assessors for students' assessment.

One major finding of that study was the lack of assessors' preparation for continuous assessment and its impact on students' assessment. A picture of how the assessors were being prepared emerged as an important issue with fifteen (15) percent of assessors receiving no preparation at all, while others attended a course for different lengths of time. Furthermore, Neary noted what assessors stated they would like to have included in the preparation course, such as practical methods of assessing students, grading students, and discussions about assessors' experiences and problems.

Despite preparation for assessment, assessors' personal characteristics may still influence the assessment process. Ramsden (2003) said that by nature, assessment is a human and uncertain process. Consequently, it might involve personal or individual judgements during the process, which according to Ramsden is an important element in every indicator of achievement. This is supported by Ferguson (1996) who conducted a phenomenological study in Victoria, Australia which aimed to analyse the experience of clinical educators in their everyday live. The research design chosen was appropriate because phenomenological research is conducted to discover meanings of a phenomenon to individuals. This research involved only four clinical educators because the researcher found a wealth of information from those clinical instructors, therefore no further participants were invited in this study. One of the themes that emerged from this study was 'being human', meaning that a clinical instructor sometimes had mixed feeling relating to his/her relationship with students. This implies that subjectivity does creep into the assessment process.

From the students' point of view, assessment processes should be clearly understood by all parties and free from personal bias or human error (Milligan, 1998). Milligan recommends that assessment should be what is mentioned in the syllabus and what has been taught as well as students demonstrating how much they understand what they have been taught.

1.6.2.2 Student Nurse's Related Factors

Factors that relate to student nurses in the assessment process reported in the literature are students' age, preparation for assessment (Neary, 1999), and their perspectives about the assessment process (Tiwari et al., 2005). There is substantial research identifying student related factors in the learning process, however limited research was found relating to clinical assessment.

Student age was reported as having an influence on academic achievement (Salamonson & Andrew, 2006). Salamonson and Andrew (2006) surveyed 267 nursing students in a regional university in New South Wales, Australia in order to examine the influence of age, ethnicity and part-time employment on students' academic performance.

The student academic performance was represented by the assessment scores of two nursing subjects, pathophysiology and nursing practice. The reason for using such subjects was because they were interrelated in terms of content and teaching method. The researchers employed a questionnaire that they had used in a previous study which was shown to have validity based on feedback from students and academic staff, however there is no clear information about the reliability of the questionnaire. The findings showed that age was positively related with academic performance. Older students (> 25 years old) had better academic performance than younger students (< 25 years old). Nonetheless, the researchers did not provide in depth discussion on this finding.

Despite the age factor, students' preparation for assessment also determined the success of the assessment process. Neary (1999) reported positive and negative responses from student participants in her study regarding student assessment preparation. The positive responses included detailed explanation from assessors about the purpose of the assessment and the tool being used, as well as pre-visits to the clinical settings. Also supporting the importance of assessment preparation, some student participants reported that there was not enough time for preparation and they found that the words used on the assessment tools were sometimes confusing. This might lead to inconsistent interpretations or perceptions of the assessment.

Student nurses' perspective of assessment may influence their learning. It was reported that students focused more on the preparation before the assessment rather than the learning itself (Ramsden, 2003). Students sometimes focus their learning according to the assessment tasks rather than the syllabus or curriculum (Tiwari et al., 2005). Tiwari et

al. (2005) conducted a qualitative study in China which aimed to identify students' and clinical teachers' perceptions of assessment and learning in clinical nursing education. The researchers employed homogeneous focus group interviews of students, graduates and teachers, to explore information regarding students' and teachers' perceptions on clinical learning. The researchers' reason for using homogeneous groups is understandable since students could feel intimidated if combined with teachers. The study results show that most students only adopted a surface approach to learning. Tiwari et al. called this phenomenon the negative 'backwash' effect on learning. The term 'backwash' effect refers to the impact of assessment on student learning (Alderson & Wall, 1993). It is essential for nursing teachers to find a way to bring a positive backwash effect of learning to nursing students. Tiwari et al. then suggested the employment of continuous assessment and portfolio development in assessment in order to encourage comprehensive learning rather than assessment-oriented learning.

Another study regarding perceptions of students about assessment was carried out in Michigan by Gicnag-Caille and Oermann (2001). The aim in this study was to identify students' and faculty academics' perceptions of effective clinical teachers. The researchers also attempted to identify whether there were differences in the perceptions of the two groups. The researcher utilised the Nursing Clinical Teacher Effectiveness Inventory (NCTEI) instrument which was developed by Knox and Mogan (1985). The reliability and appropriateness of using this particular instrument were measured and reported in the article, strengthening the study. From this study, based on the students' point of view, evaluation skills of the clinical instructors was the most important characteristic of effective clinical instructors. Unfortunately, the researchers did not discuss in detail the implications of the findings on nursing education. However, results of this study imply that students expect the clinical instructors to have good evaluation abilities because they identified assessment as an important part of their study.

Interestingly, some students perceive assessment as a social process (Calman, et al., 2002). In the Calman et al. study about the philosophy and approach of assessing competency, student participants reported that their assessments reflected how well they were accepted by nursing staff in the clinical setting. This research implies that assessment was focused on the relationship of students and staff. One participant mentioned that students' with a lack of nursing skills felt vulnerable to criticism from assessors. In other words, students with a good ability to conduct technical skills are likely to be accepted, and consequently pass the assessment. In other words, passing assessment and being accepted in the group socially were seen as dependent upon each other. This report gives rise to a critical question identified by the authors on the ability of the clinical environment to always provide good clinical learning for the students.

1.6.2.3 The Clinical Environment Characteristics

Chun-Heung & French (1997) examined the quality of clinical education in regards to the clinical environment in Hong Kong. Chun-Heung and French were concerned with the quality of education in the practice setting. They conducted qualitative research in order to gain student nurses' perspectives on their clinical practice experience and to examine the quality of students' clinical practice. They interviewed 16 student nurses from 8 schools of nursing in Hong Kong and analysed the data using structural and content analysis. The study found that students' learning goals were not clearly set out, and most of the time students had to rely on their own initiative to develop nursing skills in the clinical setting. This happened because they did not have a nurse teacher or staff nurse as a main reference for information or support. This study indicated that the students' clinical practice experience was not an educational experience because the students did not have a supportive clinical environment. The results of this study may be beneficial for other developing countries, to assist in determining factors that should be considered before implementing clinical learning for students.

Reilly and Oermann (1992) claimed that there are four important factors that should be considered before an environment is chosen as a clinical setting for students (Reilly & Oermann, 1992), namely: faculty preparation, the patients, staff and available resources. They state that all these factors are important and interrelated. Clinical instructors cannot expect their students to perform well when the clinical environment is not supportive, and it is not valid to assess students in a clinical environment that does not suit their learning objectives. The first three factors will be discussed in the following paragraphs.

First of all, Reilly and Oermann (1992) pointed out the responsibilities of nursing education institutions with regards to student clinical learning. A faculty member who is responsible for the student placement should prepare the academics who will collaborate with the clinical instructor in the clinical setting during the students' clinical practice period (Reilly & Oermann, 1992). This includes sending then information that relates to the students' learning objectives. The objectives should be clear and known by students and clinical instructors. The coordinator of the placement should also finalise all the

administration processes regarding the placement of student nurses (Drennan, 2002). In regard to the assessment process, the faculty academics should prepare the assessors by sending them guidelines or instructions or conducting a preparatory course related to the students' assessment, covering issues such as learning objectives, what to assess and how to assess (Neary, 1999).

An investigation into the clinical learning environment, focusing on the partnership between the nursing education institution and the health service provider was conducted by Clare, Edwards, Brown, and White (2003). Clare et al. carried out the study to investigate the clinical learning environments in order to improve the quality of learning for nursing students. This project involved three universities and three major public teaching hospitals in different states in Australia. The researchers recommended several benchmarks for partnerships in the clinical learning environment. One of the benchmarks was the development of a formal agreement between the faculty and the health service provider.

The Clare et al. research is valuable since it involved not only the academics from the nursing institutions but also the clinicians from the hospitals where the students did their clinical practice. Such partnerships can overcome problems between education and the health service providers. It is recommended to optimize student nurses' learning, partnerships be developed between academics and clinicians, ensuring transparent communication and good quality administration services, and accepting that some differences between the members will inevitably exist (Claire, et al. 2003). The second factor to be considered concerning the clinical environment for students is the patient population (Reilly & Oermann, 1992). There should be a sufficient population of patients for each student placed in the clinical setting area. This is important to ensure that an adequate range of learning experiences is available for students (Barnard & Dunn, 1994). Patient-student ratio is important since the patients are the source of learning for students. If the number of students is higher than the number of patients, overcrowding occurs and students are disadvantaged. On the contrary, keeping the patient-student ratio number appropriate means that there are not too many patients per student. This is important to ensure patients' safety during the clinical practice period (Barnard & Dunn, 1994).

The number of students who practice in one clinical setting influences the learning process as well as the assessment process. An increase in the numbers of nursing students despite declining resources for learning is a problem (Gibbs, et al., 1997). It is acknowledged that, on average, student-teacher ratio is one clinical instructor to 8-10 student nurses (Barnard & Dunn, 1994). When the number of students vastly exceeds the number of teachers available, then students are likely to suffer from a lack of personal attention from clinical educators (Calman, et al., 2002). In fact, the number of students being assessed simultaneously would also influence individual assessment since it is likely that individuals may be compared to the group performance (Kevin, 2006).

According to Reilly and Oermann (1997), the third most important factor after patient population and student numbers is nursing staff availability and the nursing care practices of the institution (Reilly & Oermann, 1992). Nursing staff should be available to serve as preceptors or mentors and staff should collaborate with the faculty and students on any matter in the clinical setting. Nursing staff are expected to demonstrate a good philosophy of care, so students can learn from them (Papp, Markkanen, & Bondsdorff, 2003). It is important that staff function as role models, so that student nurses are taught to be not only competent but also ethical practitioners. Papp, et al. (2003) also emphasized that cooperation between staff members is an essential characteristic of a quality clinical environment for student practice.

Papp, et al. (2003) conducted a qualitative study aimed at exploring the perceptions of student nurses regarding their experiences in the clinical environment. The researcher employed a phenomenological approach which involved 16 student nurses in Finland. The rigour of the study was discussed clearly by the researchers. One theme that emerged from this study was the importance of the clinical environment for learning. A good clinical learning environment could be established when there was good cooperation between staff members and students and they were appreciated as younger colleagues (Papp et al., 2003). Papp et al. also claimed that the clinical environment atmosphere should be conducive to students meeting their learning objectives.

It is emphasized that from the students' perspective, a clinical learning environment which is adequate for the learning experience should provide students' with autonomy, learning opportunities, clear definition of students' role, and good quality supervision (Hart & Rotem, 1994). Those themes emerged from a study by Hart and Rotem (1994) who conducted a qualitative study to explore students' perceptions of learning opportunities in the clinical setting. Participants in this study were students in the final year of their course. Choosing students in their final year gave weight to the research since these participants had already had some experience and had gone through different clinical environments. The results of the study showed that students felt that they needed more autonomy and more recognition from the nursing staff that they were not only students, but also colleagues and peers. Hart and Rotem explained that when students were given the opportunity to learn and develop skills in a clinical setting, there was an increase in the students' satisfaction level. This study revealed that for students to achieve their goals required supervisors who can provide good quality supervision to them and who are familiar with the clinical setting (Hart & Rotem, 1994).

1.6.2.4 Methods of Clinical Assessment

According to Nicklin and Lankshear (2000), there has been a major conceptual shift in assessment strategies in nursing. These changes include a shift from final examinations to continuous assessment, from institution-focused objectives to patient-focused objectives, from simulated skills to clinically based skills, and from teacher power to shared power. This shift has altered assessment methods and tools of measurement used in many nursing institutions. Consequently, in order for assessment to remain relevant, academics should adjust the assessment methods that they employ to reflect the transformation.

Many methods or strategies are used to assess student nurses in clinical practice. For each method, many attempts have been made to enhance validity and reliability, but no one method completely satisfies all scholars. The method or strategy of assessment that is used in clinical practice depends upon the objective of the clinical practice experience.
According to Hager, et al. (1994), the objectives of clinical practice contain three domains of learning which are cognitive, psychomotor and affective learning. Accordingly, Hager et al. claimed that the method of assessment for each domain of learning should be different.

Hager et al. (1994) did an extensive literature review on issues relating to the assessment of competence. The authors examined assessment methods for competency-based professions, such as medicine, nursing and accountancy. The authors concluded that the methods used to assess students' cognitive learning were usually oral and written tests, which are both examples of what they called traditional assessment. Hager et al. mentioned that such traditional methods provided supplementary evidence and not competency-based assessment that focuses on students' performance. To assess the performance of a student, an assessor is able to utilise questioning techniques, simulation, skills tests, direct observation, and evidence of prior learning. By using such a variety of methods, an assessor can get quite an accurate picture of a student's abilities (performance).

Brown (2000) stated that apart from students' cognitive learning and performance, assessing students' attitude was also an important element within the learning process. Attitude could be assessed through direct observation, the supervising process, evidence from prior achievements, oral questioning, written tests, self-reports, and practicum situations (Hager, et al., 1994, p. 14). Nevertheless, they acknowledged that attitude would always be problematic to measure. To overcome the potential for attitude to be judged from a subjective standpoint or to be misunderstanding, Hager, et al. (1994) suggested

using several methods of assessment in order to get a broader attitudinal picture of a student.

Reilly & Oermann (1992) focused on nursing education and suggested several methods of assessment that can be used in the clinical environment such as observation, written communication, oral communication, simulation and self evaluation. Student self assessment is becoming an important feature in the assessment process. The benefits of self assessment are to develop students' critical reflection skills on their own performance preparing them for their future role as professional nurses (Reilly & Oermann, 1992). However, it is hard to accept the opinion from students about their performance when they think they performed well, but in contrast, the clinical teacher failed them. Students often tend to judge their performance higher than their assessor (Lankshear & Nicklin, 2000), which is a difficulty when relying on students' judgement of their own performance.

One example of judgement-free measurement methods in clinical practice is objective structured clinical examination (OSCE) and triple-jump exercise or examination (TJE) (Mahara, 1998). Watson, Stimpson, Topping, and Porock (2002) asserted that OSCE has advantages because students' competence can be assessed in a variety of simulated scenarios and the objectivity of the assessment is heightened because OSCE employs assessors who do not know the students.

Major (2005) designed OSCE as a formative examination at the end of semester four at pre-registration Diploma in Nursing studies at University of Salford. From the staff nurses' point of view, they could organize and maximize the number of students who were to be assessed in that day, so they were able to save time in the assessment process (Major, 2005). However, it was a demanding process. On the other hand, some patients mentioned that they got information about themselves and their nursing care through the process. From the students' points of view, some of them believed that this method is appropriate for assessing students at the end of the particular course since OSCE is a holistic assessment process, and different from assessment in the ward which only focuses on one clinical skill, for example dressing or administering medication (Major, 2005). From this research, it can be said that all parties benefited from the OSCE process.

There are many studies that have been undertaken to demonstrate that OSCE is one of the most appropriate objective assessment methods, not only in nursing but also in other disciplines such as medicine and dental health (Parish, Ramaswamy, Stein, Kachur, & Arnsten, 2006; Schoonheim-Klein, Walmsley, Habets, Velden, & Manogue, 2005; Townsend, Mcllvenny, Miller, & Dunn, 2001).

1.6.2.5 Tools of Measurement in Clinical Setting

An assessment tool is a component of the assessment process that cannot be ignored when discussing the assessment process. Issues that arise regarding this topic are the variations of tools used and the validity as well as reliability of the tools (Chambers, 1998). Problems in the assessment process can also be exacerbated by confusion as to how to use the assessment tools (Kevin, 2006). There issues will be discussed in turn.

Tools of measurements are employed by every nursing institution, which tools are chosen depends on the learning objectives and the method of assessment (Brown, 2000). One nursing institution may have several tools of measurement to assess students in clinical settings. Check lists and rating scales are the tools most widely used. According to Hager et al. (1994), many scholars use the scale or behaviour check list in order to increase the objectivity of the assessment tool. This observation is also noted by Mahara (1998) who states that by using ratings or checklists, subjectivity can be substantially reduced. Watson, Calman, Norman, Redfern, & Murrels (2002) also asserted that using scales was a relatively objective way of assessing student nurses' competency. Rating scales have also been widely used in the USA to assess competency (Bartlett, Simonite, Westcott, & Taylor, 2000).

Other authors, Newble and Cannon (1989), report that when using rating scales, a clinical teacher has to set a definition on each number of the scale, then make a judgement as to where a student fits along the scale. Subjectivity is a limitation in this method of assessment, since it asks for a personal judgement from the assessor. Arguably, check lists are a more objective tool since each component has a clearly defined observable task (Newble & Cannon, 1989). Such a tool is useful in assessing technical skills, however there are limitations in the use for other assessment purposes.

In discussing issues relating to clinical practice assessment, Chambers (1998) pointed out the importance of the validity and reliability of an assessment tool. The validity and reliability of a tool is considered important in order to reduce the problem of subjectivity in the assessment process. According to Twycross and Shields (2005), validity means that "a tool measures what its sets out to measure" (p. 43). The first step in the pursuit of 'validity' in the assessment of competency is to set out a clear definition of

competence, thus establish what is going to be measured (Chambers, 1998). The tasks the learner must perform in order to be considered competent must be decided upon and stated. Ramsden (2003) asserts that it is difficult to determine the appropriate tasks, however the tasks are crucial in the learning process (Ramsden, 2003).

Besides validity, reliability of assessment tools should be considered as well. Reliability refers to "the consistency, stability, and repeatability of results" (Twycross & Shields, 2005, p. 43). Ramsden (2003) believes that the more precisely learning outcomes are defined, the more likely reliability in the assessment tool can be achieved. However, Chambers (1998) questioned if a tool can ever be truly reliable because it involves assessors' personal judgements.

Lack of understanding about how to use particular tools also influences the assessment process. This problem could be avoided by the inclusion of a topic on assessment tools in a preparatory course for assessors (Kevin, 2006). Calman et al. (2002) conducted a study in Scotland aimed at exploring different methods of measuring students' competency progress. The researchers interviewed 13 programme directors and 72 nursing and midwifery students. One of the limitation of the study, however is that the student participants were selected using convenience sampling, which reduces how widely the findings of their research can be generalised. This study gave pertinent information about how nursing institutions in Scotland measure the progress of students' competency. One of the major findings was how the students' view the assessment tools. Students expressed concern that clinical instructors had difficulty completing the tool because they did not

know how to complete the tool. This resulted in arbitrary variations in students' assessment results.

Based upon the literature review, there are several variables that relate to the assessment of student nurses. Such variables are presented in the framework below (Figure 1.1). This framework influenced the development of the questionnaire in this study.

CONCEPTUAL FRAMEWORK OF THE STUDY

Clinical Instructor: Student Nurse: preparation _ - age educational background preparation _ length of experiences perception of assessment _ skills or performance personal characteristics _ objectivity roles CLINICAL ASSESSMENT PROCESS **Clinical Environment: Methods of Assessment:** work load same or varied between _ area of specialty nursing specialty _ number of patient quality and appropriateness student : patient ratio examples: observation, _ simulation, oral test, written learning opportunity _ types of clinical setting test, self evaluation _ nursing staff behaviour

Tools of Measurement:

- same or varied between area of nursing specialty
- validity and reliability, appropriateness
- examples: check list, rating scales, journals, log book, video tapes, clinical reports

Figure 1.1 The conceptual framework of the study

1.7 Summary of Chapter One

This review has identified through assessment, nursing teachers establish students' learning, particularly their strengths and weaknesses. Despite this insight, assessment in nursing, particularly clinical assessment is still vulnerable to imperfection. Inadequacies stem from clinical instructors' and student nurses', the method and tool of measurement being used by the assessor, as well as the clinical learning environment.

It needs to be acknowledged that there was limited literature in this review regarding clinical assessment and its related factors specifically from the original country of the researcher, Indonesia.

This concludes the introduction and literature review. The next chapter will presents a description of research methodology employed in this study.

CHAPTER 2

METHODOLOGY

2.1 Introduction

This chapter describes the research methodology chosen for this study, the rationale, and the processes that were utilised to conduct the research. Included is a description of the research design, the setting, sample and sampling method. This chapter also presents a description of the research instrument used to collect data, the data collection process and the data analysis procedures. Finally, ethical considerations of the study are also addressed.

As previously presented, the purpose of the study was to investigate the clinical assessment of Indonesian student nurses undertaking the professional stage of the undergraduate nursing course. Specifically, the study aims to investigate how clinical teachers assess student nurses and how students perceive the clinical assessment process. The research objectives were to explore in detail the demographic data of the student nurses and clinical instructors, the process of nursing clinical assessment, the characteristics of the clinical environment, the methods of assessment and the tools of measurement currently used. The study also explored clinical instructors' and student nurses' perceptions of the clinical assessment process.

2.2 Nursing Research

Research is defined as "a careful search or inquiry, a course of critical investigation" (Sykes, 1976, p. 954). Research employs a systematic process to ask and answer questions that generate knowledge. Roberts and Taylor (2002) describe nursing research as "the systematic process of investigating phenomena of interest, the general purpose of which is to add to the body of knowledge about the practice of nursing and about health in humans" (p. 2). Burns and Grove (2005) also describe research as a systematic way of examining existing knowledge, as well as developing new knowledge. Quality research is one of the major factors in expanding nursing knowledge.

Nursing research plays an important role in nursing because it provides a scientific base for the development of nursing knowledge. Nursing research has tangible impacts on nursing practice as Elliot (2003) stated "knowledge of and involvement in nursing research can have a significant effect on the depth and breadth of the professional practice of every nurse" (p. 4). Nursing research does not only apply to nurses and nursing practice, but also to education, administration, and the clinical environment. In other words, any study that directly or indirectly affects nursing practice can be valuable to developing nursing knowledge (Burns & Grove, 2005).

Nursing research paradigms include quantitative and qualitative approaches. Both approaches are needed in nursing because they generate different knowledge that is useful to the nursing profession (Monti & Tingen, 1999). Researchers describe the basic differences between the approaches according to their philosophical origins and the terminology used.

Quantitative research is generated from the positivist paradigm which uses a traditional scientific approach of objective observation, prediction and testing of causal relationships (Polit & Beck, 2006). It is known that the positivist paradigm influenced early theory generation in nursing. Quantitative approaches are largely based on the assumption that there is a single reality which can be uncovered or revealed by careful measurement (Monti & Tingen, 1999). It uses numerical data to describe the world (Burns & Grove, 2005). Researchers employ this method to describe variables, to examine relationships and to describe the causal effects between variables.

