Stroke unit nurse managers' views of individual and organisational factors liable to influence evidence-based practice : A survey

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Title

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Abstract

The uptake of evidence into practice may be impeded or facilitated by individual and organisational factors within the local context. This study investigated Nurse Managers' of New South Wales, Australian, Stroke Units (n=19) views on: leadership ability (measured by the Leadership Practices Inventory), organisational learning (measured by the Organisational Learning Survey), attitudes and beliefs toward evidence-based practice (EBP) and readiness for change. Overall Nurse Managers reported high level leadership skills and a culture of learning. Nurse Managers' attitude towards EBP was positive, although nursing colleague's attitudes were perceived as less positive. Nurse Managers agreed that implementing evidence in practice places additional demands on staff; and almost half (n=9, 47%) reported that resources were not available for evidence implementation. The findings indicate that Nurse Managers require organisational support and resources to address barriers and facilitate EBP following stroke.

Key words

Evidence-based practice, leadership, organisational learning, attitudes and beliefs, readiness for change

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Ethical Approval

Australian Catholic University Human Ethics Review Committee: Register Number N2004.05.31

Background

When implemented, findings from rigorous research studies can improve health outcomes for patients[1] yet failure to translate research findings into practice is consistently reported in the literature.[2] There is a need to change the behaviour of individuals and groups, including nurses, to promote the uptake of evidence and the sustainability of evidence-based practice (EBP). Behaviour change interventions that have been shown to change clinician behaviour and promote EBP include: printed educational materials; educational meetings; educational outreach; local opinion leaders; audit and feedback; and reminders.[2] Multifaceted interventions (interventions comprising two or more components) developed from careful assessment of barriers and a coherent theoretical base may also promote clinician behaviour change more so than single interventions.[2] Behaviour change interventions which are developed or 'tailored' to overcome barriers and maximise the impact of facilitators are more likely to foster change,[3] however the evidence determining the effectiveness of tailored interventions in comparison to other interventions is incomplete.[3]

The uptake of a behaviour change intervention also may be impeded by individual[4] and organisational factors within the local setting.[5] Individual factors including attitudes and beliefs[4] towards EBP have been associated with an increase in EBP as have organisational factors such as leadership,[6] organisational learning[7,8] and readiness for change.[9,10]

Individual factors related to research utilisation

A recent systematic review investigating the association between individual factors and nurses' use of research in practice[4] concluded that attitudes and beliefs was the only individual factor evaluated in a sufficient number of studies and the only individual factor that is consistently positively related to research utilisation. Other individual factors with

evidence for a positive association with research utilisation include: having a graduate degree in nursing; attending conferences and/or in services; job satisfaction; current role and; working in a specialty area. Overall the findings from this review suggested that these individual factors, particularly attitudes and beliefs, may hold promise as targets of future research utilisation however, rigorous evidence to support individual factors that predict research utilisation is insufficient.[4]

Organisational factors related to research utilisation

The strength of the relationship between organisational factors and research utilisation by nurses is still largely unknown.[5] A systematic appraisal of the literature aimed to uncover current knowledge about leadership and the process of implementing EBP in nursing concluded that there appears to be agreement that leaders and the way leadership is performed can play an important role in the process of implementing EBP in nursing.[6] The findings from this review also indicated that leadership should not be studied in isolation from the work environment in which the leader operates as there appears to be an intricate interplay between different factors and research utilisation.

Prior studies investigating the characteristics of nurse leaders and their influence on EBP have failed to define the concept of leadership, making it difficult to identify what might characterise a leadership role that facilitates successful EBP implementation.[11-13] However, transformational leadership has been postulated to facilitate major organisational change[14] and has been linked to improved patient outcomes.[15] More rigorous research is needed concerning the possible role of the leader and research utilisation.[6]

In addition to the potential importance of leadership for EBP implementation, organisational learning or the learning organisation (the two terms are often used interchangeably in the literature) may also have an effect on evidence utilisation and

change.[7,8] A learning organisation is an organisation skilled at creating, obtaining and conveying knowledge and at modifying its behaviour to reflect new knowledge.[16] Although prior studies have found that learning organisations are more conducive to EBP[17] a recent systematic review of organisational learning and knowledge with relevance to public service organisations shows that organisational learning is under-researched in relation to the public health service[18] and further research is needed to understand the processes and contingencies which shape the nature and extent of organisational learning.