According to Schneider (2003), the strengths of quantitative research are that it uses a systematic, scientific approach that minimizes bias and maximizes validity in order to gather empirical evidence. Quantitative data analysis uses inferential statistics, and generalisability about phenomenon that can be applied to the population, based on a representative sample. Apart from its strengths, quantitative research does have its weaknesses, particularly in relation to nursing research. It is acknowledged by nurse researchers that research in nursing relates so closely to human beings who are complex and unique. The subjective experiences of human beings are especially important in context, whatever that may be (Kelly & Long, 2000). Also, quantitative research cannot easily be used to answer moral or ethical questions, as it is difficult to measure or attach numeric values to concepts such as hope or self esteem (Kelly & Long, 2000).

A qualitative research approach derives from the interpretative paradigm which collects and analyses subjective, narrative materials using flexible procedures that evolve in the field, and which emphasize understanding of the human experience (Kelly & Long, 2000). Unlike the quantitative approach which is based on a single reality, a qualitative approach acknowledges that reality is complex, holistic, and has multiple interpretations. Qualitative research uncovers knowledge related to human experiences, therefore the internal and subjective dimension of the human person is much more emphasized (Kelly & Long, 2000). Qualitative approaches therefore focus on the importance of the meanings or interpretations that underpin human behaviour.

Fulbrook (2003) highlights how the choice of a quantitative and/or qualitative approach depends on the research questions of a study. For this study, a quantitative approach was considered the most appropriate research method in order to answer the objectives of the study. Furthermore, seeing as this area of inquiry has had minimal previous research, it was decided that a non-experimental research design of descriptive exploratory research method most appropriate. The research approach was chosen because it was felt that a quantitative approach would be the methodology which would best answer the purpose and objectives of the study. The candidate wished to gather data from as many people as possible, both students and clinical teachers and this could not be achieved by using a qualitative approach. In addition, when employing a quantitative approach the most appropriate method of data collection was utilisation of a written questionnaire.

2.2.1 Descriptive Exploratory Research

This study employed a descriptive explorative design. A descriptive study is designed to describe phenomena using numbers (Roberts & Taylor, 2002), and to explore and document aspects of a situation as it naturally occurs (Polit & Hungler, 1999). Burns

and Grove (2005) assert how descriptive exploratory research can obtain information about the characteristics of a particular field of study, and can uncover information about activities or the frequency of events (Atkinson, 2000). A descriptive exploratory study is ideal when researching an area were minimal research has been undertaken (LoBiondo-Wood & Haber, 2006). As such, this design was deemed appropriate because this study aimed to gather current information regarding the clinical assessment of student nurses in Indonesia and there is limited evidence in this subject area. Furthermore, by using this design, the information gathering could be done relatively quickly and inexpensively (Roberts & Taylor, 2002). It must be noted that a descriptive design is considered weak by some authors because it can only produce superficial data without identifying detailed differences or relationships between variables (Polit & Beck, 2006). This study utilised a descriptive exploratory research approach that included a survey design.

2.2.2 Survey Design

A descriptive study which draws a large sample of subjects from a defined population is called survey research (Atkinson, 2000). According to Polit and Beck (2006), survey research is "non-experimental research in which information regarding activities, beliefs, preferences, and attitudes of people is gathered via direct questioning" (p. 551).

Survey research has been utilised as a method of research since 1880 when Karl Marx, a German political sociologist studied the exploitation of employees by their employers. It is recorded that questionnaires were distributed to 25,000 French workers, although the response rate could not be identified (Babbie, 1973). Following this, survey research became widely used by American researchers in three different settings: the

Census Bureau, in commercial polling firms, and by academics in universities (Babbie, 1973). Survey research is still widely used by researchers in many disciplines. It has been ascertained that there are few differences today found in the sampling techniques, data collection instruments and procedures, and data analysis processes used today as compared with those used in the past. The major difference found between then and now is the purpose of the research. Babbie (1973) reports that the objectives of conducting survey research are to provide a means of explaining a situation. Today few research scholars emphasize explanation as the objective of survey research. Most scholars today believe that the objectives of survey research are either exploratory and/or comparative (Atkinson, 2000; LoBiondo-Wood & Haber, 2006). This shift in objective may have occurred because there are many other research designs available today.

Through a survey, researchers can gather detailed information about subjects, groups, institutions or situations to determine current conditions and practices (Elliot & Hayes, 2003). Survey researchers attempt to identify a relationship or differences between variables, however, researchers can not use this design to determine the causal relationship or the effect direction of variables being studied (LoBiondo-Wood & Haber, 2006). The major advantage of using survey research is the wealth of data that can be obtained in an economical way (LoBiondo-Wood & Haber, 2006). It is acknowledged that data obtained from a survey tends to be superficial. As a result of this limitation, survey research is usually done as part of a beginning exploration of a more detailed study.

In survey research, data collection can be done via a questionnaire or an interview (Elliot & Hayes, 2003). One advantage of using a questionnaire as a data collection tool is

that items in the tool are applied in a consistent manner, thus reducing the opportunity for bias in comparison with other data collection tools (Burns & Grove, 2005). Questionnaires are also a cost-effective way to obtain wide coverage of a situation or topic (Polit & Beck, 2006; Tarling & Crofts, 2002). One significant limitation of questionnaires is that it can not be used for those populations who have limited reading skills such as children. Another disadvantage of a questionnaire is the responses obtained tend to have less depth (Burns & Grove, 2005; Polit & Hungler, 1999). This limitation could be overcome by including some open-ended responses. In this study, a questionnaire was employed to explore clinical instructors' and student nurses' activities, beliefs, preferences, and attitudes on the topic of student nurses assessment that would answer the purpose and objectives of the study.

2.3 Study Setting

Nursing education providers in Indonesia employ similar process in conducting bachelor program because of the national curriculum. Therefore, by undertaking this study in one area, it was felt that it would give some insight into the practices in other parts of Indonesia. Although, it was recognised that one could not generalize the results to the wider population of clinical practices in other parts of the country, only gain some insight. In order to generalize to the wider population, a random sample would be required instead the convenience sample.

This study involved accessing student nurses and clinical instructors, from four nursing institutions in Jakarta, Indonesia. There were two reasons why the researcher chose each of the four institutions. First of all, these nursing institutions are all members of the Indonesian Nursing Education Institution Association. Therefore, they employed a similar curriculum, which was the national curriculum plus additional local content. Although Institution B employs a dual degree program with a university in Australia, it still utilises the national curriculum with students continuing their study in Australia after completing the study period in Indonesia. Secondly, all the institutions were located in Jakarta where the researcher lived, making it convenient for the researcher to visit the institutions and gained approval to conduct the researcher.

Each of the four nursing institutions offered a Bachelor of Nursing course. The BN course in Indonesia has two stages: an academic and professional stage. During the academic stage, students are educated on theoretical aspects of nursing practice. The academic stage takes place over 4 years, from semester one until semester eight, for high school graduates or over 1.5 years, from semester one to three, for students who already hold Diploma III entry qualifications. The professional stage of education is undertaken in a clinical environment in the semester following the academic stage. Students who participated in this study were all undertaking the professional stage of the BN course.

Institution A's Profile

Institution A was the first nursing institution to offer tertiary education in Indonesia and was established in 1985. Initially, it offered a nursing program through the Faculty of Medicine. However, in 1995, this institution established a Faculty of Nursing. As a centre of nursing development in Indonesia, Institution A has developed several postgraduate nursing programs, such as a Master in Nursing (Leadership and Nursing Management, introduced in 1999), Maternity and Community Nursing (introduced in 2003), and Medical Surgical and Psychiatric Nursing speciality courses (introduced in 2005).

Institution A had 30 clinical instructors and 149 student nurses enrolled in the professional stage in 2006. At the time of data collection, 20 students were in another province to complete their clinical practice while simultaneously serving a community living in an area where an earthquake had just occurred. Therefore, 129 (88%) students could be contacted and asked to participate in the study.

Institution B's Profile

Institution B was established in 2001. Institution B has a twinning program with the University of Technology, Sydney. This twinning program has a slightly different curriculum when compared to other institutions in Indonesia. Graduates from Institution B graduate with a double degree (Bachelor of Science in Nursing and Bachelor of Nursing). The Bachelor of Science in Nursing incorporates the Indonesian national nursing curriculum whilst the Bachelor of Nursing uses the University of Technology, Sydney's nursing curriculum.

Institution B had 27 clinical instructors and 90 student nurses who had just completed their nursing course in Indonesia. When data collection was undertaken, many students were undertaking a preparatory English course before going to Australia, to continue their study. Only 50 students were available at the time of data collection to take part in this study.

Institution C's Profile

Institution C was formerly a nursing academy which converted into a higher degree nursing institution in 2001. Since then, Institution C has conducted a Bachelor of Nursing program for students who have graduated from senior high school or who have a Diploma III nursing qualification. In 2006, the number of clinical instructors employed by Institution C was 16 and there were 57 student nurses enrolled in the professional stage .

Institution D's Profile

Institution D was established in 1962 as a nursing academy. Then, in 1999, it became a tertiary nursing education provider that offered the Bachelor of Nursing program. In the beginning, Institution D, only offered a Bachelor of Nursing program for students who had already graduated from Diploma III. However, since 2002, this institution has accepted senior high school as the prerequisite for entry into the undergraduate BN course. There were 20 clinical instructors and 35 student nurses enrolled in the professional stage in 2006.

2.4 Sampling Method

Sampling is the process of selecting a portion of the population to represent the entire population (Schneider, 2003). A sampling technique is needed because sometimes the population is too large, and it is impossible to access the entire population. There are two broad types of sampling design in quantitative research, namely probability and non-probability sampling. Probability sampling gives the same probability to all member of the population for being selected as a sample in a study. In non-probability sampling, a sample for the study population is chosen based on subjective judgements and does not include

random assignment (Polit & Beck, 2006).

This research used non-probability sampling, namely convenience sampling. Convenience sampling refers to a sample from a population selected on the basis of accessibility to the researcher rather than on the basis of random sampling procedures (Scheneider, 2003). This sampling method is useful for descriptive studies conducted in new areas of research (Burns & Grove, 2005). Additionally, this sampling method is economical and accessible, and requires less time to obtain data (Polit & Hungler, 1999). Since convenience sampling may create an atypical sample of the population, the risk of bias is the greatest problem (Polit & Beck, 2006). This consideration means that the research results are not suitable to be generalised or being representative of the total population of student nurses and clinical instructors in Indonesia. This limitation maybe overcome by increasing the number in the sample in order to minimize sampling error (Polit & Beck, 2006).

2.5 Sample

The population of clinical instructors and student nurses at all nursing institution in Jakarta was unable to be identified. However, a prediction was made from the higher nursing education provider list by the Ministry of Education. There are six tertiary nursing education providers of tertiary education in Jakarta. Based on the profile of the four institutions, the average clinical instructor numbers in Jakarta is 20, therefore, it is assumed that the total population of clinical instructors in Jakarta is 120. In regard to the number of student nurses, the average was 50 student nurses in one nursing institution, so a rough total population of student nurses is 300.

In this study, the sample consisted of eight different groups. Four groups were clinical instructors employed by the four nursing institutions listed above and another four groups were student nurses enrolled in the professional stage of their nursing program from the same four nursing institutions as the clinical instructors.

The number of clinical instructors in the sample was based on the number of clinical instructors employed by the institutions whose role was to supervise and assess student nurses in the clinical setting during the professional stage of the nursing course. The clinical instructors supervise students in a variety of clinical settings. Some clinical instructors practice in two different settings, such as paediatric and community nursing specialty. From the 98 clinical instructors approached, 65 participated in the study, giving a 67.5% return rate.

The number of students chosen was dictated by the number of student nurses enrolled in the professional stage for 2006. Most of the students commenced the professional stage in January, 2006 meaning that when the data collection process occurred, they already had 5-6 months of clinical experience. It was an appropriate time to conduct the research because students had some experience in clinical practice and were able to share their perspectives on the clinical assessment processes. Two hundred and seventy one students were approached to participate in the study and 182 responded, giving a return rate of 67.25%. The overall return rate for the study was 67.38%. According to Polit and Hungler (1999), a study with a return rate greater than 60% is most likely to avoid the risk of response bias. Thus, the return rate for this study can be considered sufficient.

2.6 Data Collection Instrument

Questionnaire was chosen as a data collection instrument in this study in order to get views from more people about clinical assessment and also because questionnaire is a very popular method of data collection employed in quantitative research in Indonesia.

No existing questionnaires were found suitable to answer the research question. Therefore, a self report clinical instructor and student questionnaire was developed based on the conceptual framework in the literature review and the purpose of the research (see Appendix A and B). The questionnaire was translated into Bahasa Indonesia (see Appendix C and D). Information letters were also translated into Bahasa Indonesia (see Appendix E and F). The questionnaires were colour coded to differentiate between the four nursing institutions.

The questionnaires used in this research utilised three types of measurement to gather information from the participants: closed-ended items, open-ended items and Likert rating scales. The advantages of using closed items are that they are quick to answer and easy to code. However, it can lead to misleading conclusions because of a limited range of options (Dempsey & Dempsey, 1992). Participants were asked to respond to each closed-ended item in the questionnaire by ticking the response that most accurately reflected their opinions.

Open-ended items allowed the participants to explain in their own words or give reasons for their chosen alternatives. Dempsey and Dempsey (1992) reported that this approach can minimize bias in survey research. This approach can also express a richness of information that is often missed by closed-ended items. However open-ended items take time to code and may result in the information obtained being difficult to categorize (Rodeghier, 1996).

A Likert rating scale asks participants to position themselves along a scale of responses (Dempsey & Dempsey, 1992). In a Likert rating scale the respondent usually has five alternative responses in ascending order for each of the statements. In this study, only four possible responses were given to the participants, encouraging the participants to respond with a high or low rating, and not just with the neutral middle choice. This sort of scale which does not allow for a neutral response is called forced choice scales (Dempsey & Dempsey, 1992). The four possible responses used in this study were *never* (1), *seldom* (2), *sometimes* (3) and *always* (4).

The two questionnaires used in the study; the clinical instructor questionnaire and the student nurse questionnaire both consisted of a series of items divided into 4 sections: demographic data, clinical assessment processes and clinical environment characteristics, method of assessment and tools of measurement being used by clinical instructors. A description of each questionnaire is outlined below.

2.6.1 Clinical Instructor Questionnaire

Section one: Demographic data

The first section of the questionnaire requested participants to provide demographic data including age, gender, highest education level obtained, area of nursing specialty, and how long they had been a clinical instructor (see Appendix A, Section 1, item 1-5).

Section two: Clinical assessment process

This section explored data regarding the process of clinical assessment for student nurses, as well as factors related to the assessment process such as assessor, student and clinical environment characteristics. To obtain information regarding clinical assessment practices, 14 closed items and five open-ended items were formulated. At the beginning of the questionnaire, there were eight closed items relating to clinical environment (e.g. places where student nurses do their clinical practice, the number of patients and students in a ward/shift, the type of experience students can gain from the ward) and clinical assessment process (e.g. number of students being assessed in a ward/shift). Six closed items were asked of students in regard to numbers of assessments, number of assessors, duration of the assessment and the minimum mark required to pass (see Appendix A, Section 2, item 1-8, 11-16).

There were five open-ended items in the questionnaire. Two open-ended items asked for a description about the student nurses' assessment process undertaken at the ward/hospital and the clinical instructors' preparation before clinical assessment. The clinical instructors were also asked to record their comments on workload factors that hinder the assessment processes, factors that effect the assessment of student nurses and

other components that determine the students' final grade (see Appendix A, Section 2, item 9,10, 17, 18, 19).

Section three: Clinical assessment methods

A list of fifteen statements were formulated to reflect the clinical assessment method used by clinical instructors. This section focused on three domains of learning, namely cognitive, psychomotor and affective learning. For each domain, there were five items created to investigate the methods of assessment being used. The participants were asked to indicate this information on a four point Likert scale that ranged from 1 = never, 2 = seldom, 3 = sometimes, to 4 = always (see Appendix A, Section 3, item 1-15).

Section four: Tools of measurement

This section of the questionnaire contained 11 statements for clinical instructors that described different types of tools of measurement being used during clinical assessment, such as check lists, rating scales, video tapes, progress notes, journals, log books, and written tests. Similar to section three, the participants were asked to identify their current tools of measurement using a four point Likert scale that ranged from 1 = never, 2 = seldom, 3 = sometimes, to 4 = always (see Appendix A, Section 4, item 1-11).

2.6.2 Student Nurse Questionnaire

Section one: Demographic data

The first section of the questionnaire requested participants to provide demographic data including age, gender, and their highest education level obtained prior to enrolling in the BN course (see Appendix B, Section 1, item 1-3).

Section two: Clinical assessment process

This section explored data regarding the process of clinical assessment for student nurses, as well as factors related to the assessment process such as assessor, student and clinical environment characteristics. There were 34 closed items regarding the characteristics of the clinical environment (e.g. clinical practices places, type of experiences gained from the hospital, number of students on a ward), and clinical assessment processes (e.g. number of students being assessed in a ward/shift, number of assessors, duration of the clinical examination, minimum mark to pass the assessment). For each item, if there was no option that fitted the participants' opinion, participants were asked to identify their response under the 'other' option. (Appendix B, Section 2, item 1-34).

Three open-ended items were included in the questionnaire for student nurses. These items invited participants to give further comments by describing what the clinical instructor does when the student fails the assessment, how assessment methods vary, and what factors might effect the clinical assessment process (see Appendix B, Section 2, item 35, 36, 37).

Section three: Clinical assessment methods

A list of fifteen statements was formulated to reflect clinical instructors' methods of student nurses assessment. This section focused on three domains of learning, namely cognitive, psychomotor and affective learning. For each domain, there were five items created to identify methods of assessment used. The participants were asked to indicate the method of clinical assessment currently used on a four point Likert scale that ranged from 1 = never, 2 = seldom, 3 = sometimes, to 4 = always (see Appendix B, Section 3, item 1-15).

Section four: Tools of measurement

This section of the questionnaire contained eight statements for student nurses that described different types of tools of measurement being used during clinical assessment such as check lists, rating scales, video tapes, progress notes, journals, log books, and written tests. Similar to section three, the participants were asked to identify their experience using a four point Likert scale that ranged from 1 = never, 2 = seldom, 3 = sometimes, to 4 = always (see Appendix B, Section 4, item 1-8).

2.7 Validity

Validity means "the most fundamental consideration in instrument development" (Elliot, 2003, p. 340). Tarling and Crofts (2002) suggested that three forms of validity should be considered when developing a questionnaire. They include content, face, and construct validity. Content validity is concerned with the content of the questionnaire and whether it covers the area being measured in the study (Burns & Grove, 2005) whereas face validity refers to the extent to which the questionnaire measures what it is supposed to measure (Polit & Beck, 2006). However, according to Polit and Beck (2006), there are no objective methods of insuring adequate content of an instrument. It relies on experts' judgement of the content.

Content and face validity of the questionnaire in this study was achieved by a process of revision by research supervisors who are experts in clinical education and

clinical assessment. In addition, expert colleagues from Indonesia were asked to review the appropriateness of questionnaire items and to comment on the wording of items, response format, any ambiguities and general presentation. Based on the review, only minimal changes were made to the questionnaire.

Pilot testing of the instruments occurred in Australia with clinical teachers and student nurses at ACU National. The main purpose of the pilot study was to determine the clarity of the instructions and items, and an appropriate time allocation for completing the questionnaire (Fowler, 1993). Twelve participants were asked to comment on the questionnaire and most of the comments gained stated that the items were easy to understand and were appropriate to gain the data necessary to answer the objectives of the study. One of the participant said that the questions were good and easy to understand. Comments from the pilot test were incorporated into the final questionnaire. In addition, before sending the questionnaire to participants involved in the pilot test extensive development and revision took place between the student researcher and her supervisors. This process involved rewording of items for clarity, grammatical construction and to ensure the items constructed would yield the necessary data to answer the stated purpose and objectives of the study. Thus, minimal change occurred following the pilot study.

Construct validity is concerned with a valid conceptualization of the phenomena being studied (Elliot, 2003). In this study, construct validity was achieved by pilot testing, review by experts and using the literature review as a basis for questionnaire development. Besides validity, reliability is also important when conducting a research study. Reliability refers to the accuracy and consistency of study findings (Polit & Beck, 2006). Testing of the reliability ensures that the consistent results will be obtained from sample in identical situations on different time (Twycross & Shields, 2005). According to Elliot (2003), there are three main attributes of a reliable instrument, namely stability, homogeneity, and equivalence. Such attributes could be tested using different method such as test- re test reliability to ensure the stability, Cronbach alpha value and split half reliability to ensure the homogeneity, and inter rater reliability to ensure the equivalence. In this study, reliability was achieved by obtaining Cronbach's alpha (0.85) value for Likert-type responses.

Generalizability refers to the extend to which study findings can be generalized to population or broader group than study participants (Polit & Beck, 2006). To enhance the generalizability of the results, a researcher must think carefully about the sampling design, to ensure that the sample being chosen are representative of the population. However, in this study, generalizability can not be applied because the convenience sampling method being employed. In order to generalize to the wider population, a random sample would be required instead the convenience sample.

2.8 Data Collection Process

Once permission to undertake the study was granted from Indonesian nursing institutions (Appendix G) and ACU National Human Research Ethics Committee (Appendix H), the researcher returned to Indonesia and visited each of the four nursing institutions and met with the coordinators of the Bachelor of Nursing programs. Permission was requested from the co-ordinators for the questionnaires to be distributed to the clinical instructors assessing students in the professional stage and students being assessed. Then, the coordinators were asked to distribute the questionnaires to clinical instructors and student nurses. An information letter explaining the purpose of the study and the assurance of confidentiality of the study accompanied each questionnaire. The completion of the questionnaire indicated that the participant gave his/her consent. Therefore, in this study, a consent form was not used. A sealed box to return the completed questionnaire was conveniently located at each institution.

The recruitment of participants was held over a three week period. The researcher came to each nursing institution within 2-4 days to collect the completed questionnaires and follow-up whether more questionnaires were needed. After the completed questionnaire was submitted to the sealed box, a small gift (an Australian's souvenir) was put beside the box and available for the participant. Giving a small token is culturally appropriate in Indonesia following completion of a data collection instrument.

2.9 Data Analysis

All the completed questionnaires were coded and entered into the computer software package Statistical Package for Social Sciences (SPSS) for Windows version 12. Then, the researcher commenced data analysis according to the research objectives. Details of quantitative and qualitative data analysis are presented in chapter three.

2.10 Ethical Considerations

Prior to commencing the study, ethics approval was obtained from ACU Human Research Ethics Committee (Appendix H). Participants received an information letter about the study and the risks/benefits of the study were explained (Appendix E and F). Participation in this study was voluntary. Participants were able to withdraw from the study at any time and it would not affect their clinical practice assessment or employment as a clinical instructor.

Confidentiality

Confidentiality was maintained during the study and in any report of the study. The participants were informed that confidentiality of study results was assured as participants returned the questionnaire anonymously. The questionnaire did not contain any names or identifying data.

Anonymity

Anonymity of research participants was maintained by giving all participants a code, names were not collected with the data. Individual participants are not identified in any reports of the study, and are reported as aggregated data.

Informed Consent

In this research, a written informed consent was not obtained from each participant. It was assumed that a completed and returned questionnaire implied consent from the participants.

Security of Data

All the questionnaires are being stored in a locked filing cabinet in the principal supervisor's room and only the researchers have access to the completed documents. Data in the computer is saved and password protected and only the researchers have knowledge of the password. Following completion of the study all documents will be stored in a secure area by the School of Nursing and Midwifery (Victoria). After 5 years of study completion, all data will be destroyed by shredding hard copies and deleting computer generated materials.

2.11 Summary of Chapter Two

Chapter two described the research methodology and research process utilised in this study. A descriptive explorative survey design was employed in the study in order to gather current information about the assessment of student nurses. This research was undertaken in four nursing institutions in Jakarta, Indonesia where a Bachelor of Nursing course is conducted. Using convenience sampling, 98 clinical instructors and 271 student nurses were potential participants. Clinical instructors and student nurses who participated in the study were 65 and 182 respectively, giving an overall return rate of 67.38%. Chapter three will address data analysis and study findings.

CHAPTER 3

FINDINGS AND RESULTS

3.1 Introduction

Chapter three describes the data analysis process and results generated to answer the objectives of this study. Initially, data was entered into Statistical Package for Social Sciences (SPSS) for Windows v.12 and analysis was undertaken. The results are presented in both numerical and written format.

Quantitative data analysis utilised frequency tables in order to summarize the data. Then, further analysis using ANOVA, post-hoc test, and cross tabulations were undertaken. ANOVA was used to find differences on the mean of demographic data such as age and length of experience being a clinical instructor between the four nursing institutions. Cross tabulation was utilised in order to further analyse the distribution of number of assessment and student clinical assessment pass rate for each nursing institution.

Responses to open ended items were analysed using content analysis explained by Roberts and Taylor (2002). First of all, the researchers read through all responses from participants. The researchers used a colour-coded system to differentiate similar responses. Then, themes and sub-themes were identified. Frequencies of responses from each theme were tabulated in order to compile a numerical description of the responses.

3.2 Clinical Instructors' and Student Nurses' Demographic Data

Clinical instructor participants were asked to state their age, gender, highest education level completed, area of nursing specialty and the length of time being a clinical instructor. Frequency tables were used to determine distribution of gender, highest education level completed, and area of nursing specialty that they supervised students. Mean and standard deviation of age and length of being a clinical instructor were calculated. Further analysis using ANOVA and post-hoc test was undertaken to determine means difference of clinical instructors' age, as well as the employment duration for clinical instructors within the nursing institutions.

Similarly, student nurse participants were asked their age, gender, and highest education level completed. To determine distribution of gender, highest education level completed frequency tables were used to illustrate the results.

Findings:

3.2.1 Clinical Instructors' Demographic Data

The age of clinical instructors ranged from 25 to 55 years (mean=35.54 years, SD=8.1). Most of the participants (87%, n=57) were female. The majority of participants had completed a Bachelor of Nursing qualification (52%, n=34). Others had qualification such as Master of Nursing (29%, n=19), Master's degree non nursing (16%, n=10), and PhD (1.5%, n=1). The highest number of the clinical instructor participants in this study were supervising students in the areas of Medical Surgical and/or Emergency nursing (20.1%, n=13). The duration as a clinical instructor varied from 1 to 26 years (mean=7.37)

years, SD=5.89). Table 3.1 presents a full summary of clinical instructors' demographic data.

	Demographics	%
Gender	Female Male	87.7 12.3
Highest education level completed	Bachelor of Nursing Bachelor of Health Sciences Master of Nursing Master degree non nursing PhD	52 1.5 29 16 1.5
Area of nursing specialty supervision	Maternity nursing Paediatric nursing Medical Surgical and/or Emergency nursing Psychiatric nursing Gerontic and/or family and/or community nursing Nursing management Nursing management and others Missing data	16.9 15.4 20.1 13.8 13.8 7.7 7.7 4.6

Table 3.1 Clinical instructors' demographic data

Further analysis using ANOVA indicated that there is a significant difference (p<0.05) in the mean of clinical instructors' age between the four nursing institutions (see Table 3.2). Post hoc test indicated that mean of clinical instructors' age was significantly different between Institution A and Institution D (p=0.01), as well as between Institution B and Institution D (p=0.00).

 Table 3.2 ANOVA for clinical instructors' age between four nursing institutions

	Sum of squares	df	Mean Square	F	Sig.
Between Groups Within Groups Total	1250.213 2943.941 4194.154	3 61 64	416.738 48.261	8.635	.000

Similarly, from ANOVA analysis, there was significant difference (p<0.05) when comparing the length of time as a clinical instructor between the four nursing institutions (see Table 3.3). Post hoc test indicated that mean of being a clinical instructors was significantly different between Institution B and Institution D (p=0.00), as well as between Institution C and Institution D (p=0.04).

 Table 3.3 ANOVA for length of experience being a clinical instructor between four

 nursing institutions

	Sum of squares	df	Mean Square	F	Sig.
Between Groups Within Groups Total	497.005 1657.098 2154.103	3 59 62	165.668 28.086	5.899	.001

3.2.2 Student Nurses' Demographic Data

The age of student nurses ranged from 21 to 47 years (mean=28.75 years, SD=6.3). Of the 172 student nurse participants, 75% were female (n=132) and the remaining were male. The highest level of education level completed prior to nursing studies was Diploma III (62.1%, n=113), senior high school (21.4%, n=39) and Bachelor of Public Health (14.8%, n=27). Full details of student nurses' demographic data can be seen in Table 3.4.

Table 3.4 Student nuises acmoziapine uau	Table 3	.4 Student	nurses'	demographic	c data
--	---------	------------	---------	-------------	--------

	Demographics	%
Gender	Female Male	72.5 27.5
Highest education level completed	Senior High School Diploma III Bachelor of Public Health Missing data	21.4 62.1 14.8
	Missing data	1./

Summary:

This section provides the results of the study regarding participants' demographic data. Most of the participants were female aged between 25-55 years of age for clinical instructors and 21-47 years of age for student nurses. The mean for duration of being a clinical instructor was 7.37 years. Almost half of the clinical instructors held Master degree qualifications. Whereas, most student nurses held Diploma III qualifications as the entry level into nursing studies. From ANOVA, there were significant differences on mean of clinical instructors' age and length of being a clinical instructor between the four nursing institutions.

3.3 Clinical assessment

To establish the process of clinical assessment, two types of data were gathered, which were closed and open responses. Closed-ended items were used to elicit information regarding the process of clinical assessment including number of students being assessed in the hospital and community setting, number of assessors, number of assessments, duration of the assessment, and the minimum mark to pass the assessment. Student nurses were also asked about their grades for each area of nursing specialty that they had completed, and whether they got the same mark from assessors (if the assessment was done by more than two persons). To analyse the data, frequency tables were used in order to summarize the data obtained. Mean and standard deviation were calculated. Cross tabulations was also used to further analyse the minimum pass mark for each nursing institution.
Participants' responses to seven open ended items were analysed using the content analysis process explained by Roberts and Taylor (2002). Themes and sub-themes were identified and are presented with quotes to support the analysis process. There were five themes that emerged for clinical instructors' preparation prior to assessing students and three major themes were elicited regarding the process of student nurses' assessment. Five themes also emerged from the student nurses' responses about the different methods employed in each area of nursing specialty. Lastly, other components to determine the final mark of students were described according to each nursing specialty area.

Findings:

3.3.1 Number of Students being Assessed

The number of students being assessed in the hospital setting was mostly three to four students, identified by 41.4% of clinical instructors and 39.56% of student nurses. Some clinical instructors (20%) and student nurses (31.87%) mentioned only one to two students were assessed in the hospital setting. The remainder of the participants said more than four students were being assessed. It is interesting that there was generally congruence between the responses from both groups (clinical instructors and student nurses) about the number of students being assessed in the hospital setting. Figure 3.1 presents a summary of the number of students being assessed in the hospital setting.

Percent



The results about the number of students being assessed in the community setting varied between the participant groups (see figure 3.2). The number of student nurses being assessed in a community setting was one to five students, reported by clinical instructors (29.23%) and student nurses (72.5%). From figure 3.2, it can be seen that there was 63.08% of student nurses did not answer this question. It is probably because they have not been in the community setting placement.

Percent



Figure 3.2 Number of student being assessed in a community setting

3.3.2 Number of Assessors and Number of Assessment

Participants reported varied number of assessor during the assessment process. The greatest percentage of responses (60.9% of clinical instructor and 75.8% of student nurses) mentioned that there were two assessors during the assessment process. They also indicated that the number of assessments varied. Student nurse participants reported that the number of assessments varied between one to more than three assessments during the clinical practice period. However, most of the student nurses stated that the assessments were undertaken only once during the clinical practice period in paediatric nursing (identified by 50.9% of student nurses), emergency nursing (identified by 82.2% of student nurses), gerontic nursing (identified by 5.7% of student nurses), family nursing (identified by 85.7% of student nurses), community nursing (identified by 67.3% of student nurses),

and nursing management (identified by 85.7% of student nurses). Table 3.5 illustrates a full summary of the total number of assessments according to each nursing specialty reported by student nurses.

From clinical instructors' responses, all clinical instructors in paediatric nursing specialty (100%) reported that the assessment was only done once during clinical practice, the remaining clinical instructor participants mentioned varied number of assessments between one to three assessments. In contrast to students' responses, none of the clinical instructors mentioned more than three assessments was done during clinical placement. Table 3.5 illustrates a full summary of the total number of assessments according to each nursing specialty identified by clinical instructors.

	Number of assessment							
		1	2			3	> 3	
	% CI	% SN	% CI	% SN	% CI	% SN	% CI	% SN
Maternity nursing	45.5	37.8	18.2	25.2	36.4	29.6	0	7.4
Paediatric nursing	100	50.9	0	38.2	0	2.7	0	8.2
Medical Surgical nursing	63.6	27.4	27.3	51.4	9.1	17.1	0	4.0
Emergency nursing	63.6	82.2	27.3	16.7	9.1	0	0	1.1
Psychiatric nursing	22.2	23.2	66.7	68.8	11.1	3.2	0	4.8
Gerontic nursing	33.3	54.7	66.7	45.3	0	0	0	0
Family nursing	33.3	85.7	66.7	13.6	0	0.7	0	0
Community nursing	33.3	67.3	66.7	16.8	0	1.8	0	14.2
Nursing management	40	85.7	20	14.3	40	0	0	0

Table 3.5 Number of assessment each area of nursing specialty supervision.

(Clinical instructor-CI; Student nurse-SN)

3.3.3 Duration of the Assessment Process

Regarding the duration of the assessment process, there were differences in mean and standard deviation between clinical instructors' and student nurses' responses. According to clinical instructors, the mean duration of assessment was 3.3 hours (SD=2.13), whereas 1.84 hours (SD=1.39) was identified by student nurses. The greatest percentage of clinical instructors (17.5%) and student nurses (28.9%) stated that one hour was the duration of the assessment process.

3.3.4 Minimum Mark to Pass

The results of this study indicated that the minimum pass mark for assessment varied between the nursing specialty areas. The mean of the minimum mark to pass the assessment was 69.22, with a standard deviation=3.7. All clinical instructors of maternity and psychiatric nursing reported 70 as the pass mark. For other area of nursing specialty, the pass mark ranged from 60 to 80, the greatest percentage was 70. Most student nurse participants also reported the minimum mark to pass was 70. Table 3.6 shows a summary of the minimum mark to pass the assessment for each nursing specialty identified by clinical instructors and student nurses. There was one student nurse participant who stated that 50 was the pass mark for the emergency nursing specialty. This response was not included in the analysis because it was identified by others as being well above this level and the respondent may not have understood the questioner.

	Minimum mark to pass						
-	6	0	7	70		0	
-	% CI	% SN	% CI	% SN	% CI	% SN	
Maternity nursing	0	18.6	100	79.6	0	1.8	
Paediatric nursing	11.1	21.4	88.9	76.8	0	1.8	
Medical Surgical nursing	15.4	21.4	76.9	78.0	7.7	0.6	
Emergency nursing	15.4	22.6	76.9	75.5	7.7	1.3	
Psychiatric nursing	0	18.8	100	80.0	0	1.2	
Gerontic nursing	22.2	23.3	66.7	75.5	11.1	1.3	
Family nursing	22.2	22.5	66.7	75.1	11.1	2.3	
Community nursing	22.2	20.7	66.7	76.4	11.1	2.9	
Nursing management	40	22.9	60	72.9	0	4.2	

Table 3.6 Minimum mark to pass the assessment.

(CI-Clinical instructor; SN-Student nurse)

Further analysis regarding the minimum mark to pass between institutions using cross tabulations showed that Institution D used 70 for the pass rate. The remaining institutions had variable minimum mark to pass the assessment. The 90.5% participants of Institution A reported 70 as the minimum mark, remaining participants mentioned 60 and 80. Participants of Institution B stated 60 and 70 as the pass mark identified by 28,6% and 71.4% of participants respectively. Table 3.7 presents a detail summary of the pass mark according to the four nursing institutions.

Institutions	Minimum mark to pass					
	60 (% within institution)	70 (% within institution)	80 (% within institution)			
Institution A	4.8	90.5	4.8			
Institution B	28.6	71.4	0			
Institution C	15.4	76.9	7.7			
Institution D	0	100	0			

Table 3.7 Cross tabulation of minimum mark to pass by the four institutions

3.3.5 Students' Grades

Student nurses were asked to report their grades for each nursing specialty that they had completed. As can be seen from Figure 3.3, community nursing was the area of nursing specialty that had the highest mean for student grades (78.81), whereas paediatric nursing had the lowest mean (71.34). However, most student nurses got 70 (B grade) in each nursing specialty. In addition, student nurses were also asked whether they got the same result if they were being assessed by more than one assessor. The responses were 53% (n=96) answered 'don't know', 41.3% (n=74) answered 'no', and 5% (n=9) answered 'yes'.



Figure 3.3 Student nurses' grades for each area of nursing specialty

3.3.6 Clinical Instructors' Preparation for the Clinical Assessment

The themes that emerged were: self preparation, input to students, patient case selection, assessment, and pre-test. For some themes, a number of sub-themes were elicited. A summary of themes and sub-themes as well as the frequency for each theme can be seen in Table 3.8.

Themes	Sub-themes	Frequency
1. Self preparation	 Read textbooks Read students' assignment Review knowledge about the patient Physical preparation 	9
2. Input to students	 Pre conference Bed-side teaching Discussion Feedback Tutorial 	28
3. Patient case selection	 Inform contact person Identify patient case Select patient case Patient preparation Field practice preparation 	36
4. Assessment	 Procedure/processes Time setting Form being used What to assess How to assess Equipments needed Mark and passing criteria Briefing 	47
5. Pre test	 Verify pre report Review students' knowledge, experience 	7

Table 3.8 Clinical instructors' preparation before students' clinical assessment

3.3.6.1 Self preparation

Before the assessment of student nurses, clinical instructors mentioned that they prepared themselves by reading textbooks and reviewing their knowledge about the selected patient case such as diagnosis, treatment, and nursing care required. One respondent stated that she prepared herself by *reading textbook relating to patient case selected*. Whilst, another respondent prepared for clinical assessment by *reading patient case pathology at home and patient medical file in the hospital before the examination being done*.

For particular area of nursing specialty, psychiatric and community nursing, a student should submit a paper before the examination. Therefore, *read students' work (a paper on health education)* was one of the clinical instructors' means of preparation. Interestingly, one clinical instructor explained that she not only prepared by learning about the patient case, but also her/his *physical preparation (having enough food and drink) the night before*. Identifying that student assessment is a physically demanding and challenging activity.

3.3.6.2 Input to students

Clinical instructor participants reported that they prepared the students for the assessment by giving input to them regarding the assessment process. In general, clinical instructors mentioned that they used pre-conferences as a means of giving information about the assessment to the students. One clinical instructor said that he/she *conducts a pre conference in order to give the opportunity to students clarifying something before examination being done*. Another clinical instructor mentioned that he/she used pre-conference to *make sure students make contact with patient and make sure students know the marking criteria*.

Other ways to prepare students for assessment were through bed side teaching, discussion, or tutorial. In discussions, the clinical instructor and student discussed about student's experience and difficulties during clinical practice and their preparation for the assessment. One clinical instructor explained the preparation as *make contract with a patient, prepare equipments needed, and psychological preparation*. It was unclear as to what psychological preparation meant. Furthermore, other respondents said they conducted

bed side teaching, discussions or tutorials, then gave feedback afterwards as a way of preparing students for clinical assessment, as a clinical instructor mentioned *conducts discussion in small group and observe students implement the care plan, then give feedback on nursing care plan report*.

3.3.6.3 Patient case selection

Patient case selection was one of the recurrent themes when clinical instructor prepared for student assessment. The first step in the patient case selection was *make a contact with person in charge in the ward*. Then, clinical instructors stated that they would identify and select patient cases. It was reported by one clinical instructor as *make contract with key person in clinical setting, create patient list and select the case*. Clinical instructors stated that they would prepare the patient selected for the assessment by *make a time contract with the patient* and *check patient's condition*. Lastly, the clinical instructor stated *set clinical setting* and *prepare equipment needed*.

Some clinical instructors reported that patient requiring many nursing interventions were more likely to be chosen. One clinical instructor said *analyse patient case in the ward and identify the clinical nursing skills required*. Additionally, another participant said *contact key person in the ward, determine case and nursing skills to be assessed*.

3.3.6.4 Assessment

The majority of clinical instructor participants (47 of 65) undertook a preparation process prior to student assessment. Some clinical instructors reported that the coordinator of the subject conducted a briefing for the assessors before the assessment in order to discuss issues relating to assessment preparation. A clinical instructor said she/he *conducts* assessors' briefing regarding how to assess, the mark and passing criteria, the examination method and forms being used. During the briefing, the role of assessor was also discussed.

It was reported that besides a briefing for the assessors, students also got the opportunity to have the process of assessment explained. Information given to students consisted of explanation about *the assessment strategy and forms being used*, a*spects to be assessed, marking criteria,* and *time schedule*. According to one participant, patient case selected was given to the students during the briefing.

Furthermore, another clinical instructor clearly described the process of assessment preparation: *Clinical instructors and the coordinator set the plan regarding examination method, content, how to mark, and form to be used. Then the coordinator invites all assessors in order to socialize the plan, as well as meeting with students.* In comparison, a clinical instructor from another institution mentioned another process of preparation: *set the form needed according to learning objectives, plan the budget, arrange the examination schedule, meeting with all assessors and students explaining examination procedure.* In general, the preparation began with coordinator of the subject preparing all information relating to the assessment, then meeting with the assessors and the students to explain about the assessment process.

3.3.6.5 Pre-test

The last theme identified by clinical instructors regarding preparation for assessment of student nurses was a pre-test, as one clinical instructor said *verify pre-report* and *do a pre-test* before the assessment was done. Another participant mentioned the objectives of a pre-test which were *to assess students' knowledge and preparation for examination*. Additionally, a pre-test was done to *review students' clinical learning objectives and competencies*.

3.3.7 Student Nurses Assessment Process

There were three themes identified relating to the student nurse assessment process that was the nursing process focused, nursing management focused and teaching learning focused model. In general, respondents commented on nursing-process focused model (39 of 63). Two participants gave responses but they do not answer the questions asked. Their responses related to the method of assessment being used. Therefore, their responses were not included in the analysis as they did not answer the question.

3.3.7.1 Nursing process focused model

The majority of clinical instructor participants reported that they utilised the nursing process as a focus in the assessment process. Generally, clinical instructors explained clearly nursing process steps used in the assessment process, which are specifically assessment, diagnosis, intervention, implementation and evaluation, one clinical instructor explained *students do the assessment, write nursing diagnosis, set patient care plans, and implement the care plans. Then assessors observe students and conduct post-test after students implement patient care plans.* Another participant

described a similar response as *interview pre-report, student assess the patient, make nursing diagnosis and set nursing intervention, implement the care plans, evaluate each implementation and document the actions. Then oral test is conducted based on the case.* The later response included documentation of the nursing process undertaken.

Interestingly, three clinical instructors reported the assessment process accompanied with time duration for each step, as one explained *select the case, students* write patient-case pathoflow and nursing care plans for 10-15 minutes, pre-test 15-30 minutes, implement patient care, and post-test 15-30 minutes. However, some clinical instructors only mentioned assessors select the case, students use nursing process approach, then post-test is conducted.

3.3.7.2 Nursing management focused model

When students practice in the nursing management area, they go through a different assessment process since the focus of the assessment process is on the roles of students in the clinical setting as primary care givers or case managers, as one mentioned *students explain their nursing care plan for that day, then the student do the role as a case manager/primary nurse/associate nurse, whilst the assessor observes student performance and evaluates students' report.* Since there was only two participants who gave responses regarding this matter, explanation about this model is limited.

3.3.7.3 Teaching learning focused model

Some clinical instructor participants mentioned the process of assessment that included pre and post conference activities which consist of discussion and feedback for students during clinical assessment. This process was called teaching and learning process. One clinical instructor described the process as *pre-conference* (*check students*' *preparation*), *observe students*' *clinical performance, and post-conference* (*evaluate students*' *clinical performance*). Another participant gave feedback during post-conference. Most of clinical instructors who used this model were supervising the area of psychiatric, gerontic, family and community nursing.

3.3.8 Clinical Instructors' Perception on Adequate Time to Assess Student

There were only four responses to this item. Clinical instructors believed that the duration of assessment depended on two factors which were students' ability and patients' characteristics. In regard to students' ability, one clinical instructor said *assessment depends on students' cognitive and psychomotor skills*. Another clinical instructor mentioned *it need more time if students experience lack of knowledge about the case*. Patients' characteristics factor was reported by a participant who said that *according to psychiatric patient characteristics, it (the process) needed more time to implement the care*.