Another organisational factor that may influence EBP is organisational readiness which refers to the level of commitment of *all* members of the organisation to implement organisational change.[19,20] Organisational readiness for change is considered a critical precursor to the successful implementation of complex changes in health care settings.[9,10] However, there has been little theoretically grounded discussion on the determinants of organisational readiness.[21] Peter and Waterman's Seven-S management model[22] suggest several conditions or circumstances that might promote it. The Seven-S model describes seven important aspects of organisations, which together, determine the way in which an organisation operates or functions. The seven Ss represent strategy, structure, systems, staff, style of management, shared beliefs and values, and skills. Organisational readiness may be linked to one or more of these domains.[22]

From July 2005 to October 2010, we conducted a cluster randomised controlled trial across 19 acute stroke units in New South Wales (NSW), Australia-The Quality in Acute Stroke Care Trial (QASC).[23] The aim of the QASC trial was to promote evidence-based management of fever, hyperglycaemia and swallowing dysfunction following acute stroke. The QASC behaviour change intervention comprised the introduction of multidisciplinary supported, nurse-initiated evidence-based protocols using team building workshops, barrier assessment and educational outreach and reminders. Prior to the implementation of the

QASC trial, we wished to determine knowledge of individual and organisational factors that may have impeded or facilitated the successful uptake of the QASC intervention and EBP. Accordingly, the aim of our study was to investigate Nurse Managers of New South Wales (NSW) stroke units participating in the QASC trial, views of: self-leadership ability; organisational learning; attitudes and beliefs towards EBP; and readiness for change.

Methods

We surveyed Nurse Managers working in the 19 NSW stroke units that had consented to participate in the QASC trial. This survey was conducted three months prior to randomisation of stroke units.

Participants

Nurse Managers were chosen as the population of interest because the intervention comprised multidisciplinary supported nurse-initiated clinical treatment protocols to manage fever, hyperglycaemia and swallowing. Nurse Managers are the most senior nurses working within the stroke unit team and their role is pivotal to the coordination of patient care and stroke unit management. Further, at the stroke unit level, they are influential in ensuring the delivery of high-quality patient care and efficient use of resources.

Survey administration

Each nurse manager was mailed an advanced notification prior to the survey with a preaddressed envelope for survey return. Non-responders were telephoned 14, 21 and 28 days following initial survey distribution.

Survey instrument

The survey comprised five sections with 77 items explained in full below. The survey was pilot tested for content validity with six nurse leaders not otherwise involved in the study.

The first section of our survey required Nurse Managers to complete the Self-Leadership Practices Inventory (LPI),[24] a 30-item measure that is separated into five subscales and assesses the presence of features consistent with transformational leadership style. Each of the five leadership practices (five subscales) is measured by six items rated on a 10-point Likert scale (1=almost never, 10=almost always). Over a period of 15 years, studies by the authors of the LPI as well as by other researchers have tested its reliability and validity[25,26]. Internal reliabilities for the five LPI subscales were a Cronbach's α coefficient above 0.75 for the self-version and test–retest reliability was 0.94.[25,26] Studies conducted with Nurse Managers also reported internal consistencies as ranging between 0.58 and 0.85 for the five subscales.[27,28]

The second section of our survey required Nurse Managers to complete the Organisational Learning Survey (OLS). The OLS features 21 questions separated into five subscales, all of which encourage organisational learning.[7] Each of the five subscales is measured by items rated on a 1–7 rating scale (1=strongly disagree, 7=strongly agree).[7] This measure has been used in a study of the relationships between individual, team and organizational learning in nursing.[29] The internal consistency for the OLS five subscales were a Cronbach's α coefficient of 0.90 and test–retest reliability after 10 weeks was 0.77.[30]

Section three of the survey, comprising seven questions, was designed to explore Nurse Managers' attitudes and beliefs about EBP and was patterned after a survey used to study the attitudes of general practitioners toward evidence-based medicine.[31] To determine the attitudes and beliefs of Nurse Managers employed on the stroke unit towards EBP, Nurse Managers were required to estimate their own attitude and perceived attitudes of colleagues

towards EBP (0=extremely cynical to 100=extremely positive), usefulness of EBP in day-to-day management of patients (0=completely useless to 100=extremely useful) and percentage of clinical practice that was evidence based (0%–100%). Nurse Managers were also required to indicate their level of agreement to the following statements: EBP improves patient care (0=strongly disagree to 100=strongly agree); EBP is of limited value in nursing because much of the primary care lacks scientific base (1=strongly agree to 5=strongly disagree); the adoption of EBP, however worthwhile as an ideal, places another demand on already overloaded nurses (1=strongly agree to 5=strongly disagree).

The fourth section of our survey was designed to measure the stroke units 'readiness to accept change' and originated from the Seven-S model.[22] Thirteen questions were developed targeting the seven important aspects of an organisation (see Table 5). Nurse Managers were required to respond to questions using visual analogue scales or yes/no responses (see Table 5). The Seven-S model has been used as a diagnostic tool in prior nursing studies investigating barriers and facilitators to a practice change.[32,33]

Our final section of the survey collected demographic data (six questions).