3.3.9 Variations on Assessment Methods in Each Area of Nursing Specialty

Themes identified by student nurses regarding the differences in method of assessment being used in the nursing specialty area were the case allocation method, supervision, focus of examination, location of examination, and duration of examination. For some themes, a number of sub-themes were elicited. Respondents generally made comments about place of examination (42 of 120). A summary of frequency for each theme elicited can be seen in Table 3.9.

Table 3.9 Assessment method of each area of nursing specialty

Themes	Sub-themes	Frequency
Supervision	 Supervision with or without pre and post-test Supervision with known or unknown patient case Without supervision 	29
Focus of examination	 Health education Nursing skills Nursing care plans Actual problems Physical assessment 	12
Case allocation method	 Use lottery Use own patient case 	8
Location of examination	 Clinical setting (hospital, family or community) Laboratory 	42
Duration of examination	 One day More than one day 	3

3.3.9.1 Case allocation method

During the clinical examination, it was reported that students had to care for a patient. How a student was allocated to the patient is determined by the assessor. Some assessors used a lottery to give a student the patient case, this was mentioned by one student nurse: *paediatric and medical surgical nursing use lottery to get the case, whereas family and psychiatric nursing use the same daily patient case*. A lottery means that students did not know what patient case they can get. The assessor writes the patient cases on pieces of paper, then students select one paper. The case written on the paper is the case for the examination.

However, some assessors in certain areas of nursing specialty use the students' allocated patient case for clinical examination as reported by one student nurse: *medical surgical nursing use a lottery to determine the ward and patient case for the student, whereas community and psychiatric nursing use own patient.*

3.3.9.2 Supervision

In Indonesia, supervision is used as a method of assessment. The supervision process includes supervising students' clinical practice during the day, and assessing students' level of knowledge and their clinical thinking when providing nursing care to patient. Student nurse participants reported that both clinical examination and the supervision process were used in some area of nursing specialty such as community and psychiatric nursing. The supervision was held *with or without pre and post test*. The supervision also was conducted *with a known or unknown patient case*. However, for another specialty area, the assessor did not use supervision process at all, as mentioned by one participant *there was no supervision process in paediatric nursing*.

3.3.9.3 Focus of examinations

The focus of the examinations varied between nursing specialty. It included health education, nursing skills, nursing care plan, patient's actual problem or physical assessment. It was reported by some student nurses that *psychiatric nursing focuses on nursing care plans, community nursing focuses on actual problems.* Others mentioned *community, family, gerontic nursing focus on health education; medical surgical, paediatric, maternity and emergency nursing were nursing care-oriented; psychiatric nursing focuses on health education and nursing care.* It can be seen from participants' responses that, in general, the focus of the examination for nursing specialty area within the hospital setting was on nursing care plans.

3.3.9.4 Location of examination

In general, there were two locations used for the examination, that was the clinical setting or laboratory. Emergency and maternity nursing specialty used the laboratory for clinical examination, as mentioned by one student nurse: *paediatric nursing in the hospital while emergency nursing in laboratory*. For other areas of nursing specialty, the majority of the clinical examinations took place in the clinical settings such as in the ward, in the client's house or in the community setting. This was supported by several student nurses: *family nursing do examinations at the clients' house, community nursing do supervision in the community, medical surgical nursing use patient direct care, maternity nursing do antenatal and postnatal care as direct care, and intra-natal examination in the laboratory.*

3.3.9.5 Duration of examination

According to the student nurse respondents, there was variation in the duration of the examination. Some specialty areas held the examination on one day, whilst others were held on more than one day. One student said *medical surgical nursing do examinations in one day, maternity nursing do examinations in two days, family nursing do examinations depending upon the students' preparation.* Another participant mentioned examination *in the hospital focused on the nursing process in one day, examination in the community: assessment one day before examination, intervention on the day of examination.* Some student nurse participants in this study, not only gave responses on how methods of assessment differed between areas of nursing specialty, but also commented on what method of assessment was utilized. Consequently, the results found that the methods of assessment employed by clinical instructors in the four nursing institutions differed. It included *supervision, Objective Structured Clinical Assessment (OSCA), written test, home visit, direct patient care, case simulation (in laboratory), oral test, and observation.*

3.3.10 Clinical Instructors' Action when Student Nurses Failed

There were two categories of responses for this item, positive and negative. Positive responses included the clinical instructor will give students the opportunity to *a re-test, give encouragement, additional assignment,* and *tutorials.* In general, respondents made comments about re-test (126 of 170). However, according to student nurse participants, a clinical instructor sometimes *get upset,* then *did nothing* or *failed the students* without giving opportunity to a re-test. A summary of the positive and negative responses can be seen in Table 3.10. It is encouraging to note that in most case the students received a positive response from the clinical instructor.

Themes	Sub-themes	Frequency
1. Positive responses	 Re-test Encouragement Additional assignment Tutorial 	161
2. Negative responses	 Do nothing Get upset Fail the student 	9

Table 3.10 Clinical instructors' action when student nurses failed

3.3.11 Factors Determining a Re-Test

Ten student nurse participants provided comments to this item. They reported that if a student fails, then the student will have an opportunity to be assessed another time, but *it depends on the coordinator of each area of nursing specialty, academic schedule* and *mark achieved*.

3.3.12 Other Components for Students' Final Mark

Themes identified related to component other than clinical examination that determine students' final mark within each nursing specialty are presented below. In general, each nursing specialty used *case reports* and *clinical performance* as components to determine students' final mark. Furthermore, some areas of nursing specialty such as medical surgical and emergency nursing had more components to consider before deciding students' final mark than any other area of nursing specialty.

3.3.12.1 Maternity nursing

The assessment components to determine students' final mark for maternity nursing varied between the four nursing institutions. All institutions measured *clinical performance* and used it to determine students' final mark. Other aspects that determined students' mark were *written test, case report* (including patients' nursing care plans) and *students' attendance*. A summary of factors that contributed to the final mark are described in Table 3.11.

	Institution A	Institution B	Institution C	Institution D
Written test	\checkmark	\checkmark		
Case report	\checkmark	\checkmark	✓	
Clinical performance	\checkmark	✓	✓	\checkmark
Attendance	\checkmark			\checkmark
Others: -Nursing skills achievements	✓			
- Time management		\checkmark		
-Uniform		✓		
- Discipline			\checkmark	
-Communication skills			✓	
-Involvement in pre and post conference			\checkmark	
-Analytic thinking				✓

Table 3.11 Components to determine students' final mark for maternity nursing

3.3.12.2 Paediatric nursing

Clinical instructors in paediatric nursing specialty reported that *case report* (including case presentation), *clinical performance* and *creativity program* were components included to decide students' final mark. However, there were other components that were included in each nursing institution such as *nursing skills achievements* and *supervision* for Institution A, *written test, tutorial* and *assignment* for Institution B, and *teaching group* and *seminar* for Institution D. A summary of components determine students' final mark in Paediatric Nursing is given in Table 3.12.

	Institution A	Institution B	Institution C	Institution D
Case report	\checkmark	\checkmark	\checkmark	\checkmark
Clinical performance	\checkmark	\checkmark	✓	\checkmark
Creativity program	✓		\checkmark	✓
Others: - Nursing skills achievements	✓			
-Supervision	\checkmark			
- Written test		✓		
-Tutorial		\checkmark		
-Assignment		✓		
- Teaching group				\checkmark
-Seminar				~

Table 3.12 Components to determine students' final mark for paediatric nursing

3.3.12.3 Medical surgical and emergency nursing

The majority of clinical instructors from all nursing institutions mentioned that *clinical performance* and *case report* were the major components of the students' final mark. *Attendance* and *involvement in pre and post conference* also determined final mark in most institutions. Clinical instructors from Institution C and D reported similar components such as *nursing skills achievements, discipline,* and *seminar*. A summary of component determining final mark of student nurses in medical surgical and emergency nursing are presented in Table 3.13.

 Table 3.13. Components to determine students' final mark for medical surgical and

 emergency nursing

	Institution A	Institution B	Institution C	Institution D
Case report	\checkmark	\checkmark	\checkmark	\checkmark
Clinical performance	\checkmark	\checkmark	\checkmark	\checkmark
Nursing skills achievements			\checkmark	\checkmark
Involvement in pre and post conference	\checkmark		\checkmark	\checkmark
Seminar			\checkmark	\checkmark
Discipline			\checkmark	\checkmark
Attendance		\checkmark	✓	\checkmark
Others: - Supervision	\checkmark			
- Rational thinking ability, Communication skills		√		

3.3.12.4 Psychiatric nursing

For this area of nursing specialty, only clinical instructors from Institution A, B and D gave comments on this item. It is probably because no students practice in Psychiatric Nursing in Institution C when data collection procedure was undertaken. The clinical instructors reported various aspects that should be completed by students in order to get their final mark. In general, clinical instructors in Institution A and D reported similar components to determine students' final mark, whereas Institution B clinical instructors used other components in determining final mark. Table 3.14 displays various factors that determine students' final mark in psychiatric nursing.

	Institution A	Institution B	Institution C	Institution D
Involvement in pre and post conference	\checkmark	\checkmark		
Case report	\checkmark			\checkmark
Clinical performance	\checkmark			\checkmark
Therapy modality	✓			\checkmark
Others: - Seminar	✓			
- Written test		\checkmark		
-Tutorial		\checkmark		
-Attendance		\checkmark		
- Oral test				~
-Nursing skills achievements				✓
-Mental health education				✓
-Daily activities				\checkmark

Table 3.14. Components to determine students' final mark for psychiatric nursing

3.3.12.5 Gerontic, family and community nursing

Almost all clinical instructors of each nursing institution agreed that *students' clinical performance* was used to determine students' mark in this nursing specialty area. Other components were *case report, involvement in pre and post conference,* as well as *students' attendance*. Table 3.15 displays components used to determine students' final mark.

 Table 3.15 Components to determine students' final mark for gerontic, family and community nursing

	Institution A	Institution B	Institution C	Institution D
Case report	\checkmark	\checkmark		
Clinical performance		\checkmark	✓	\checkmark
Involvement in pre and post conference	✓		\checkmark	
Attendance		\checkmark	\checkmark	
Others: - Seminar		√		
-Communication skills		\checkmark		
- Individual and group tasks			\checkmark	
- Involvement in community programs				\checkmark

3.3.12.6 Nursing management

Only clinical instructors in Institution A, B and D commented on this item. It is probably because when data collection procedures were undertaken, no student nurses practiced in the area of nursing management in Institution C. Clinical instructors mentioned that *clinical performance* was the important aspect that determined a student's final mark. During clinical practice period, students would do role plays in the ward such as role as a case manager or a primary nurse. Student's report in regard this matter was considered before compiling the final mark. A summary of factors determining students' final mark can be seen in Table 3.16.

	Institution A	Institution B	Institution C	Institution D
Role as a change agent	\checkmark			\checkmark
Clinical performance	✓	✓		✓
Attendance	✓	✓		
Others: - Discipline	\checkmark			
- Students' creativity and participation		✓		
-Communication skills				\checkmark
-Clinical assignment				\checkmark

Table 3.16 Components to determine students' final mark for nursing management

Summary:

Results of this section describe the clinical assessment process reported by clinical instructor and student nurse participants. Both clinical instructors and student nurses had similar responses about the number of students being assessed in a ward and community which were three to four students in a ward and one to five students in a community. The majority of the respondents, both clinical instructors and student nurses, reported that the number of assessors were two. Mean for duration of assessment differed, 3.3 and 1.84 hours for clinical instructors and student nurses respectively. Regarding number of assessment and minimum mark to pass, the greatest percentage was one assessment and 70 for the pass mark (both clinical instructors and student nurses had similar responses).

From open-ended data analysis, it is found that clinical instructors had done a lot of preparation prior to the assessment. In regard to the process of assessment, clinical instructors employed different models, however, the nursing process model was generally used. Student nurses reported that each nursing specialty utilised different methods of 89

assessment. They described the differences and five themes emerged relating to this matter, such as exam with or without supervision, focus of exam, use lottery or own case, place of exam and duration of exam. There was also information elicited from student nurses responses regarding clinical instructors' action regarding students' failure and factors determining a clinical instructor's decision to allow a re-test.

3.4 Characteristics of the Clinical Assessment Environment

Participants were asked for information about the clinical assessment environment, such as types of hospital, types of experience students can gain from clinical practice, number of patients being cared for, number of students in the hospital and community setting. Frequencies were utilised to analyse the data. Histograms are used for this data as a graphical method of summary of the results.

Findings:

According to the clinical instructors, sixty-three percent (63%) mentioned that clinical practice mostly occurs in the hospital. Student nurses also stated that most of the time, they spent their clinical practice in the hospital (52%). However, there was disagreement on the types of hospital between clinical instructors and student nurses. Clinical instructors believed that the majority of student nurses were placed in type B hospitals (40%) whilst student participant said that they spent the clinical placement period mostly in type A hospitals (38.9%).

Findings of this study revealed that there are contradictory responses from clinical instructors and student nurses. Most of the clinical instructors (55.4%) said that student

nurses gave total care to the patients, whereas most of the students (51.6%) believed that they only gave partial care to the patients. Regarding the number of patients allocated to each student, clinical instructors mentioned that each student was supposed to care for one or two patients (38.5%), three to four patients (24.6%), and more than four patients (32.3%). According to the data gathered from student nurses, 45.6% of the participants cared for one or two patients, 26.9% cared for three to four patients and 24.2% of student nurses reported they cared for more than four patients. Table 3.17 presents a summary of types of students' experience and number of patient allocated.

		Clinical Instructor (%)	Student Nurse (%)
Type of students' experience	Observation Partial care Total care	0 36.9 55.4	3.3 51.6 41.2
	Other Missing	4.6 3.1	1.1 2.8
Number of patient allocated to each student	0 1-2 patients 3-4 patients > 4 patients Missing	0 38.5 24.6 32.3 4.6	1.1 45.6 26.9 24.2 2.2

Table 3.17 Types of students experiences and number of patients allocated

In relation to the number of students in the hospital, there was little difference between clinical instructors and student nurses. Both group of participants pointed out that mostly there were one to five students in the hospital setting per shift, identified by 47.69% of clinical instructors and 63.19% of student nurses. Some clinical instructors (44.62%) and student nurses (29.67%) reported there were six to ten students allocated in the hospital setting per shift. The mean of number of students in the hospital setting per shift was 5.25 (SD=2.43). Figure 3.4 displays a summary of number of students in the hospital setting.



Figure 3.4 Number of students in hospital setting

Similarly, there was little difference between clinical instructors' and student nurses' response on number of students in the community setting. Most of the participants (20% of clinical instructors and 43.41% of student nurses) reported there were one to ten students allocated in the community setting. Whilst, 12.31% of clinical instructors and 35.16% of student nurses stated that 11-20 students were allocated in the community setting. The mean number of students in the community setting was 7.29 (SD=6.8). Figure 3.5 presents a summary of number of students in the community setting.



From figure 3.5, it can be seen that 60% of clinical instructors and 18.68% of student nurses did not respond to this question. The reason for this is not all student nurse participants in this study had a clinical placement in the community setting, therefore the students could not provide a response. Similarly, not all clinical instructors had information regarding students' clinical placement in the community, since they only supervised students in the hospital setting.

Summary:

This section presented results from this study concerning the characteristics of the Indonesian clinical environment for student nurse assessment. The characteristics identified were place of clinical setting, types of hospital, type of students' experience, number of patients allocated to students, and number of students in the hospital or community setting. Similar perspectives from clinical instructors and student nurses occurred for the clinical practice setting, which was mostly in the hospital, even though they did not agree about the type of the hospital. Both groups also had similar opinions about the number of patients allocated for each students that is one to two patients. There was also consensus regarding the number of students in the hospital and community setting for both groups. However, the type of experience students can gain from the clinical practice had varied responses with the clinical instructors reporting that most of the student gave total care for patient whilst student nurses claimed that they only gave partial care.

3.5 Method of Clinical Assessment in Each Clinical Setting

Participants were asked to report their opinion about methods of assessment being used to assess cognitive, psychomotor and affective learning skills of student nurses using a four point likert scale that range from 1=*never*, 2=*seldom*, 3=*sometimes*, and 4=*always*. Frequencies were used to determine the distribution of each method of assessment.

Three domains of learning which were cognitive, psychomotor and affective learning were utilised to determine the focus of the assessment method used by clinical instructors. It is interesting to note that the responses to specific methods of assessment being used were similar between clinical instructors and student nurses.

Findings:

Regarding the assessment of cognitive learning, the highest number of clinical instructors and student nurses reported that observation (42.2% CI compared to 37.6% SN), written test (60% CI compared to 25% SN), and oral test (81.5% CI compared to 63% SN) were *always* being used as assessment methods. Whilst, simulation and self evaluation were only *sometimes* being used. For full summary of results see Table 3.18.

	Never		Seldom		Sometimes		Always	
	% CI	% SN	% CI	% SN	% CI	% SN	% CI	% SN
Observation	23.4	9.4	17.2	16.6	17.2	37.6	42.2	37.6
Written test	6.2	16.6	10.8	11.0	23.1	29.8	60.0	25
Oral test	0	1.1	0	6.1	18.5	29.8	81.5	63.0
Simulation	4.7	14.4	17.2	19.3	51.6	37.6	26.6	28.7
Self Evaluation	3.1	7.2	10.8	25.6	7.7	3.4	29.8	32.8

Table 3.18 Methods of assessment for cognitive learning

(CI-Clinical Instructor; SN-Student Nurses)

The second domain of learning was psychomotor learning skills. The highest number of responses regarding assessment of psychomotor skills were observation (92.3% CI compared to 51.7% SN), simulation (73.4% CI compared to 37.6% SN), and self evaluation (49.2% CI compared to 35.4% SN). Oral test was *sometimes* being used and written test *never*. Table 3.19 presents a detail of the information regarding method of assessment for psychomotor skills.

	Never		Seldom		Sometimes		Always	
	% CI	% SN	% CI	% SN	% CI	% SN	% CI	% SN
Observation	0	2.8	1.5	8.4	6.2	37.1	92.3	51.7
Written test	35.9	28.3	25.0	18.9	25.0	26.7	14.1	26.1
Oral test	13.8	8.3	20.0	15.5	38.5	36.5	27.7	39.8
Simulation	0	12.2	4.7	19.3	21.9	30.9	73.4	37.6
Self Evaluation	12.3	8.3	9.2	23.8	29.2	32.6	49.2	35.4

Table 3.19 Methods of assessment for psychomotor learning

(CI-Clinical Instructor; SN-Student Nurses)

According to the respondents, to assess students' affective skills, observation (76.9% CI compared to 52.3% SN) and self evaluation (50.8% CI compared to 28.0% SN) as methods of assessment were *always* used. However, oral test and simulation were *sometimes* being used, with written test *never* used. See Table 3.20 for full details of method being used to assess students' affective learning.

	Never		Seldom		Sometimes		Always	
	% CI	% SN	% CI	% SN	% CI	% SN	% CI	% SN
Observation	0	5.1	4.6	17.6	18.5	25.0	76.9	52.3
Written test	29.2	38.8	26.2	16.9	29.2	28.7	15.4	15.7
Oral test	12.3	19.0	16.9	19.0	36.9	36.9	33.8	25.1
Simulation	7.7	22.5	18.5	23.6	41.5	34.1	32.3	19.8
Self Evaluation	3.1	11.5	7.7	19.2	38.5	41.2	50.8	28.0

Table 3.20 Methods of assessment for affective learning

(CI-Clinical Instructor; SN-Student Nurses)

Summary:

This section displays results of this study regarding method of assessment employed by clinical instructors. There were different method of assessment according to three domain of learning: cognitive, psychomotor and affective learning. To assess cognitive learning, the method *always* used were observation, written test, and oral test. Observation was also used to assess psychomotor learning, as well as simulation and self evaluation. In regard to assessing students' affective learning, clinical instructors utilised observation and self evaluation.

3.6 Clinical Assessment Tools Used

A four point likert scale was used to elicit participants' opinion about the clinical assessment tools used. To begin with, frequencies were utilised to examine the distribution of tools of measurement used. Examination of tools of measurement utilised by nursing institutions was also undertaken. Unfortunately, only two nursing institutions submitted the tools usually used in the assessment process. Therefore, the analysis of tools was only conducted for those two institutions. Firstly, all tools used were identified and listed. Following that, comparison on tools used was undertaken between two institutions according to each area of nursing specialty.

Findings:

Both clinical instructors and student nurses had similar response to tools of measurement that were *always* used: check lists (75.4% CI compared to 53.6% SN), rating scales (80% CI compared to 50.9% SN), and clinical reports (66.2% CI compared to 53.4% SN). Respondents also gave similar responses that *sometimes* the clinical

instructors used journals (41.5% CI compared to 28% SN) and log books (32.8% CI compared to 35.6% SN) as tools of measurement, but they *never* utilized video tapes.

Interestingly, for written test, clinical instructors and student nurses gave responses in a contradictory way. Most of the clinical instructors (43.1%) mentioned that they *never* used written tests as a tool of measurement, whereas most of the student nurses (37.6%) reported that clinical instructors *always* utilised written tests in assessing students. The reason for this anomaly is there was a different perception on written test between clinical instructors and student nurses. For details regarding respondents' responses about tools of measurement, see Table 3.21.

	Never		Seldom		Sometimes		Always	
	% CI	% SN	% CI	% SN	% CI	% SN	% CI	% SN
Check list	7.7	11.7	1.5	10.1	15.4	24.6	75.4	53.6
Rating scale	1.5	5.1	4.6	9.7	13.8	34.3	80.0	50.9
Video tape	90.8	80.2	6.2	11.3	3.1	6.8	0	1.7
Journal	10.8	22.3	10.8	21.7	41.5	28	36.9	28
Clinical report	6.2	5.6	1.5	11.8	26.2	29.2	66.2	53.4
Log book	13.1	15.5	26.2	22.4	32.8	35.6	27.9	26.4
Written test	43.1	27.5	16.9	14.6	20	20.2	20	37.6

 Table 3.21 Tools of measurement to assess student nurses
Two institutions submitted the tools used in the assessment process of student nurses (Institution A and Institution C). Both institutions submitted form used in nine specialty areas. A list of the tools are contained in Table 3.22. As can be seen from the table, most areas of nursing specialty employed rating scales, clinical reports and 'modified rating scale' as tools to assess students. The range for rating scale was one to four (1-4) or one to five (1-5). The modified rating scale means that assessors already determine the maximum mark for each aspect of learning being assessed. Clinical reports were usually based on patients' nursing care plans.

Area of nursing specialty supervision	Institution A	Institution C
Maternity nursing	Clinical report Modified rating scale	Rating scale Clinical report Modified rating scale
Paediatric nursing	Rating scale Clinical report Modified rating scale	Rating scale Clinical report
Medical surgical nursing	Rating scale Clinical report	Rating scale Clinical report
Emergency nursing	Rating scale Clinical report	Rating scale
Psychiatric nursing	Rating scale Clinical report	Rating scale Clinical report
Gerontic nursing	Check list Clinical report Modified rating scale	Modified rating scale Clinical report
Family nursing	Check list Rating scale Clinical report Modified rating scale	Modified rating scale Clinical report
Community nursing	Rating scale Modified rating scale	Modified rating scale
Nursing management	Rating scale	Rating scale

Table 3.22 List of tools of measurement being used in Institution A and Institution C

As an example of modified rating scale, assessors in the maternity nursing setting for Institution A utilised the nursing process form during the intranatal period. This form consisted of four elements which were assessment, intervention, implementation and evaluation. For each elements, there was a maximum mark that students could achieve, specifically 20 points for assessment, 30 points for intervention, 25 points for implementation and 25 points for evaluation.

In general, both institutions described what to assess from students' cognitive, psychomotor and affective learning on the form used. Institution A employed more types of tools of measurements than Institution B. As an example, assessors in family nursing for Institution A used checklists, rating scales, clinical reports and modified rating scales as tools of measurements in student nurses assessment, in contrast, in Institution C, the assessor used only modified rating scales and clinical reports.

Another difference between institution was there were more detailed forms being used in Institution C to assess students. Unfortunately, there was no explanation relating to how to use the form. In comparison, almost in all area of nursing specialty from Institution A, an explanation accompanied the form about how to use the form.

Summary:

This section provides the results about tools of measurement used in the clinical assessment process. According to clinical instructors and student nurses in this study, check lists, rating scales and clinical reports were tools of measurement that were always used in the student nurses' assessment process.

Institution A's and Institution C's tools were similar, even though Institution A employed more tools of measurements, which were rating scales, clinical reports and modified rating scales. Institution A also used checklists as a tool when assessing student nurses. However, there was inconsistency between tools being used reported by participants and tools being submitted to the researcher such as participants reported clinical instructors used check list, rating scale, clinical report, journals, log book, and written test, but tools submitted to the researcher were only in the form of rating scales and clinical reports.

3.7 Clinical Instructors' and Student Nurses' Perceptions of the Clinical Assessment Process

Clinical instructor participants were asked their perceptions on time to assess students whether it was adequate or not, using 'yes or no' answer. Meanwhile, student nurse participants were asked their perceptions on time to be assessed whether it was adequate or not. Then, using a four point likert scale, participants were asked whether or not they were satisfied with the assessment process. For clinical instructors, they were also asked to express their opinion about whether they felt sad or responsible if students failed because of their judgment. The results are presented on graphs using pie and bar charts.

Open-ended item responses analysed using content analysis according to the process described by Roberts and Taylor (2002). Themes and sub-themes were identified and are now presented with quotes to support the analysis process. There were three themes that emerged from clinical instructors' responses on workload factors that may

hinder the assessment process. Five themes were elicited relating to factors that effect the clinical assessment process identified by both clinical instructor and student nurse participants. Frequency of responses were also tabulated in order to present the data in a numerical way.

Findings:

3.7.1 Participants' Perceptions on Adequate Time in Assessment Process

Most of the clinical instructors (95.3%) felt that they had adequate time to assess student nurses. Similarly, 71.1% of student nurses also felt that they had enough time to be assessed. There were more student nurses (28.89%) who considered not enough time was available for assessment compared to clinical instructor (4.69%). Figure 3.6 displays a clear picture of clinical instructors and student nurses perceptions on adequate time for the assessment process.



Figure 3.6 Clinical instructors' and student nurses' perceptions of adequate time to assess the students.

3.7.2 Participants' Satisfactions in Assessment Process

Using four point likert scale, participants reported their satisfaction on the assessment process. The greatest percentage of both clinical instructors and student nurses reported that they *sometimes* felt satisfied with the assessment process. There was a difference of 1.8% between the participants (58.5%, n=38 for clinical instructor and 60.3%, n=108 for student nurses). However, 20% of clinical instructors and 6.1% of student nurses were not satisfied with the assessment process. Figure 3.7 presents a summary of participants' satisfaction on the clinical assessment process.



Figure 3.7 Participants' satisfaction on clinical assessment process

3.7.3 Clinical Instructors' Feeling if Student Failed

Table 3.23 displays the clinical instructors' feelings if the students did not pass the assessment. 49.2% clinical instructor *sometimes* felt sad if students failed because of their judgement, 21.6% participants said *always*, and the remaining said *never* and *seldom* (13.8% and 15.4% respectively). The highest percentage of clinical instructors who *always* felt responsible if student failed was 52.3 %. Other said *sometimes* (38.5%), *seldom* (6.1%) and *never* (3.1%). Furthermore, almost all clinical instructors mentioned that they *always* (95.4 %) did not have any intention to fail students.

Statement	Never	Seldom	Sometimes	Always
I feel sad if students fail because	13.8	15.4	49.2	21.6
of my judgement.				
I feel responsible if students fail	3.1	6.1	38.5	52.3
because of my judgement.				
I have no intention to fail	3.1	0	1.5	95.4
students.				

Table 3.23 Clinical instructors' feeling if student failed the assessment

3.7.4 Workload Factors that Hinder Assessment of Student Nurses

Themes identified regarding workload factors that may hinder the assessment process were clinical instructors' other roles, assessor factors and student factors. For each theme, a number of sub-themes emerged. A summary of themes and sub-themes as well as the frequency for each theme can be seen in Table 3.24.

Themes	Sub-themes	Frequency
1. Clinical instructors' other roles	 A teacher A course coordinator A faculty member 	23
2. Assessor factors	 Limited number of qualified assessor Assessors' physical condition Limited time availability 	13
3. Student factors	 Number of students Students' expertise 	15

Table 3.24 Workload factors that hinder the assessment process

3.7.4.1 Clinical instructors' other roles

The major role as a clinical instructor as stated by participants was supervising students in clinical practice. However, a clinical instructor often had other responsibilities such as *teaching in the classroom or working in the laboratory*, as mentioned by one of the clinical instructor participants. Another participant reported that *teaching workload*, *research activities and community services activities* sometimes burden her/his duty as a clinical instructor.

As a faculty member, besides teaching, a clinical instructor has other responsibilities such as *managerial or administrative workload*. Attending a faculty *meeting* was also reported as another responsibility as a faculty member. Clinical instructor participants said that meeting schedules at the same time with students' assessment made them not concentrate on both events.

3.7.4.2 Assessor factors

Since clinical instructors had other roles such as a teacher, course coordinator and faculty member, it means that a clinical instructor was required to manage their time wisely. Some clinical instructors said that *limited time to read students' work before the assessment* made them busy at the time of assessment. Participants also reported that their *physical condition* influenced their performance and consequently their load during assessment process. This situation got worst since *there was limited number of qualified assessors*.

3.7.4.3 Student factors

For student factors, sub-themes that elicited were number of students and students' expertise. Clinical instructor participants reported that a *high number of students in a ward* increased their workload and influenced the assessment process. In addition, *students' knowledge and preparation* also made the assessment process a demanding task.

3.7.5 Factors that Effect Clinical Assessment

Overall themes identified were: student, assessor and environment factors as well as the assessment process. Within each factor, a number of sub-themes emerged. Quotes are used to verify themes that effects clinical assessment process. Table 3.25. presents a summary of frequency for each theme.

Themes	Sub-themes	Frequency	
	-	Clinical instructor	Student nurses
1. Student factors	 Individual preparation Ability (cognitive and psychomotor skills) Motivation Health and mental status Self confidence Anxiety and stress Time management 	44	142
2. Assessor factors	 Performance Personality Attitude Preparation Number of assessor Relationship with students Subjectivity 	16	113
3. Clinical environment factors	 Equipment availability Ward activities Clinical setting preparation Patients' condition Limited patient cases Patient and family preparation Patients' medical treatment schedule Too many students Hospital management Communication skills Support from group member 	47	110
4. Assessment process	 Method of assessment The luck of a draw 	0	24

Table 3.25 Factors that effect the clinical assessment process

3.7.5.1 Student factors

Clinical instructors and student nurses reported a number of sub-themes that support this theme, such as students' preparation and ability (cognitive and psychomotor skills) could influence the assessment process, as one clinical instructor reported students' understanding about patient case, students' experience doing clinical skills, and students' preparation before the assessment. It emphasized by another clinical instructor who reported limited level of knowledge, lack of students' preparation, incomplete nursing assessment, lack of time management, students' anxiety could effect the process of student nurses' assessment.

From student nurses' point of view, most student nurses reported similar responses. One student mentioned that *students' preparation (physically and psychologically), knowledge and psychomotor skills* were factors that could influence them during the assessment process. Other student nurses said different factors such as *prior experiences, self confidence, stress, anxiety, health status* and *communication skills* also impact on the assessment process.

3.7.5.2 Assessor factors

There were several sub-themes elicited from both clinical instructors and student nurses regarding assessor factors that could affect the assessment process of student nurses, that is, *assessors' performance, personality, attitude,* and *preparation*. In regard to the personality, some students reported that *assessors' facial expression during examination* could give impact on their assessment. There was no explanation on what is meant by assessors' performance, attitude, and preparation.

Moreover, student nurses mentioned other sub-themes under assessors' factor that effect the assessment process such as *the number of assessors, relationship with students* and *assessors' subjectivity*. One student explained about assessors' subjectivity as *if the* assessor likes the student, then the students will pass with high mark, otherwise the students will be difficult to pass. This response was emphasized by another student participant who said that assessors' subjectivity is obvious, and differences between one assessor and another is obvious as well.

3.7.5.3 Environment factors

Environment factor was the most recurrent theme identified by clinical instructor respondents. However, both clinical instructors and student nurses reported similar subthemes. Issues concerning patients emerged. One clinical instructor said that *patient's condition and the number of patients in the ward* affect the assessment process. It was emphasized by one students who said *number of patient and case available* as factors that could effect the assessment. Another student mentioned that *patients, their family, and preparation for the assessment* also influenced the process of assessment.

Clinical setting was also reported as a factor that could effect student nurses assessment. It included *ward's condition, facility, policy* and *preparation*. Some clinical instructors mentioned other factors such as *communication with other staff in the ward* and *other health personnel activities*. Furthermore, the number of students in the ward was believed to influence the assessment process, as clinical instructor participants mentioned *number of students doing assessment per day* and *too many students in a ward*.

3.7.5.4 Assessment process

One factor identified by student nurse respondents only was the assessment process. There were two sub-themes that is method of assessment and 'the luck of a draw'.

Participants did not give details comments on how and what method of assessment could effect the assessment process. Interestingly, some respondents mentioned that 'the luck of a draw' was one factor that could determine their assessment process. Unfortunately, these respondents did not explain in more details about this sub-theme.

Summary:

This section presented results relating to clinical instructors' and student nurses' perception about the assessment process. The results indicated that most of the clinical instructors felt that they had enough time to assess student nurses, similarly more than half of the student nurse participants felt the same way regarding having enough time to be assessed. Concerning the frequency of satisfaction on the assessment process, the greatest percentage was *sometimes* for both groups. Furthermore, most of clinical instructors *sometimes* felt sad and *always* felt responsible to pass the students.

From open-ended data analysis, three major themes emerged in regard to workload factors that may hinder the assessment process that is clinical instructors' other roles such as a teacher and faculty member, assessor factors and student factors. Four themes were also elicited relating to factors that effect student nurses' assessment. The themes were student factors, assessor factors, clinical environment factors, and the assessment process. For each theme, a number of sub-themes emerged.

3.8 Summary of Chapter Three

Results generated from this study focused on the research objectives. There were six objectives of the study. First, the characteristics of participants were described. Most of the participants were female aged between 25 - 55 years of age for clinical instructors and 21-47 years of age for student nurses. The mean for duration of being a clinical instructor was 7.37 years.

The clinical assessment process was identified, as well as factors that contributed to the assessment process such as number of assessment, duration of assessment, and minimum mark to pass. Mean of duration of assessment differed, 3.3 and 1.84 hours for clinical instructors and student nurses respectively. Regarding the number of assessment and minimum mark to pass, the greatest percentage was one assessment and 70 for the pass mark. From open-ended data, it is found that clinical instructors did a lot of preparation prior to the assessment of student nurses. With regard to the process of assessment, clinical instructors employed different models, however, the nursing process was the model generally used. Student nurses reported different method of assessment were utilised in each area of nursing specialty.

The characteristics of the Indonesian clinical environment were classified as place of clinical setting, types of hospital, types of students' experience, number of patients allocated to students, and number of students in the hospital or community setting. In general, both clinical instructors and student nurses reported similar responses on each of the clinical environment characteristics. Most of the clinical placements were in the hospital setting. There were mostly one to five students per shift in the hospital setting, whereas one to ten students were in the community setting. Mean of students in the hospital and community setting were five and seven students, respectively. There were different methods used to assess student nurses. The methods of assessment focused on three domains of learning: cognitive, psychomotor and affective abilities. To assess cognitive learning, the method always used were observation, written test, and oral test. Observation was used to assess psychomotor learning, as well as simulation and self evaluation. In regard to assessing students' affective learning, clinical instructors utilised observation and self evaluation.

The tools of measurement used were also identified. Participants reported that check lists, rating scales and clinical reports were the tools of measurement that were always used in the student nurses' assessment process. However, there was inconsistency between the tools being used reported by participants and tools being submitted to the researcher. Participants reported clinical instructors used check list, rating scale, clinical report, journals, logbook, and written test, but tools submitted to the researcher were only in the form of rating scales and clinical reports generally.

Clinical instructors' and student nurses' perception about the assessment process were also identified. Most of the clinical instructors *sometimes* felt sad and *always* felt responsible to pass the students. From open-ended data analysis, three major themes emerged in regard to workload factors that may hinder the assessment process that is clinical instructors' other roles, assessor factors and student factors. Four themes were also elicited relating to factors that effect student nurses' assessment. The themes were student, assessor, and clinical environment factors as well as the assessment process. For each theme, there were a number of sub-themes. This chapter has presented results of the analysis of the data. The next and final chapter will discuss these findings with reference to the literature and make recommendation for future research and practice in Indonesia.

CHAPTER 4

DISCUSSION AND CONCLUSION

4.1 Introduction

Chapter four is a discussion on the findings of the study, drawing on the literature review and interpreting the study results. Conclusions, recommendations for future research, and proposed changes to the practice of clinical assessment in Indonesia are also stated.

This study was designed to investigate the clinical assessment of Indonesian student nurses undertaking the professional stage of their undergraduate nursing course. The research attempted to explore in detail clinical instructors' and student nurses' demographic data, the assessment of student nurses, characteristics of the clinical environment, and assessment tools of measurements currently used by four nursing institutions in Indonesia. The perceptions of clinical instructors and student nurses about the assessment process were also identified. The findings of this study have shown that there are many important issues surrounding the assessment of Indonesian student nurses which need to be addressed by nursing educators, and they will be discussed in this chapter.

Until recently, nursing was considered a low-status and poorly paid profession in Indonesia, but since nursing education has been included in the higher education sector, a change in attitude towards the nursing profession is occuring (Shields & Hartati, 2003). The Indonesian National Nurses Association (INNA), as a professional organization and a regulatory authority for nurses in Indonesia, is committed to the improvement in the status of the Indonesian nursing profession. One significant step forward for INNA was becoming a member of the International Council for Nurses in 2003 (INNA, 2006a). However, it was acknowledged that INNA's function as a regulatory authority needs improvement (Shields & Hartati, 2003). To overcome the problem of a lack of standardization of nursing competencies, INNA and the Association of Indonesian Nursing Education Institutions are working in collaboration with each other to develop a set of competency standards based on the International Council of Nursing Competencies (INNA, 2006). The development of competency standards in Indonesia is at least 15 years behind that of Australia, who developed competency guidelines in the early 90's (ANC, 1992).

There is a worldwide shortage of qualified nurses and an improvement in the quality of Indonesian nursing practice, may be a means of reducing the nursing shortage in areas of needs, not only in Indonesia, but also in other countries. Improvement in the quality of Indonesian nursing practice that is compatible with international standards may afford opportunities for Indonesian nursing graduates to work overseas. Many nursing institutions in Indonesia are improving their education system to meet international standards, so that their graduates have the opportunity to migrate to areas in the world that has a nursing shortage. The worldwide nursing shortage and the employment opportunities available, could be the reasons why Indonesian people are increasingly attracted to nursing as a career. They may anticipate that migration to areas of nursing shortage may mean that they will have a better quality of life (Kingma, 2001).

Improvement in the quality of the nursing profession must start with an improvement in nursing education. The development of nursing higher education in Indonesia has been influenced by several developed countries. It started in 1983 when the Indonesian government, with assistance from WHO consultants, began to improve the Indonesian health care system with the aim of improving the quality of the nursing profession (Gartinah, Sitorus, & Irawaty, 2006). Several nursing consultants from developed countries were invited to visit Indonesia, bringing with them their experiences of nursing education, especially in regards to assessment processes. Following this visit by international experts, Indonesian nursing scholars sought to implement what they had learned. However, since the culture of a country has a significant impact on nursing education, it was a struggle to impose a system in Indonesia that was based on methods used in other developed countries without modification. Some of the cultural influences that affected the application of foreign nursing education in Indonesia were the characteristics of teachers and learners, attitudes toward gender, historical practices, the clinical environment and available financial resources. A difficulty for this study has been the minimal documentation of research or comprehensive evaluation of nursing education practices that has occurred over time in Indonesia.

It can be said that despite a desire to educate nurses to a level at which they could confidently work in developed countries, minimal change has occurred to the National Nursing curriculum. The latest Indonesian national curriculum for nursing was based on a curriculum developed in 1999 (INNA, 2006). In this revised national curriculum, a nursing process approach was integrated into the academic and professional stage of the course (Strength and Cagle, 1999) whereas globally nursing education has moved away from a nursing process approach towards competency-based education and clinical pathway for care delivery.

4.2 Indonesian Clinical Assessment Processes

In many developed countries, competency-based assessment has become central in nursing education, particularly in the teaching, learning process and assessment (Watson et al., 2002). When using competency-based assessment, an assessor should indicate the level of competence attained by the students (Kevin, 2006). It is acknowledged that Benner's model of 'novice to expert' is widely used in competency-based assessment globally (Chambers, 1998). Whereas Indonesia has not adopted this assessment method and still uses a skill based assessment approach.

This study found that the clinical assessment of student nurses in Indonesia focuses more on technical skills development as opposed to competency. Assessment of Indonesian student nurses employs a nursing process-focused model which concentrates on assessing students' ability to conduct each step of the nursing process. This means that skill assessment based on the recommendations of the WHO consultants in 1983 is still being used in Indonesia, despite the subsequent global trend towards competency-based assessment. Clinical instructors continue to use skilled-based assessment to assess students in the clinical setting because this is the model employed by the clinical instructors at the direction of the institutions, and the national nursing curriculum has been unchanged for many years (INNA, 2006b). This model of assessment was the one introduced into Indonesia by nursing experts from developed countries (Strength & Cagle, 1999), with most nursing institutions in Indonesia employing a similar model of assessment. The nursing process-focused model is considered an appropriate method of assessing student nurses since the nursing process approach is integrated into all aspects of the BN curriculum (Strength and Cagle, 1999). Consequently, students are drilled in using the nursing process approach throughout their studies. At the professional stage, most specialty areas focused on students' performance using the nursing process, which results in skilled-based assessment.

Based on the literature, the assessment of student nurses should not only focus on the achievement of nursing skills but also attitudinal knowledge attributes (Dolan, 2003; Neary, 1999). Findings from this study showed that certain nursing specialty areas, the assessment focused more on clinical nursing skills. In the latter case, students passed the assessment if they were able to complete the nursing skills procedures successfully. This is related to the traditional belief that assumes nurses' duties are related only to technical skills. Kevin (2006) confirmed that assessors, as a product of a former educational programme focus more on skills than competence. In addition, Dolan (2003) recommended that assessment should not be too task-oriented because if the assessment is 'too task-oriented' then it will lessen 'the art of nursing'. Meaning that competency assessment which is comprehensive and holistic is a more suited assessment approach today.

The clinical learning component of the Indonesian national nursing curriculum focuses on three domains of learning: cognitive, psychomotor and affective. Hager et al.

(1994) suggested that several methods of assessment are required to be employed in order to get a broader picture of student nurses' progress. Despite this suggestion, this study demonstrates that such 'holistic' assessment does not occur in Indonesia at this stage.

This study also identified that the clinical instructors' level of knowledge about what signifies reliable assessment methods needs improvement. From this study it was revealed that observation, written tests, and oral tests are being employed to assess students' cognitive learning. Pen-and-paper tests are seen by many experts as having increased students' comprehension in classroom tests for many years (Hager et al., 1994), Rushton and Eggett (2003) report that written and/or oral examinations are methods that can be used to assess student nurses knowledge but that oral examinations are more effective in evaluating students' understanding of clinical practice and its application in the clinical settings. Despite what is documented in the literature, changes have not been implemented in the clinical assessment of student nurses in Indonesia.

This study also identified that clinical instructors used observation to assess students' psychomotor skills, simultaneously with simulation and self evaluation. Hager et al. (1994) supports simulation and direct observation as methods that can be utilised in assessing psychomotor learning. These assessment methods are considered useful for determining the progress of psychomotor learning because through simulation, students can perform their practical performance in simulated cases, and through observation an assessor is capable of measuring students' psychomotor learning progress directly (Hager, et al., 1994). There is general consensus that out of the three domains of learning, attitude is the hardest domain to measure (Hager et al., 1994). Many attempts to find the optimum method for assessing attitude have been documented. Hager et al. (1994) suggested that attitude can be assessed using several methods such as direct observation, self report, oral and written tests. However, this study found that the attitude of Indonesian student nurses is assessed by observation and self evaluation only. In this case, the increase in knowledge of clinical instructors regarding the various methods of assessment and when they should be applied is required to improve the assessment processes. It is clear from the data that the knowledge of clinical instructors must be enhanced to include a variety of assessment methods.

It is essential for Indonesian nursing education to adopt a standardized assessment process that employs a competency-based assessment method if it wants to be recognised globally as a provider of competently educated nurses. Professional development courses which train educators in assessment methods are also needed and should be conducted in every nursing institution in Indonesia. The professional development courses should be held regularly in order to share knowledge and experience in various methods of assessment as well as tools of measurement so that clinical instructors have the same perceptions and knowledge about 'what' and 'how to apply' assessment methods.