Data analysis

All data were analysed using STATA version 11.0. Individual Nurse Managers' responses to the 30 questions included in the LPI were grouped under the five leadership dimensions.[24] All Nurse Managers' scores for each of the five practices were summed and then means and standard deviations were calculated for each leadership dimension. The potential subscale score ranges from 6 to 60, with higher scores indicating better leadership skills and more frequent engagement by Nurse Managers in the leadership dimension consistent with transformational leadership.

Responses to the 21 questions included in the OLS were grouped under five learning capabilities.[7] A total mean score for each subscale was calculated. The potential score range for each subscale (learning capability) was 1–7. Higher mean scores indicated Nurse Managers perceived stroke units to have a higher learning capability. Specifically, values above 4 indicated the presence of a culture of learning and values below 4 did not.

Data from section three of the survey (measuring attitudes and beliefs) were summarised using frequencies and calculations of measures of central tendencies. For questions in which scores ranged from 1 to 5 (two questions), median values above 2.5 indicated agreement, median values below 2.5 indicated disagreement.

Data from section four, measuring readiness to accept change, were summarised using frequencies. For those items with a five-point Likert scale, the 'strongly agree' and 'agree' categories were combined, as were the 'neither agree nor disagree', 'strongly disagree', and 'disagree' categories, so that responses fell into one of two categories: 'agree' or 'disagree'. For the items with a 'yes/no/unsure' choice set, the 'unsure' category was combined with the 'no' category.

This study was approved by the Human Research Ethics Committee of the Australian Catholic University and from area health service human research ethics committees pertaining to each hospital.

Results

Completed questionnaires were received from 19 Nurse Managers (100% response rate). The majority of the Nurse Managers were female (n=16, 84%). The largest represented age group was 40–49 years old (n=8, 42%). Just over one half of Nurse Managers (n=10, 53%) were educated to a bachelor's level and among the participants, the highest

qualification was a master's degree (n=3, 16%). The median length of time employed as a nurse manager on the stroke unit was 10 months (IQR 5-36) (see Table 1).

Self-leadership ability

The mean values of the LPI of all subscales were predominantly in the upper third of the possible range between 6 and 60, indicating that Nurse Managers of NSW stroke units provided a high level of leadership on all five subscales on the LPI. The highest value was in the practice 'enabling others to act' according to self-assessment (self mean 49.26, SD 3.22), and the lowest was in 'inspiring a shared vision' (self mean 40.46, SD 4.87) (see Table 2).

Organisational learning

The mean scores across all five learning capabilities were clarity of mission and values (mean 4.2, SD 1.56); leadership commitment and empowerment (mean 4.92, SD 1.44); experimentation and rewards (mean 4.94, SD 1.54); effective transfer of knowledge (4.86, SD 1.15); teamwork and group problem solving (mean 4.81, SD 1.35). The scores were above the midpoint of 4 on the seven-point scale, indicating the presence of a culture of learning (see Table 3).

Attitudes and beliefs towards EBP

Nurse Managers' attitudes and beliefs towards EBP were positive (median 80, IQR 80–95), although colleagues were perceived to be less welcoming (median 70, IQR 60–80). Most Nurse Managers perceived research findings to be extremely useful in their day-to-day management of patients (median 80, IQR 75–95) and overwhelmingly believed that EBP improves patient care (median 95, IQR 90–100). The median value for the estimated percentage of the respondents' clinical practice that was evidence based was 80% (IQR 70–

85). Respondents disagreed (median 2, IQR 1–3) that there was a lack of strong evidence to support aspects of their practice; however, Nurse Managers agreed (median 3, IQR 2–3.5) that using evidence in practice places unreasonable demands on their colleagues (see Table 4).

Readiness to accept change

All Nurse Managers (n=19, 100%) agreed that staff were receptive to using evidence-based guidelines, and 100% (n=19) agreed that there was a positive culture towards guideline implementation within their hospital. The majority of Nurse Managers (n=18, 95%) indicated that guideline dissemination and implementation had been built into the organisational structure, and 68% (n=13) indicated that their organisation provided multi-professional forums or networks to facilitate dissemination and implementation of guidelines into practice. The majority of Nurse Managers (n=17, 89%) agreed that their organisation employed a strategy to communicate new guideline information, and 53% (n=10), agreed that their organisation specifically allocated resources for dedicated staff time to plan guideline dissemination and implementation. The majority of Nurse Managers (n=14, 74%,) indicated that there was an organised programme of training to develop staff skills to implement guidelines, and 95% (n=18) indicated that staff requests for acquiring new skills and knowledge about implementation of evidence-based guidelines was supported. The majority of Nurse Managers indicated that their organisation had allocated a staff member specific to the implementation of guidelines (n=16, 84%), and 94% (n=15 of 16) indicated that this designated staff member had the expertise to lead the coordination of guideline dissemination and implementation. However, for those stroke units who had an allocated staff member (n=16), 56% (n=9 of 16) of Nurse Managers indicated that this designated person was not allocated sufficient time to coordinate and implement guidelines into practice. The majority

of all respondents 95% (n=18) indicated that staff are given the opportunity to give feedback on the relevance of the guideline recommendations to their practice.