Overall, clinical educators cannot be blamed for maintaining traditional assessment practices. As previously mentioned, the lack of available documentation about competency assessment of students is a factor in this situation. As well as a lack of access to web based knowledge on nursing education developments.

4.3 Indonesian Clinical Instructors and Student Nurses

Globally, nursing is a predominantly female dominated profession. This global trend is also found in Indonesia, evident with the fact that more than two thirds of the participants involved in this study were female. There is limited statistical evidence in the Indonesian literature regarding the gender imbalance in the nursing profession. In comparison, according to Kermode (2006), 91% of registered nurses in Australia are female. While it can be safely assumed that nursing remains a predominantly female occupation in Indonesia as well as Australia. Documentation and publication of such basic facts would be useful for the nursing profession in Indonesia. Particularly as Indonesia is a culturally strong country with a male dominated society. Increasing the number of male nurses may increase the status of nursing in Indonesia.

Another significant characteristic of participants in this study was age. There was little difference between the age range of clinical instructors and student nurses. In some cases, the clinical instructors were younger than student nurses being assessed. Indonesian culture emphasizes a respect for elders. In a nursing assessment context, this difference could have an influence in the assessment process. In Indonesia, many people adhere to the traditional belief that a teacher should be older than the student. This belief may contribute to the problem of bias in the assessment process as clinical instructors may feel reluctant to fail an older student nurse. This concern is supported by Kevin (2006) who asserted that one of the problems in assessment was related to a lack of confidence in junior staff who felt insecure with their role as an assessor and as a result, were reluctant to fail students.

The educational background of clinical instructors was varied with almost half of the clinical instructors holding masters level qualifications. This is in contrast to the results from a study conducted by Roemer, Wuntu, and Heryanti (1992). They conducted a study in Indonesia under the auspices of the Centre for Policy and Implementation Studies and the Harvard Institute for International Development and reported that there was only one clinical instructor who held a master level qualification in 1992. In that decade, there was no institution in Indonesia that offered nursing courses at a postgraduate level (Roemer, Wuntu, & Heryanti, 1992). Consequently, few clinical instructors could continue their education to a higher level, as this required them to get a scholarship to continue their study in another country. Fortunately, there is now a nursing education provider, the Faculty of Nursing University of Indonesia (FoN UI), which offers postgraduate nursing programs. Moreover, several developed countries offer scholarships. For example, Australia offers the AusAID scholarship and the Netherlands offers the NEC scholarship enabling baccalaureate nurses to continue their study to a master or doctoral level, which in turn assists in enriching and developing the nursing profession in Indonesia. It can be seen from the study that continuing higher education for clinical instructors has been occurring with already half of the clinical instructors being educated to master's level. This is an outstanding achievement in such a short time.

Most of student nurses in Jakarta had Diploma III qualifications prior to commencing their nursing studies. This shows that more mature students enroll in the BN course in Indonesia than do school graduates. This trend relates to the history of nursing education development in Indonesia, one that has focused on educating Diploma III graduated nurses as a means of speeding the education period, in order to produce more nurses (Roemer, Wuntu, & Heryanti, 1992). The School of Health Care, Oxford Brookes University, in United Kingdom identified that mature students reported higher satisfaction levels and better performance than did younger students (Ansari, 2002), whilst Salamonson and Andrew (2006) also found that age was positively related to academic performance. Both studies concluded that older students performed better academically than younger students did. However, this study did not attempt to identify students performances in relation to age.

4.4 Issues related to Clinical Instructors and Student Nurses

This study raised two main issues regarding the assessment of Indonesian student nurses; preparation for clinical assessment and assessor subjectivity. Findings from this study showed that clinical instructors undertook a lot of preparation before the assessment of student nurses. This included the preparation of assessors, students and the clinical environment. The emphasis placed on preparation before assessment highlights that assessment is viewed as a key component of the teaching and learning processes. It is not known if a lack of assessors' preparation could result in an unstructured assessment of students (Calman, et al., 2002) and poor assessment results (Neary, 1999). One obvious solution to assist in the assessment process is to schedule assessor preparatory courses before students' assessment (Lankshear & Nicklin, 2000).

The phenomenon called the negative 'backwash' effects on learning means that how students learn depends on how they perceive they will be assessed (Tiwari, et al. 2005). This phenomenon was seen in this study. Like the assessor's preparation, the students' preparation occurs before the assessment process. Preparation included revision of knowledge and psychomotor skills, as well as attention to the students' psychological condition. Neary (1999) revealed that students' preparation for the assessment is important in order to pass the assessment successfully. The preparation could include an explanation as to the purpose of the assessment, the form that will be used, identification of the clinical setting, and a visit to the clinical setting before the assessment is done. However, such preparatory information might lead students to only focus on preparing themselves for assessment to achieve high marks rather than focusing on the learning process which has a more long term focus as a whole.

Assessors' subjectivity is another issue that emerged in this study. It is acknowledged that subjectivity is 'an old problem' for assessors (Chambers, 1998; Mahara, 1998; Dolan, 2003). Assessment of student nurses is subjective because it relies on direct observation of students' competencies (Chambers, 1998) and judgement based personal opinion (Chapman, 1999). Even though the assessors may deny that their subjectivity affects the assessment process, students in this study reported it. It is believed by student nurses that assessors' subjectivity exists in the assessment process and it is one factor that influences the process of student nurse assessment.

This study identified that students' relationships with their assessors that develop during the learning period, as being one of the main causes of assessor subjectivity. Neary (1997) has documented similar findings. Neary found that the closer the relationship was between mentor and the student, the more difficult it was for the assessor to judge the student objectively, when they later had to fulfil their role as assessors. Chambers (1998) also asserts that the relationship between clinical teacher, as both mentor and an assessor, and student, might contribute to a lack of objectivity in the assessment process. Chambers elaborated that this problem occurred since there is a lack of clarity about the role and the relationships of clinical teacher to their students. In Indonesia, this is compounded by the issue of age mentioned earlier, because of the similar age range of students and assessors, and the cultural reluctance of the young to criticize their elders.

The preparation of clinical instructors is an important factor in the assessment process. Therefore, it is concluded that students should receive a detailed briefing before assessment in order to clarify what is expected from them. Also, staff development sessions are needed and should be conducted prior to assessment in order to gain further expertise on the part of the assessor. This would create a supportive environment for both the student being assessed and the assessor

4.5 Clinical Assessment Environment

Student nurses in Indonesia encounter both community and hospital experiences during their course. The clinical environment influences the assessment process of student nurses. This finding is supported by Papp, et al. (2003) who highlights that the characteristics of the clinical placement have an impact on the clinical learning. Impacting characteristics include patient conditions, staff skills and personalities. In Indonesia, these clinical environmental characteristics of types of clinical settings, types of hospitals, and number of students, will be peculiar to the Indonesian context. This study identified that while clinical settings for student nurses in Indonesia can include different types of hospital and the community, most of the time, student nurses spend their time in type A hospitals. Type A, are located in the capital city, and provide the greatest number of

specialists and care options (Strength & Cagle, 1999). Consequently, student nurses have excellent clinical practice experiences from which they can learn a great deal.

On the other hand, the health system in Indonesia has a strong community health focus (Hennessy, Hicks, Hilan & Kawonal, 2006). This is due to the fact that a large proportion of the population live in rural areas. Therefore, in order to meet the needs of Indonesian citizens in rural areas, the government has a policy encouraging most nursing institutions to give attention to community nursing practice (Strength & Cagle, 1999). As a consequence of such a policy, students spend a longer period of their clinical placement in a community nursing area rather than in other areas of nursing specialty.

The clinical assessment environment requires adaptation generally in order to facilitate reliable assessments. This may include reducing the number of students being assessed in the hospital or community setting per shift. This study noted that clinical instructors made an effort to keep a reasonable number of students being assessed at any one time. However, no research was found that identified the maximum numbers of students that should be assessed in one shift.

4.6 Assessment Tools

The findings of this study identified that minimal changes have occurred in the assessment processes of student nurses. Indonesian clinical instructors employ skill-based assessment introduced by WHO consultants in the beginning of the development of nursing education in Indonesia (Strength & Cagle, 1992). Only minimal changes have been made to the tools of measurement used to assess students as well.

This study found that student nurses in Indonesia are assessed frequently using rating scales, check lists and clinical reports as assessment tools. The literature highlights the benefits of rating scales in assessing students. Dolan (2003) used a list of skills in assessing students' competency as it helped assure students had gained the experience of performing basic nursing tasks. Check lists and rating scales are widely used to assess psychomotor skills (Bartlett, 2000; Watson, et al., 2002). It was also noted that rating scales and clinical reports are also being used widely in institutions in Scotland to assess students' clinical competency (Brown, 2000; Calman et al., 2005). For example, the Bondy Scale and the Slater Nursing Competencies Rating Scale are both used widely in nursing (Chambers, 1998). Chambers said that such scales have a high inter-rater reliability, however, they still depend on the assessors' agreement on the description of each scale, and therefore are still vulnerable to assessor subjectivity.

Professional development courses on tools of measurement to assess student nurses are needed to be held in each nursing institution in Indonesia. These courses could ensure more reliable valid assessment of students and prevent problems regarding the lack of objectivity in student nurse assessment.

To sum up, the findings of this study have shown that there are many important issues surrounding the assessment process of student nurses in Indonesia, identified by both clinical instructors and student nurses. This study revealed that the assessment of student nurses in Indonesia is influenced by Indonesian cultural factors in terms of individuals involved and the clinical environment characteristics. Furthermore, it revealed that the assessment process still employs a traditional process in terms of the model, methods and tools. Consequently, it is clear that the current assessment process would be more effective if clinical academics improved their knowledge about factors related to student nurses assessment. A better assessment process is needed in order to avoid "a wrongful decision about a student's competence that may cause either unfair delays in course progression or, more importantly, facilitate the graduation of a student who is not yet competent" (Kevin, 2006, p. 36). If Indonesia is to educate nurses to a standard that they can immigrate to developed countries, the assessment of student nurses needs to be modified as identified in this study.

4.7 Limitation of the Study

The result of this study cannot be generalised to all nursing institutions in Indonesia since data was only gathered from 4 nursing education institutions in one area Jakarta. Additionally the convenience sampling technique employed means that study results cannot be generalized to the wider Indonesian population. However, the results still provide some insights into clinical assessment practices and the basis for further research and clinical practice.

A further limitation was that this study only relied upon self reporting of clinical assessment practices and not observation research. Therefore, further explanations or descriptions regarding participants' responses on particular items in this study could not be achieved.

The experiences of the researcher as a clinical assessor and faculty member could also have increased the bias of this study. However, during the study period, the research supervisors kept challenging the role of the researcher and providing direction for the study.

4.8 Conclusion

This study is a first step in understanding what is occurring in nursing education institutions in Indonesia with regards to student assessment. The study provides base line data on the current situation. Areas for improvement have been identified with the overall aim of clinical assessment being the education of a competent nurse, and enhancing the professionalism of nurses in Indonesia. Increasing professionalism of nursing in Indonesia will occur with the increasing of clinical education quality including the assessment process for students.

Findings of this study illustrate that the assessment of student nurses employed is a skilled-based assessment, despite the global trends towards competency-based assessment. Therefore, improvement in nursing curriculum which focuses on competency-based curriculum is needed. These improvements in the nursing curriculum will lead to improvements in the nursing profession, resulting in a higher standard of professionalism for nursing and nurses in Indonesia.

Although these results are based on respondents in one area in Indonesia, it is evident that improvement in the assessment process of all student nurses is required. The majority of the recommendations arising from the study are therefore aimed at addressing improvements in clinical teaching and learning processes, including the assessment process in order to achieve a high standard of clinical nursing education.

4.9 Recommendations

Based upon this research, the following are recommended:

- 1. It is recommended that further research include the refinement of the survey questionnaire and replication of the study at a national level, in order to get a broader picture of clinical assessment of student nurses in Indonesia.
- 2. Additionally, findings in this study can be used as baseline data to conduct further research focused on factors influencing the assessment processes of student nurses and whether these factors relate to each other.
- A further study could also include comparisons of the clinical assessment of student nurses in Indonesia and other countries.
- 4. Professionally, it is recommended that nurse educators and nurse clinicians work together to establish a policy in order to achieve high standard nursing education and function as quality controllers of nursing education.
- 5. Changes to curriculum are recommended to include the use of competency-based assessment for student nurses.
- 6. A further recommendation is to establish policy regarding a standardized assessment process to be employed by nursing education institutions in assessing student nurses.

MY REFLECTIVE DIARY:

I feel very fortunate to have had the opportunity to continue my study abroad. I have learnt so many things, both educational-related matters and non-educational-related matters. What I mean by educational-related matters are that I have learnt how to conduct research, beginning with making a proposal and developing instruments, then collecting and analysing data, and finishing with writing up the thesis. Besides all those educational-related matters, I have also learnt how to make friends, communicate with others in English, and get insights about how Australian teachers have a relationship with their students.

However, I faced some difficulties during my study period. First, since I came from a non-English speaking country, I needed time to get used to communicating in English all day long. My writing skills in English have also been challenged. I made errors in grammar, but I have learnt from my mistakes. I believe that my writing skills now are better than before. On top of that, differences in learning approaches between Australia and Indonesia, have contributed to 'the hardest time of my life' ever. In Australia, critical thinking is encouraged from the beginning of the education period. I could say this because I have a son who starts his pre-primary school in Australia, and I can see differences in learning approaches employed by his teachers.

Learning approaches employed in Australia are student-centred, resulting in fostering a critical thinking ability and independent learning. In comparison, in most cases, the Indonesian education provider employs teacher-centred philosophy, which results in a lack of analytical and synthesizing thinking. As a result, I needed more time to finish writing up chapter one (literature review) and chapter four (discussion) rather than chapter two (research methodology) and chapter three (results) in my thesis. This happened because in the literature review and the discussion sections, I had to use my critical thinking ability, which needed to be improved at that time. I believed that analytical and synthesizing thinking abilities are essential for a master's student, and my supervisors guided me on how to achieve those skills.

Another difficulty was concerned with my role as researcher. When I tried to be a 'true' researcher in this study, it was difficult because I was an experienced clinical educator in Indonesia. It sometimes happened that I used my experiences in answering the problems discussed in this study. Fortunately, I have supervisors who kept challenging my role as a researcher in this study.

This learning experience has enriched my academic life. I will share my experience of studying in Australia with my colleagues in Indonesia. I wish that they also will have the opportunities to experience the experiences that I have experienced.



SELF REPORTED QUESTIONNAIRE CLINICAL ASSESSMENT OF STUDENT NURSES IN JAKARTA, INDONESIA (for Clinical Instructors)

SECTION I

Instructions: Please complete the questionnaire by ticking the most appropriate response.

1. What year were you born?

5. How long have you been a clinical instructor?
SECTION II Instructions: Please complete the questionnaire by ticking the most appropriate response.

- 1. Places where student nurses do their clinical practice:
 - () Puskesmas () Community () Hospital

Type A
Type B
Type C
Type D
Other, please specify

On average, how many patients are in the ward on each shift?

<5
16-30
5-15
>30

3. On average, how many patients can the students care for each day?

4. What type of experience can the students gain from the ward where you work?

Observation only Partial patient care
 Total patient care
 Other, please specify

- 5. How many students are placed in a ward each shift?
- 6. How many students can be assessed in a ward each shift?
- 7. How many students are placed in a community each shift?

8. How many students can be assessed in a community each shift?

9. Please describe the student nurses assessment process that you undertake at the ward/

hospital.

10. Please describe the preparation you do before students' clinical assessment.

		_
11. u	How many assessments are students required to ndertake when they are in your ward?	
	1 2 3 > 3 Other, please specify	
12.	On average, how long does the clinical assessment process take?	
13.	Where does the clinical assessment take place?	
	Laboratory	
	Puskesmas Community Other, please specify	7
14.	What is the minimum mark a student needs to get to pass the assessment?	
	□ 50 □ 60 □ 70 □ □ 0 Other, please specify)
15.	How many assessors will assess student nurses in th assessment process?	ıe
16.	Do you consider that you have enough time to assess each student?	5
	□ Yes □ No)
17.	Please describe the workload factors that hinder your assessment of student nurses.	

_____ _____ _____ 18. Please describe the factors that you believe effects the assessment of student nurses. ____ _____ _____ What other components that determine students' final 19. mark? _____ _____ _____ _____ _____ _____ _____

SECTION III

Instructions: For each of the following, please tick the box that most closely corresponds to your perspective.

	Statements	Never	Seldom	Some	Always
				time	
1	I assess students' cognitive				
	learning by using				
	observation.				
2	I assess students' cognitive				
	learning by written				
2	examination.				
3	lassess students cognitive				
1	Laggers students' compitive				
т	learning by simulation				
5	Lassess students' cognitive				
-	learning by self evaluation.				
6	I assess students'				
	psychomotor learning by				
	observation.				
7	I assess students'				
	psychomotor learning by				
0	written examination.				
8	1 assess students'				
	examination				
9	T aggegg students/				
2	psychomotor learning by				
	simulation.				
1	I assess students'				
0	psychomotor learning by self				
	evaluation.				
1	I assess students' affective				
1	learning by observation.				
1	I assess students' affective				
2	learning by written				
1	Examination.				
⊥ ג	learning by oral examination				
1	I assess students' affective				
$\frac{1}{4}$	learning by simulation.				
1	I assess students' affective				
5	learning by self evaluation.				

SECTION IV

Instruction: For each of the following, please check the box that most closely corresponds to your perspective.

	Statements	Never	Seld	Some	Always
			om	time	
				ន	
1	I use a check list to assess				
	students' clinical				
	performance.				
2	I use rating scales to assess				
	students' clinical				
	performance.				
3	I use video tapes to assess				
	students' clinical				
	performance.				
4	I use progress notes to				
	assess students' clinical				
	performance.				
5	I use a journal to assess				
	students' clinical				
	performance.				
6	I use a log book to assess				
	students' clinical				
	performance.				
7	I use paper and pencil test				
	to assess students' clinical				
	performance.				
8	I am satisfied with the				
	clinical assessment process.				
9	I feel sad if students fail				
	because of my judgement.				
1	I teel responsible it				
0	students fail because of my				
	judgement.				
1	I have no intention to fail				
1	students.	1			

--- Thank you for your participation in my study ---



SELF REPORTED QUESTIONNAIRE CLINICAL ASSESSMENT OF STUDENT NURSES IN JAKARTA, INDONESIA (for Student Nurses)

SECTI Insti tick:	ION I ructions: Please complete ing the most appropriate i	th res	e quest ponse.	ionnaire by
1.Wh	at year were you born?			
2.Ar	e you male or female?			
	□ Male		Female	
3.Wh	at is the highest educati	on	level y	you have completed?
	 Senior High School Bachelor of Nursing specify 		🔲 Di 🔲 Ot	ploma 3 Nursing her, please
SECTI Insti ticki	ION II ructions: Please complete ing the most appropriate o	th res	e quest ponse.	ionnaire by
1.	Places where you do clin	ica	l pract	ice:
	() Puskesmas () Comr	nun	ity	() Hospital
			Type A Type C Other,	☐ Type B ☐ Type D please specify
2.	What type of experience of hospital where you undert	can tak	you ga e clini	in from the cal practice?
	Observation onlyTotal patient care		Partial	patient care D Other, please

specify _____

3. How many patients' cases can you care for each day?

0		🔲 1-2 patients
3-4	patients	\Box > 4 patients

- 4. How many students are placed in a ward on a shift?
- 5. How many students can be assessed in a ward each shift?
- 6. How many students are placed in a community on a shift?
- 7. How many students can be assessed in a community each shift?
- 8. Please indicate the specialty area that you have completed and your grade.

	<50	51- 60	61- 70	71- 80	>80	Mark not qiven
Psychiatric						<u> </u>
Nursing						
Paediatric						
Nursing						
Maternity						
Nursing						
Community						
Nursing						
Medical						
Surgical						
Nursing						
Gerontic						
Nursing						
Family Nursing						
Emergency						
Nursing						
Nursing						
Management						

9. What area of nursing specialty are you currently undertaking clinical practice?

Psychiatric Nursing
 Paediatric Nursing
 Maternity Nursing
 Community
 Community
 Gerontic Nursing
 Emergency Nursing
 Medical Surgical Nursing
 Other, please

- 10. How long have you been undertaking clinical practice in this specialty?
- 11. How many assessments are done in the psychiatric nursing specialty?
- 12. How many assessments are done in the maternity nursing specialty?
- 13. How many assessments are done in the paediatric nursing specialty?
- 14. How many assessments are done in the community nursing specialty?
- 15. How many assessments are done in the medical surgical nursing specialty?
- 16. How many assessments are done in the gerontic nursing specialty?
- 17. How many assessments are done in the family nursing specialty?
- 18. How many assessments are done in the emergency nursing specialty?

19. ma	How many assessments are done in the nursing anagement specialty?
20.	How long does the clinical assessment process take?
21.	Where does the assessment take place?
	 Laboratory Community Other, please specify Hospital Puskesmas
22.	What is the minimum mark a student needs to get to pass the assessment in the psychiatric nursing specialty?
	□ 50 □ 60 □ 70 □ Other, please specify
23.	What is the minimum mark a student needs to get to pass the assessment in the maternity nursing specialty?
	50 60 70 0ther, please specify
24.	What is the minimum mark a student needs to get to pass the assessment in the paediatric nursing specialty?
	50 60 70 0ther, please specify
25.	What is the minimum mark a student needs to get to pass the assessment in the community nursing specialty?
	50 60 70 0ther, please specify
26.	What is the minimum mark a student needs to get to pass the assessment in the medical surgical nursing specialty?

	□ 50 □ 70 specify	<pre>G0 Other, please</pre>
27.	What is the minimum mark a st pass the assessment in the ge specialty?	udent needs to get to rontic nursing
	□ 50 □ 70 specify	<pre>G0 Other, please</pre>
28.	What is the minimum mark a st pass the assessment in the fa	udent needs to get to mily nursing specialty?
	□ 50 □ 70 specify	<pre>G0 Other, please</pre>
29.	What is the minimum mark a st pass the assessment in the em specialty?	udent needs to get to ergency nursing
	□ 50 □ 70 specify	<pre>G0 Other, please</pre>
30.	What is the minimum mark a st pass the assessment in the nu specialty?	udent needs to get to rsing management
	□ 50 □ 70 specify	<pre>G0 Other, please</pre>
31.	How many clinical instructors clinical assessment process?	assess students in the
32.	Do you get the same result fr	om all the assessors?
	Yes No	🛛 I don't know
33. ar	If you fail one assessment, w nother time?	ill you be assessed
	□ Yes □ No depends on (please specify)	Sometimes,

34.	Do you consider that you have enough time to be clinically assessed?
	🛛 Yes 💭 No
35.	Please describe what your clinical instructor does when you have failed the assessment?
36.	Does the assessment method vary in each area of nursing specialty?
	🛛 Yes 💭 No
	Please write a comment on how the assessment method varies.
37.	What factors do you think effect the clinical assessment process?

SECTION III

Instructions: For each of the following, please tick box that most closely corresponds to your perspective.

	Statements	Never	Seldom	Some time s	Always
1	Clinical instructors assess				
1	my cognitive learning by				
	observation				
2	Clinical instructors assess				
2	my cognitive learning by				
	written examination				
2	Clinical instructors assess				
5	my cognitive learning by oral				
	examination				
4	Clinical instructors assess				
т	my cognitive learning by				
	gimulation				
5	Clinical instructors assess				
5	my cognitive learning by self				
	evaluation				
6	Clinical instructors assess				
0	my psychomotor learning by				
	observation				
7	Clinical instructors assess				
'	my psychomotor learning by				
	written examination				
8	Clinical instructors assess				
0	my psychomotor learning by				
	oral examination.				
9	Clinical instructors assess				
2	my psychomotor learning by				
	simulation.				
1	Clinical instructors assess				
0	my psychomotor learning by				
-	self evaluation.				
1	Clinical instructors assess				
1	my affective learning by				
	observation.				
1	Clinical instructors assess				
2	my affective learning by				
	written examination.				
1	Clinical instructors assess				
3	my affective learning by oral				
	examination.				
1	Clinical instructors assess				
4	my affective learning by				
	simulation.				
1	Clinical instructors assess				
5	my affective learning by self				
	evaluation.				

SECTION IV

Instruction: For each of the following, please check the box that most closely corresponds to your perspective.

	Statements	Never	Seld om	Some time	Always
1	My clinical instructor uses a			5	
-	check list to assess my				
	clinical performance.				
2	My clinical instructor uses				
	rating scales to assess my				
	clinical performance.				
3	My clinical instructor uses				
	video tapes to assess my				
	clinical performance.				
4	My clinical instructor uses				
	progress notes to assess my				
	clinical performance.				
5	My clinical instructor uses a				
	journal to assess my clinical				
	performance.				
6	My clinical instructor uses a				
	log book to assess my				
	clinical performance.				
7	My clinical instructor uses				
	paper and pencil test to				
	assess my clinical				
	performance.				
8	1 am satisfied with the				
	clinical assessment process.				

--- Thank you for your participation in my study ---



KUESIONER "UJIAN KLINIK BAGI MAHASISWA KEPERAWATAN DI JAKARTA, INDONESIA" (untuk Instruktur Klinik)

BAGIAN I: KARAKTERISTIK RESPONDEN

jelaskan: ____

Instruksi: Lengkapi kuesioner dibawah ini dengan mengisi dan memberikan tanda (✔)pada jawaban yang paling sesuai dengan anda.
1. Umur: tahun
2.Jenis kelamin: 🗆 laki-laki 🛛 perempuan
3. Pendidikan tertinggi yang pernah diselesaikan: Diploma 3 Keperawatan S1 Keperawatan S1 Kesehatan S2 Keperawatan S2 Kesehatan Doktor Lain-lain, tolong jelaskan:
 4. Apa area kekhususan keperawatan yang anda bimbing? Keperawatan Jiwa Keperawatan Gerontik Keperawatan Keluarga Keperawatan Keluarga Keperawatan Anak Keperawatan Maternitas Keperawatan Medikal bedah Keperawatan Gawat darurat
u Manajemen keperawatan u Lain-lain, tolong

5. Sudah berapa lama anda menjadi instruktur klinik?

BAGIAN II: PRAKTIK DAN UJIAN KLINIK							
Instruksi: Lengkapi kuesioner dibawah ini dengan mengisi dan memberikan tanda (✔)pada jawaban yang paling sesuai dengan anda.							
1. Tempat anda membimbing mahasiswa:							
jelaskan:							
<pre>2. Berapa rata-rata jumlah pasien di tempat anda membimbing tiap hari?</pre>							
3. Berapa rata-rata jumlah pasien yang diasuh oleh mahasiswa dalam sehari?							
 4. Apa pengalaman klinik yang didapat mahasiswa dari tempat anda membimbing terkait dengan asuhan keperawatan kepada klien? □ Hanya observasi □ Asuhan keperawatan total □ Lain-lain, tolong jelaskan: 							
5.Berapa jumlah mahasiswa yang ditempatkan di satu ruang rawat dalam satu shift? Sebutkan mahasiswa							
6.Berapa jumlah mahasiswa yang diuji di satu ruang rawat dalam satu shift? Sebutkan mahasiswa							
7.Berapa jumlah mahasiswa yang ditempatkan di komunitas dalam satu shift? Sebutkan mahasiswa							
8.Berapa jumlah mahasiswa yang diuji di komunitas dalam satu shift? Sebutkan mahasiswa							
9. Tolong jelaskan persiapan yang anda lakukan sebelum melakukan ujian klinik bagi mahasiswa keperawatan.							

 10. ke me	Tolong jelaskan proses ujian klinik mahasiswa eperawatan yang biasa anda lakukan di tempat anda embimbing.
11. pi	Berapa kali ujian klinik dilakukan selama mahasiswa raktik di tempat anda membimbing? □ 1 □ 2 □ 3 □ > 3 □ Lain-lain, tolong jelaskan:
12.	Berapa lama biasanya proses ujian klinik dilakukan?
	Sebutkan jam.
13.	Dimana proses ujian klinik dilakukan? 🗆 Laboratorium 🛛 🗆 Laboratorium dan rumah sakit
	□ Rumah sakit □ Rumah sakit dan
	Puskesmas/Komunitas□ Puskesmas□ Puskesmas dan Komunitas□ Komunitas□ Lain-lain
14. di	Berapa nilai minimum ujian klinik untuk bisa lulus i area keperawatan yang anda bimbing? D 50 D 60 D 70 D Lain-lain, tolong jelaskan:

- 15. Berapa jumlah penguji klinik saat menguji mahasiswa di lahan praktik? Sebutkan _____ penguji klinik
- 16. Menurut anda, apakah waktu yang diberikan cukup untuk menguji tiap mahasiswa? 🛛 Ya

_

□ Tidak, tolong sebutkan alasannya:

17. Tolong jelaskan faktor-faktor beban kerja apa sajakah yang mengganggu proses ujian klinik yang anda lakukan.

18.	. Menurut anda, faktor apa saja yang dapat mempengaruhi proses ujian klinik bagi mahasiswa keperawatan?	
19.	. Selain ujian klinik, komponen lain apa saja yang menentukan nilai akhir mata ajar keperawatan yang bimbing?	y anda

BAGIAN III: METODE UJIAN KLINIK

Instruksi: Berikan tanda (✓) pada kotak yang sesuai dengan pendapat anda mengenai metode ujian klinik yang anda gunakan untuk mengkaji kemampuan klinik mahasiswa.

No.	Pernyataan	Tidak pernah	Jarang	Kadang- kadang	Selalu
1.	Saya mengkaji kemampuan kognitif mahasiswa dengan metode observasi .				
2.	Saya mengkaji				

	kemampuan kognitif mahasiswa dengan ujian tulis .		
3.	Saya mengkaji kemampuan kognitif mahasiswa dengan ujian lisan .		
4.	Saya mengkaji kemampuan kognitif mahasiswa dengan simulasi .		
5.	Saya mengkaji kemampuan kognitif mahasiswa dengan metode evaluasi diri sendiri .		
6.	Saya mengkaji kemampuan psikomotor mahasiswa dengan metode observasi .		
7.	Saya mengkaji kemampuan psikomotor mahasiswa dengan ujian tulis .		
8.	Saya mengkaji kemampuan psikomotor mahasiswa dengan ujian lisan .		
9.	Saya mengkaji kemampuan psikomotor mahasiswa dengan simulasi .		
10.	Saya mengkaji kemampuan psikomotor mahasiswa dengan metode evaluasi diri sendiri .		
11.	Saya mengkaji kemampuan afektif mahasiswa dengan metode observasi .		
12.	Saya mengkaji kemampuan afektif mahasiswa dengan ujian tulis .		
13.	Saya mengkaji kemampuan afektif mahasiswa dengan		

	ujian lisan.		
14.	Saya mengkaji kemampuan afektif mahasiswa dengan simulasi .		
15.	Saya mengkaji kemampuan afektif mahasiswa dengan metode evaluasi diri sendiri .		

BAGIAN IV: ALAT UJI UJIAN KLINIK

Instruksi: Berikan tanda (✓) pada kotak yang sesuai dengan pendapat anda mengenai alat uji ujian klinik yang anda gunakan saat menilai penampilan klinik mahaiswa.

No.	Pernyataan	Tidak	Jarang	Kadang-	Selalu
		pernah		kadang	
1.	Saya menggunakan check list untuk menilai penampilan klinik mahasiswa.				
2.	Saya menggunakan rating scale untuk menilai penampilan klinik mahasiswa.				
3.	Saya menggunakan rekaman video untuk menilai penampilan klinik mahasiswa.				
4.	Saya menggunakan catatan perkembangan untuk menilai penampilan klinik mahasiswa.				
5.	Saya menggunakan laporan klinik untuk menilai penampilan klinik mahasiswa.				
6.	Saya menggunakan log book untuk menilai penampilan klinik mahasiswa.				
7.	Saya menggunakan ujian tulis untuk menilai penampilan klinik mahasiswa.				

8.	Saya puas dengan proses penilaian klinik yang dilakukan pada mahasiswa.		
9.	Saya sedih bila mahasiswa tidak lulus ujian karena penilaian saya.		
10.	Saya merasa bertanggung jawab bila mahasiswa gagal karena penilaian saya.		
11.	Saya tidak pernah berniat membuat mahasiswa gagal.		

--- Ferima kasih atas partisipasi saudara dalam penelitian ini ---



KUESIONER "UJIAN KLINIK BAGI MAHASISWA KEPERAWATAN DI JAKARTA, INDONESIA" (untuk Mahasiswa Keperawatan)

BAGIAN I: KARAKTERISTIK RESPONDEN

Instruksi: Lengkapi kuesioner dibawah ini dengan mengisi dan memberikan tanda (\checkmark) pada jawaban yang paling sesuai dengan saudara.

1. Umur: _____ tahun

2. Jenis kelamin: 🗆 laki-laki 🔹 🗆 perempuan

3. Pendidikan tertinggi sebelum Sarjana Keperawatan:

 Image: SMU
 Image: Diploma 3 Keperawatan

 Image: Diploma 3 Keperawatan
 Image: Diploma 3 Keperawatan
 </tr

BAGIAN II: PRAIKTIK DAN UJIAN KLINIK

Instruksi: Lengkapi kuesioner dibawah ini dengan mengisi dan memberikan tanda (\checkmark) pada jawaban yang paling sesuai dengan saudara.

1. Tempat praktik klinik:
C D Lain-lain tolong
jelaskan:
2. Apa pengalaman klinik yang saudara dapatkan terkait dengan asuhan keperawatan kepada klien? 🗆 Hanya observasi 🔹 🗆 Asuhan keperawatan
parsial 🗆 Asuhan keperawatan total 🛛 🛛 Lain-lain, tolong jelaskan:

3. Berapa jumlah pasien yang saudara berikan asuhan keperawatan dalam sehari?

0		🛛 1-2 orang
3-4	orang	\Box > 4 orang

- 4. Berapa jumlah mahasiswa yang ditempatkan di satu ruang rawat dalam satu shift? Sebutkan _____ mahasiswa
- 5. Berapa jumlah mahasiswa yang diuji di satu ruang rawat dalam satu shift? Sebutkan _____ mahasiswa
- 6. Berapa jumlah mahasiswa yang ditempatkan di komunitas dalam satu shift? Sebutkan _____ mahasiswa
- 7. Berapa jumlah mahasiswa yang diuji di komunitas dalam satu shift? Sebutkan _____ mahasiswa
- 8. Sebutkan area keperawatan yang telah saudara selesaikan selama periode profesi ini dan nilai yang saudara dapat.

	<50	51- 60	61- 70	71- 80	>80	Nilai belum diberikan
Keperawatan Jiwa						
Keperawatan Gerontik						
Keperawatan Keluarga						
Keperawatan Komunitas						
Keperawatan Anak						
Keperawatan Maternitas						
Keperawatan Medikal Bedah						
Keperawatan Gawat darurat						
Manajemen Keperawatan						

9. Sebutkan area keperawatan yang sekarang sedang saudara jalani.

🛛 Keperawatan Jiw	a	Keperaw	vatan	Gerontik
🗆 Keperawatan Kel	uarga	🗆 Ke	eperav	vatan
Komunitas				
🗆 Keperawatan Ana	k	Keperaw	vatan	
Maternitas				
□ Keperawatan Med	ikal Bedah	🛛 Ke	eperav	vatan
Gawat Darurat				
🗆 Manajemen Keper	awatan	Lain-la	ain, t	colong
jelaskan:				

- 10. Sudah berapa lama saudara melakukan praktik klinik di area ini? Sebutkan minggu
- 11. Berapa kali ujian klinik dilakukan di Keperawatan Jiwa? Sebutkan _____ kali.
- 12. Berapa kali ujian klinik dilakukan di Keperawatan Gerontik? Sebutkan kali.
- 13. Berapa kali ujian klinik dilakukan di Keperawatan Keluarga? Sebutkan _____ kali.
- 14. Berapa kali ujian klinik dilakukan di Keperawatan Komunitas? Sebutkan kali.
- 15. Berapa kali ujian klinik dilakukan di Keperawatan Anak? Sebutkan _____ kali.
- 16. Berapa kali ujian klinik dilakukan di Keperawatan Maternitas? Sebutkan _____ kali.
- 17. Berapa kali ujian klinik dilakukan di Keperawatan Medikal Bedah? Sebutkan kali.
- 18. Berapa kali ujian klinik dilakukan di Keperawatan Gawat Darurat? Sebutkan kali.
- 19. Berapa kali ujian klinik dilakukan di Manajemen Keperawatan? Sebutkan _____ kali.
- 20. Berapa lama biasanya proses ujian klinik dilakukan? Sebutkan _____ jam.
- 21. Dimana proses ujian klinik dilakukan?

 □ Laboratorium
 □ Laboratorium dan rumah sakit

 □ Rumah sakit
 □ Rumah sakit dan

 Puskesmas/Komunitas
 □ Puskesmas dan Komunitas

 □ Komunitas
 □ Lain-lain

- 24. Berapa nilai minimum ujian klinik untuk bisa lulus di Keperawatan Keluarga? □ 50 □ 60 □ 70 □ Lain-lain, tolong jelaskan: ______

25. Berapa nilai minimum ujian klinik untuk bisa lulus di Keperawatan Komunitas? D 50 D 60 D 70 D Lain-lain, tolong jelaskan:
26. Berapa nilai minimum ujian klinik untuk bisa lulus di Keperawatan Anak?
27. Berapa nilai minimum ujian klinik untuk bisa lulus di Keperawatan Maternitas? D 50 D 60 D 70 D Lain-lain, tolong jelaskan:
28. Berapa nilai minimum ujian klinik untuk bisa lulus di Keperawatan Medikal Bedah? D 50 D 60 D 70 D Lain-lain, tolong jelaskan:
29. Berapa nilai minimum ujian klinik untuk bisa lulus di Keperawatan Gawat Darurat? D 50 D 60 D 70 D Lain-lain, tolong jelaskan:
30. Berapa nilai minimum ujian klinik untuk bisa lulus di Manajemen Keperawatan?
31. Berapa jumlah penguji klinik saat menguji mahasiswa di lahan praktik? Sebutkan penguji klinik
32. Apakah saudara mendapatkan nilai yang sama dari penguji klinik? □ Ya □ Tidak □ Tidak tahu
33. Bila saudara tidak lulus, apakah saudara akan diuji diwaktu lain?

155

34.	Menurut	saudara,	apakah	waktu	yang	diberikan	cukup
un	tuk ujia	n klinik?					
	🛛 Ya	🛛 Tida	k				

35.	Jelaskan	apa	yan	g dila	kukan	oleh	instruktur	klinik
bi	la saudar	a ti	dak	lulus	ujian	•		

36	Apakah	metode	uiian	klinik	berbeda	untuk	tiap	area
ke	perawat	an?	ajian		Derbedd	ancan	crap	arca
	¯□ Ya	ПТ	idak					

Jika	va.	tolong	beri	penjelasan	perbedaannva.
0 7120	101	corong	NCTT	penjeraban	perseduanitya.

37. Menurut saudara, faktor apa saja yang bisa mempengaruhi proses ujian klinik?

BAGIAN III: METODE UJIAN KLINIK

Instruksi: Berikan tanda (\checkmark) pada kotak yang sesuai dengan pendapat saudara mengenai metode ujian klinik yang digunakan oleh instruktur klinik untuk mekaji kemampuan klinik saudara.

No.	Pernyataan	Tidak	Jarang	Kadang-	Selalu
1		pernan		kadang	
⊥.	Instruktur klinik				
	hengkaji kemampuan				
	cava dengan metode				
	observasi				
2	Instruktur klinik				
2.	mengkaji kemampuan				
	kognitif (pengetahuan)				
	sava dengan ujian				
	tulis.				
3.	Instruktur klinik				
	mengkaji kemampuan				
	kognitif (pengetahuan)				
	saya dengan ujian				
	lisan.				
4.	Instruktur klinik				
	mengkaji kemampuan				
	kognitif (pengetahuan)				
	saya dengan simulasi .				
5.	Instruktur klinik				
	mengkaji kemampuan				
	kognitif (pengetahuan)				
	saya dengan metode				
	evaluasi diri sendiri.				
6.	Instruktur klinik				
	mengkaji kemampuan				
	psikomotor				
	(ketrampilan klinik)				
	saya dengan metode				
	ODServas1.				
7.	Instruktur klinik				
	mengkaji kemampuan				
	psikomotor				
	(Keurampilan Klinik)				
	saya dengan ujian				
-	LUIIS.				
8.	INSTRUKTUR KIINIK				

	mengkaji kemampuan		
	psikomotor		
	(ketrampilan klinik)		
	saya dengan ujian		
	lisan.		
9.	Instruktur klinik		
	mengkaji kemampuan		
	psikomotor		
	(ketrampilan klinik)		
	saya dengan simulasi .		
10.	Instruktur klinik		
	mengkaji kemampuan		
	psikomotor		
	(ketrampilan klinik)		
	saya dengan metode		
	evaluasi diri sendiri.		
11.	Instruktur klinik		
	mengkaji kemampuan		
	afektif (berperilaku)		
	saya dengan metode		
	observasi.		
12.	Instruktur klinik		
	mengkaji kemampuan		
	afektif (berperilaku)		
	saya dengan ujian		
	tulis.		
13.	Instruktur klinik		
	mengkaji kemampuan		
	afektif (berperilaku)		
	saya dengan ujian		
	lisan.		
14.	Instruktur klinik		
	mengkaji kemampuan		
	afektif (berperilaku)		
	saya dengan simulasi .		
15.	Instruktur klinik		
	mengkaji kemampuan		
	atektif (berperilaku)		
	saya dengan metode		
1	evaluasi diri sendiri.		

BAGIAN IV: ALAT UJI UJIAN KLINIK

Instruksi: Berikan tanda (✓) pada kotak yang sesuai dengan pendapat saudara mengenai alat uji ujian klinik yang digunakan oleh instruktur klinik saat menilai penampilan klinik saudara.

No.	Pernyataan	Tidak pernah	Jarang	Kadang- kadang	Selalu
1.	Instruktur klinik menggunakan check list untuk menilai penampilan klinik saya.				

2.	Instruktur klinik menggunakan rating scale untuk menilai penampilan klinik saya		
3.	Instruktur klinik menggunakan rekaman video untuk menilai penampilan klinik saya.		
4.	Instruktur klinik menggunakan catatan perkembangan untuk menilai penampilan klinik saya.		
5.	Instruktur klinik menggunakan laporan klinik untuk menilai penampilan klinik saya.		
6.	Instruktur klinik menggunakan log book untuk menilai penampilan klinik saya.		
7.	Instruktur klinik menggunakan ujian tulis untuk menilai penampilan klinik saya.		
8.	Saya puas dengan proses penilaian klinik yang dilakukan pada saya.		

--- Ferima kasih atas partisipasi saudara dalam penelitian ini ---

ACU National

Australian Catholic University Limited ABN 15 050 192 660 Melbourne Campus (St Patrick's) 115 Victoria Parade Fitzroy Vic 3065 Locked Bag 4115 Fitzroy MCD VIC 3065 Telephone 03 9953 3000 Facsimile 03 9953 3005 www.acu.edu.au

INFORMATION LETTER TO PARTICIPANTS

TITLE OF PROJECT: An Investigation of the Clinical Assessment Processes of Student Nurses in Jakarta, Indonesia PRINCIPAL SUPERVISOR: Ms Maria Miller CO-SUPERVISOR: Dr Colleen Rolls STUDENT RESEARCHER: Dessie Wanda COURSE: Master of Nursing (Research)

Dear Participant,

My name is Dessie Wanda. I have been employed as a lecturer at Faculty of Nursing, University of Indonesia, and am currently a postgraduate student at School of Nursing and Midwifery, ACU National Australia. I am currently studying Master of Nursing by research. The focus of my research is about the assessment of student nurses in clinical practice in Jakarta, Indonesia.

You are invited to participate in this research which aims to investigate the clinical assessment of student nurses in professional stage in four (4) nursing education institutions in Jakarta, Indonesia. Being involved in this study, will help the Indonesian nursing profession development particularly nursing education, through improvements in clinical assessment for student nurses. Participants will be able to share their perceptions on clinical assessment issues.

As a participant in the study, you will be expected to fill in a questionnaire which will take 20-30 minutes to complete. Completion of the questionnaire will signify consent to participate in the study. No names or identifying information will be obtained on the questionnaire. Anonymity will be maintained during the study. All questionnaires will have a code attached. Participation in this research is voluntary. The results of the study will be published in a thesis. The thesis will only contain aggregate data. Therefore, no identifying information will be mentioned.

If you have any questions about the research, before or after participating, please contact the Principal Supervisor, Ms Maria Miller, on telephone number +61 3 9953 3178 in the School of Nursing and Midwifery, St Patrick's Campus at the Australian Catholic University, 115 Victoria Parade, FITZROY 3065.

This study has been approved by the Human Research Ethics Committee at Australian Catholic University. 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 Student Researcher and Principal Supervisor have not been able to satisfy, you may write to:

Chair, Human Research Ethics Committee C/o Research Services Australian Catholic University Locked Bag 4115 FITZROY VIC 3065 Tel: +61 3 9953 3157 Fax: +61 3 9953 3315

Any complaint will be treated in confidence and fully investigated. The participant will be informed of the outcome.

Dessie Wanda Student Researcher Ms Maria Miller Principal Supervisor

ACU National

Australian Catholic University Limited ABN 15 050 192 660 Melbourne Campus (St Patrick's) 115 Victoria Parade Fitzroy Vic 3065 Locked Bag 4115 Fitzroy MCD VIC 3065 Telephone 03 9953 3000 Facsimile 03 9953 3005 www.acu.edu.au

LEMBAR INFORMASI UNTUK RESPONDEN PENELITIAN

JUDUL PENELITIAN: Investigasi terhadap proses ujian klinik bagi mahasiswa keperawatan di Jakarta, Indonesia PEMBIMBING UTAMA: Ms Maria Miller PEMBIMBING KEDUA: Dr Colleen Rolls MAHASISWA PENELITI: Dessie Wanda PROGRAM: Master of Nursing (Research)

Dengan hormat,

Nama saya Dessie Wanda. Saya bekerja sebagai staf pengajar di Fakultas Ilmu Keperawatan, Universitas Indonesia, dan sekarang saya sedang menjalani program Master of Nursing (Research) di School of Nursing and Midwifery, ACU National Australia.

Fokus penelitian saya adalah tentang ujian klinik bagi mahasiswa keperawatan. Penelitian ini bertujuan untuk mengkaji proses ujian klinik yang dilakukan terhadap mahasiswa keperawatan pada tingkat profesi di 4 (empat) institusi pendidikan tinggi keperawatan di Jakarta Indonesia.

Saudara diharapkan dapat berpartisipasi dalam penelitian ini Dengan keterlibatan saudara dalam penelitian ini, diharapkan perkembangan profesi keperawatan di Indonesia, khususnya pendidikan keperawatan klinik, dapat terjadi melalui perubahan-perubahan yang akan dilakukan berkaitan dengan ujian klinik bagi mahasiswa keperawatan.

Saudara diharapkan dapat mengisi kuesioner yang telah disediakan. Waktu pengisian kuesioner berkisar antara 20-30 menit. Dengan melengkapi kuesioner, berarti Saudara telah menunjukkan kesediaan untuk menjadi responden dalam penelitian ini. Tidak akan ada nama atau informasi yang menunjukkan identitas saudara selama penelitian berlangsung. Kesediaan saudara untuk berpartisipasi dalam penelitian ini adalah sukarela. Hasil penelitian ini akan dipublikasikan dalam bentuk laporan tesis. Tesis tersebut tidak akan mengandung suatu informasi yang menunjukkan identitas saudara.

Jika Saudara ingin menanyakan sesuatu hal yang berkaitan dengan penelitian ini, sebelum atau sesudah penelitian berlangsung, Saudara dapat menghubungi Pembimbing Utama Peneliti, Ms Maria Miller, di nomor telepon 001 61 3 9953 3178 di School of Nursing and Midwifery, St Patrick's Campus, Australian Catholic University, 115 Victoria Parade, FITZROY 3065.

Penelitian ini telah mendapat ijin dari Komite Etik Penelitian terhadap Manusia di ACU National. Bila Saudara ingin menyampaikan sesuatu yang berkaitan dengan bagaimana Saudara diperlakukan dalam penelitian ini, atau bila Saudara memiliki pertanyaaan yang tidak bisa dijawab dengan memuaskan oleh Mahasiswa Peneliti atau Pembimbing Utama Peneliti, Saudara dapat mengirimkan surat kepada:

Chair, Human Research Ethics Committee C/o Research Services Australian Catholic University Locked Bag 4115 FITZROY VIC 3065 Tel: 001 61 3 9953 3157 Fax: 001 61 3 9953 3315

Setiap pertanyaan atau keluhan yang disampaikan bersifat rahasia dan akan segera ditindaklanjuti. Selanjutnya, Saudara akan diberitahukan hasil dari tindak lanjut tersebut.

Dessie Wanda Student Researcher Ms Maria Miller Principal Supervisor Australian Catholic University Brisbane Sydney Canberra Ballarat Melbourne

APPENDIX G

ACU National

Human Research Ethics Committee

Committee Approval Form

Principal Investigator/	Supervisor: Ms	Maria Miller	Melbourne (Campus
Co-Investigators:	Melbourne	Campus		
Student Researcher	Dossio Wanda	Malhaurna (amous	

Ethics approval has been granted for the following project: An investigation of clinical assessment processes of student nurses in Jakarta, Indonesia

for the period: 5th July 2006 - 31st August 2006

Human Research Ethics Committee (HREC) Register Number: V200506 70

The following <u>standard</u> conditions as stipulated in the *National Statement on Ethical Conduct in Research Involving Humans* (1999) apply:

- 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
- 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.

To Mushin

Signed: (Research Services Officer, Melbourne Campus)

Date: 6.7.2006

(Committee Approval.dot @ 15/10/04)

162 Page 1 of 1


STIK SC SEKOLAH TINGGI ILMU KESEHATAN Sint Carolus Sint Carolus School of Health Sciences of Higher Education

JI. Salemba Raya 41, JAKARTA 10440 - INDONESIA, Phone : (62-21) 3904441 Ext. 2368 and 3910594 Telfax : (62-21) 3924094 and Fax. : (62-21) 3154184, E-mail : stiksc@stik-sintcarolus.ac.id

Jakarta, June 12, 2006

· 217/Um Exs/STIK-SC/VI/2006 No. · Letter of Permission to Conduct Research Re

Dessie Wanda Australian Catholic University Limited ABN 15 050 192 660 Melbourne Campus (St Patrick's) 115 Victoria Parade Fitzroy VIC 3065 Locked Bag 4115 Fitzroy MDC VIC 3065

Dear Ms. Wanda.

With regard to your letter of request dated on May 26, 2006. I am pleased to inform that you are welcomed and allowed to conduct research entitle The assessment of student nurses in clinical practice in Jakarta, Indonesia, in our institution.

Please note that you should submite one copy of thesis.

Thank you very much for your cooperation.



Cc

- First Vice Director of Academic Affairs of STIK Sint Carolus
- Head of BSN Course of STIK Sint Carolus

Page 1 of 1

```
From: Diana Setyodewi <diana_setyodewi@yahoo.co.id>
To: si_smiley@student.acu.edu.au
CC:
Date: Mon, 26 Jun 2006 11:34:04 +0700 (ICT)
Subject: Terusan: research
```

Perhatikan: pesan yang diteruskan sudah dilampirkan.

```
Apakah Anda Yahoo!?
Lelah menerima spam? Surat Yahoo! memiliki perlindungan terbaik terhadap spam
http://id.mail.yahoo.com
```

Dear Dessi,

Print

Refer to your letter dated May,16,2006 on requesting a permission to conduct research at Faculty of Nursing University of Indonesia, prinsiply, I support your plan and allow you to conduct research at Faculty of Nursing University of Indonesia.

This letter also approve your detail plan on the research activiting.

Best of luck.

Dean Faculty of Nursing UI

Prof. Dra. Elly Nurachmah, SKp, M.App.Sc, DNSc, RN

Apakah Anda Yahoo!? Kunjungi halaman depan Yahoo! Indonesia yang baru!

http://mail.student.acu.edu.au/Xad05cc999dcf9bce929861a08399/print.39408.cgi?mbx=... 29/06/2006

164

INSTITUTE OF HEALTH SCIENCES

Jakarta, June 21st, 2006

No. : 054/Ketua/SE/STIKes-Bin/VI/06 Subject : Research

Mrs. Dessie Wanda Master Student School of Nursing and Midwifery ACU National Australia St. Patrick's Campus

Dear Mrs. Wanda,

With reference to your e-mail dated June 2, 2006 concerning approval to conduct a study entitled **An Investigation of Clinical Assessment Processes of Student Nurses in Jakarta, Indonesia** at STIKes Binawan, herewith, we are pleased to inform you that we have no objection to the study.

Please feel free to contact Mr. Masfuri (Vice Dean of Nursing Program) prior to the study for further arrangement

With my best regards,

Prof. Dr. Azrul Azwar, dr, MPH Chancellor of Binawan Institute Health of Science

Cc : Mr. Masfuri (Vice Dean of Nursing Program)

REFERENCES

- Alderson, J. C., & Wall, D. (1993). Does washback exist? *Applied Linguistics*, 14(2), 115-129.
- Ansari, W. (2002). Student nurse satisfaction levels with their courses: Part I effects of demographic variables. *Nurse Education Today*, 22, 159-170.
- Assosiasi Institusi Pendidikan Ners Indonesia. (2005). *Profil organisasi*. Retrieved September 15, 2006, from <u>http://www.aipni.org/page.php?bahasa=id&display=statis&sub=organizationprofile</u>
- Atkinson, F. I. (2000). The research process in nursing. In D. F. S. Cormack, *The research process in nursing* (4th ed., pp. 263-274). Oxford: Blackwell Science.
- Australian Nursing Council. (1992). ANC National Competency Standards for the Registered Nurse, Canberra: ANC.
- Australian Nursing & Midwifery Council. (2005). *National competency standards for the registered nurse*. Retrieved September 15, 2006, from http://www.anmc.org.au/docs/Competency_standards_RN..pdf
- Babbie, E. (1973). Survey research methods (2nd ed.). California: Wadsworth Pub. Co.
- Barnard, A. G., & Dunn, S. V. (1994). Issues in the organization and structure of clinical education for undergraduate nursing programs. *Journal of Nursing Education*, 33(9), 420-422.
- Bartlett, H., Simonite, V., Westcott, E., & Taylor, H. (2000). A comparison of the nursing competence of graduates and diplomates from UK nursing programmes. *Journal of Clinical Nursing*, *9*(3), 369-379.
- Badan Pusat Statistik. (2000). *Population Density per Square Kilometer by Province*. Retrieved September 2, 2006, from <u>http://www.bps.go.id/sector/population/table3.shtml</u>
- Badan Pusat Statistik. (2003). *Health*. Retrieved September 2, 2006, from http://www.bps.go.id/sector/socwel/table1.shtml

- Billings, D. M., & Halstead, J. A. (2005). *Teaching in nursing: A guide for faculty* (2nd ed.). St. Louis: Elsevier Saunders.
- Brown, N. (2000). What are the criteria that mentors use to make judgements on the clinical performance of student mental health nurses? An exploratory study of the formal written communication at the end of clinical nursing place modules. *Journal of Psychiatric and Mental Health Nursing*, 7, 407-416.
- Burns, N., & Grove, S. K. (2005). *The practice of nursing research: Conduct, critique, and utilization*. St. Louis: Elsevier/Saunders.
- Calman, L., Watson, R., Norman, I., Redfern, S., & Murrels, T. (2002). Assessing practice of student nurses: Methods, preparation of assessors and student views. *Journal of Advanced Nursing*, *38*(5), 516-523.
- Chambers, M. A. (1998). Some issues in the assessment of clinical practice: A review of the literature. *Journal of Clinical Nursing*, *7*, 201-208.
- Chapman, H. (1999). Some important limitations of competency-based education with respect to nurse education: An Australian perspective. *Nurse Education Today*, 19, 129-135.
- Chun-Heung, L., & French, P. (1997). Education in the practicum: A study of the ward learning climate in Hong Kong. *Journal of Advanced Nursing*, 26(3), 455-462.
- Clare, J., Edwards, H., Brown, D., & White, J. (2003). Evaluating clinical learning environments: Creating education-practice partnerships & clinical education benchmarks for nursing. Adelaide: School of Nursing & Midwifery, Flinders University.
- Dempsey, P. A., & Dempsey, A. D. (1992). Nursing research with basic statistical applications. Boston: Jones & Barlett.
- Dolan, G. (2003). Assessing student nurse clinical competency: Will we ever get it right? *Journal of Clinical Nursing*, *12*, 132-141.
- Drennan, J. (2002). An evaluation of the role of the Clinical Placement Coordinator in student nurse support in the clinical area. *Journal of Advanced Nursing*, 40(4), 475-483.

- Duffield, K. E., & Spencer, J. A. (2002). A survey of medical students' view about the purposes and fairness of assessment. *Medical Education*, *36*, 879-886.
- Elliot, D. (2003). Research and professional practice. In Z. Schneider, D. Elliot, G. LoBiondo-Wood & J. Haber, *Nursing research: Methods, critical appraisal and utilisation* (2nd ed., pp. 3-20). Sydney: Mosby.
- Elliot, D., & Hayes, L. (2003). Observational designs and methods. In Z. Schneider, D. Elliot, G. LoBiondo-Wood & J. Haber, *Nursing research: Methods, critical appraisal and utilisation* (2nd ed., pp. 295-315). Sydney: Mosby.
- Ferguson, S. (1996). The lived experience of clinical educators. *Journal of Advanced Nursing*, 23(4), 835-841.
- Fowler, F. J. (1993). Survey research methods (2nd ed.). Newbury Park: Sage Publications.
- Fulbrook, P. (2003). Developing best practice in critical care nursing: Knowledge, evidence and practice. *Nursing in Critical Care*, 8(3), 96-102.
- Gartinah, T., Sitorus, R., & Irawaty, D. (n.d.) Pelayanan profesionalisme keperawatan yang didukung oleh ilmu pengetahuan dan teknologi. Retrieved September 2, 2006, from <u>http://www.inna-ppni.or.id/index.php?name=News&file=article&sid=76</u>
- Gibbs, G., Lucas, L., & Spouse, J. (1997). The effect of class size and form of assessment on nursing students' performance, approaches to study and course perceptions. *Nurse Education Today*, *17*(4), 311-318.
- Gicnac-Caille, A. M., & Oermann, M. H. (2001). Student and faculty perceptions of effective clinical instructors in ADN program. *Journal of Nursing Education*, 40(8), 347-353.
- Hager, P., Gonczi, A., & Athanasou, J. (1994). General issues about assessment of competence. *Assessment and Evaluation in Higher Education*, 19(1), 3-16.
- Hart, G., & Rotem, A. (1994). The best and the worst: Students' experiences of clinical education. *The Australian Journal of Advanced Nursing*, 11(3), 26-33.
- Hennessy, D., Hicks, C., Hilan, A., & Kawonal, Y. (2006). The training and development needs of nurses in Indonesia: Paper 3 of 3. *Human Resources for Health*, 4(10), 1-14.

Indonesian National Nurse Association. (2006a). *Safe staffing dalam pelayanan kesehatan menyelamatkan kehidupan dan penghematan dana*. Retrieved September 15, 2006, from http://www.inna-ppni.or.id/index.php?name=News&file=article&sid=46

- Indonesian National Nurse Association. (2006b). *Lokakarya nasional pendidikan tinggi keperawatan tentang kurikulum inti pendidikan sarjana keperawatan*. Retrieved September 15, 2006, from <u>http://www.inna-ppni.or.id/index.php?name=News&catid=18</u>
- IP, W. Y., & Chan, D. S. K. (2004). Hong Kong nursing students' perception of the clinical environment: A questionnaire survey. *International Journal of Nursing Studies*, 42, 665-672.
- Kelly, B., & Long, A. (2000). Quantity of quality? Nurse Researcher, 7(4), 53-67.
- Kermode, S. (2006). Is nurse education sexist? An exploratory study. *Contemporary Nurse*, 22, 66-74.
- Kevin, J. (2006). Problems in the supervision and assessment of student nurses: Can clinical placement be improved? *Contemporary Nurse*, 22, 36-45.
- Kingma, M. (2001). Nursing migration: Global treasure hunt or disaster-in-the-making? *Nursing Inquiry*, 8(4), 205-212.
- Knox, J., & Mogan, J. (1985). Important clinical teacher behaviors as perceived by university nursing faculty, students, and graduates. *Journal of Advanced Nursing*, *10*, 25-30.
- Lankshear, A., & Nicklin, P. (2000). Methods of assessment. In P. J. Nicklin & N. Kenworthy (Eds.), *Teaching and assessing in nursing practice: An experiential approach* (3rd ed., pp. 54-69). London: Harcourt Publisher Limited.
- LoBiondo-Wood, G. & Haber, J. (2006). Nonexperimental designs. In G. LoBiondo-Wood & J. Haber, *Nursing research: Methods, critical appraisal for evidence-based practice* (6th ed., pp. 238-259). St. Louis: Mosby Inc.
- Mahara, M. S. (1998). A perspective on clinical evaluation in nursing education. *Journal* of Advanced Nursing, 28(6), 1339-1346.

- Major, D. A. (2005). OSCEs seven years on the bandwagon: The progress of an objective structured clinical evaluation programme. *Nurse Education Today*, *25*, 442-454.
- Milligan, F. (1998). Defining and assessing competence: The distruction of outcomes of the importance of educational process. *Nurse Education Today*, *18*, 273-280.
- Monti, E. J., & Tingen, M. S. (1999). Multiple paradigms of nursing science. Advances in Nursing Science, 21(4), 64-80.
- Morton-Cooper, A., & Palmer, A. (1993). *Mentoring and preceptorship: A guide to support roles in clinical practice*. London: Blackwell Scientific Publications.
- Neary, M. (1997). Defining the role of assessors, mentors and supervisors: Part 2. *Nursing Standard*, *11*(43), 34-38.
- Neary, M. (1999). Preparing assessors for continuous assessment. *Nursing Standard*, *13*(18), 1-16.
- Newble, D., & Cannon, R. (1989). A handbook for teachers in universities & colleges: A guide to improving teaching methods. London: Kogan Page.
- Nicklin, P., & Lankshear, A. (2000). The principles of assessment. In P. J. Nicklin & N. Kenworthy (Eds.), *Teaching and assessing in nursing practice: An experiential approach*. (3rd ed., pp. 43-53). London: Harcourt Publisher Limited.
- Papp, I., Markkanen, M., & Bonsdorff, M. (2003). Clinical environment as a learning environment: Student nurses' perceptions concerning clinical learning experiences. *Nurse Education Today*, 23(4), 262-268.
- Parish, S. J., Ramaswamy, M., Stein, M. R., Kachur, E. K., & Arnsten, J. H. (2006). Teaching about substance abuse with objective structured clinical exams. *Journal* of General Internal Medicine, 21(5), 453-459.
- Polit, D. F., & Beck, C. T. (2004). *Nursing research : principles and methods* (7th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Polit, D. F., & Beck, C. T. (2006). *Essentials of nursing research: Methods, appraisal, and utilization* (6th ed.). Philadelphia: Lippincott Williams & Wilkins.

- Polit, D. F., & Hungler, B. P. (1999). *Nursing research : principles and methods* (6th ed.). Philadelphia: Lippincott.
- Pusat Pendidikan Tenaga Kesehatan. (2000). *Pendahuluan*. Retrieved September 2, 2006, from <u>http://www.pusdiknakes.or.id/info/progsus/pendahuluan.php3</u>
- Ramsden, P. (2003). *Learning to teach in higher education* (2nd ed.). London: RoutledgeFalmer.
- Reilly, D. E., & Oermann, M. H. (1992). *Clinical teaching in nursing education*. New York: Publications Dev. Company.
- Roberts, K., & Taylor, B. (2002). *Nursing research processes: An Australian perspective* (2nd ed.). Melbourne: Nelson Australia Pty. Limited.
- Rodeghier, M. (1996). Surveys with confidence: A practical guide to survey research using SPSS. Chicago: SPSS.
- Roemer, L., Wuntu, S., & Heryanti, T. (1992). Nursing education in Indonesia. *World Health Forum, 13, 49-51.*
- Rushton, P., & Eggett, D. (2003). Comparison of written and oral examinations in a baccalaureate medical-surgical nursing course. *Journal of Professional Nursing*, 19(3), 142-148.
- Salamonson, Y., & Andrew, S. (2006). Academic performance in nursing students: Influence of part-time employment, age and ethicity. *Journal of Advanced Nursing*, 55(3), 342-251.
- Schneider, Z. (2003). Approaches in quantitative research. In Z. Schneider, D. Elliot, G. LoBiondo-Wood & J. Haber, *Nursing research: Methods, critical appraisal and utilisation* (2nd ed., pp. 3-20). Sydney: Mosby.
- Schoonheim-Klein, M., Walmsley, A. D., Habets, L., Velden, O. v. d., & Manogue, M. (2005). An implementation strategy for introducing OSCE into a dental school. *European Journal of Dental Education*, 9(42), 143-149.
- Shields, L., & Hartati, L. E. (2003). Nursing and health care in Indonesia. *Journal of Advanced Nursing*, 44(2), 209-216.

- Strength, D. & Cagle, C. S. (1999). Indonesia: An assessment of the health state, health care delivery system, and nursing education. *Journal of Cultural Diversity*, 6(2), 41-46.
- Sykes, J. (1976). Concise Oxford English dictionary. Oxford: University Press.
- Tarling, M., & Crofts, L. (2002). *The essential researcher's handbook: For nurses and health care professionals*. Edinburgh: Baillière Tindall.
- Tiwari, A., Lam, D., Yuen, K. H., Chan, R., Fung, T., & Chan, S. (2005). Student learning in clinical nursing education: Perceptions of the relationship between assessment and learning. *Nurse Education Today*, *25*, 299-308.
- Townsend, A. H., Mcllvenny, S., Miller, C. J., & Dunn, E. V. (2001). The use of an objective structured clinical examination (OSCE) for formative and summative assessment in a general practice clinical attachment and its relationship to final medical school examination performance. *Medical Education*, *35*(9), 841-846.
- Twycross, A., & Shields, L. (2005). Reliability and validity in practice: Assessment tools. *Paediatric Nursing*, *17*(9), 43.
- Vollmann, A. (1990). *The clinical instructor of nursing and the learning environment: A qualitative study*. Unpublished Doctoral dissertation.
- Watson, R., Calman, L., Norman, I., Redfern, S., & Murrels, T. (2002). Assessing clinical competence in student nurses. *Journal of Clinical Nursing*, *11*, 554-555.
- Watson, R., Stimpson, A., Topping, A., & Porock, D. (2002). Clinical competence assessment in nursing: a systematic review of the literature. *Journal of Advanced Nursing*, *39*(5), 421-431.
- World Health Organization. (2006). The world health report. Retrieved September 2, 2006, from <u>http://www.who.int/whr/2006/annex/en/index.html</u>