Discussion

This study was conducted to identify stroke unit Nurse Managers' views of: self-leadership ability, organisational learning, attitudes and beliefs towards EBP; and readiness for change prior to the commencement of the QASC trial. While this information was not explicitly used to inform the QASC intervention, we sought to obtain pre-trial descriptive data from participating sites. The results of this study suggest that NSW stroke units prior to the implementation of the QASC trial: were guided by Nurse Managers who reported exemplary leadership skills consistent with transformational leadership; embraced a culture of learning; were supportive and accepting of EBP; and were committed to and ready for a practice change—all of which are essential for the successful uptake of EBP.

Although Nurse Managers indicated that NSW stroke units were ready for a practice change, they also indicated that barriers to change existed. Consistent with prior studies,[12,34] a lack of time and a lack of resources were identified as major organisational barriers to EBP in our study. Our data indicate that over three-quarters of NSW stroke units had a hospital staff member whose role was specifically designated to guideline dissemination and implementation however over half of Nurse Managers indicated that these staff members were not allocated sufficient time for this role. This is of concern considering that organisations in which guidelines had been successfully implemented and sustained had someone specifically designated for guideline implementation.[34] Change is subject to wider organisational and political pressures and leaders such as Nurse Managers encounter challenges such as cost cutting and staff shortages.[6] Other studies suggest that managers may

be unable to address these types of organisational barriers to EBP as this is outside their control.[6]

Also consistent with other studies investigating nursing and research utilization, Nurse Managers perceived their nursing colleagues to be less welcoming towards EBP.[35] Prior studies have found that nurses practicing in leadership roles were significantly more likely to utilise research than staff nurses.[4] It is of concern that very few Nurse Managers participating in our study had obtained a graduate degree (i.e. Masters degree) as current evidence indicates that there is a positive association with research utilisation and having a graduate degree.[4]

Although Nurse Managers estimated that 80% of clinical practice was evidence-based, the National Stroke Foundations 2011 audit report confirms that not all Australians diagnosed with stroke receive evidence-based care.[36] The National Stroke Foundation of Australia publishes a report every two years that provides an overview of the quality of acute stroke care in Australia. For the NSF 2011 report,[36] a total of 3,548 patient medical records were audited by clinicians from 108 hospitals across Australia. The hospitals that participated in the audit provided care for the majority of stroke cases (88%) admitted to Australian hospitals and hence the results from this audit are representative of acute stroke care nationally. The findings from our study suggest that Nurse Managers have likely overestimated the frequency with which evidence-based practice occurs in NSW stroke units and further studies are required measuring EBP use versus actual practice.

A limitation of our study was the use of self-report data and the likelihood of desirability bias (i.e. participants provide responses they think the researcher wants or expects). We attempted to minimize this potential bias by assuring respondent anonymity. Our study was also limited by our small sample size of 19 Nurse Managers. However, since we obtained 100% participation rate, our results clearly represent the views of all Nurse

Managers from those stroke units that participated in the QASC trial. A lack of study resources precluded a more in-depth analysis of views of organisational factors that impede evidence uptake at the level of the individual nurse and other members of the healthcare team working on the stroke unit, but such a study would be of value in future trials wishing to implement a practice change. That our study was conducted prior to implementation of our intervention and as part of a more in-depth process evaluation is a strength and that we have quantified these domains provides important baseline levels not previously reported in Australian stroke units.

Conclusions

Nurse Managers from the stroke units participating in the QASC trial perceived NSW stroke units to be ready for a practice change and supported the introduction of evidence-based nurse-initiated protocols. Nurse Managers are the most senior members of the nursing team at the stroke unit level and well placed to influence and drive practice change. The barriers to change, including insufficient resources and time constraints, identified by Nurse Managers in our study are not likely to be unique to stroke units and Nurse Managers may be unable to address these organisational barriers and thus provide all the components necessary to implement change and EBP. In order to effectively design research utilisation interventions, further knowledge is needed about which individual and organisational factors predict research utilisation and, thus, uptake of evidence based care.

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Authors Contributions

Peta Drury: Study conception, data collection/analysis; drafting of manuscript.

Elizabeth McInnes: Drafting of manuscript.

Jennifer Hardy: Review of manuscript.

Simeon Dale: Review of Manuscript.

Sandy Middleton: Study conception and review of manuscript.

Table 1: Characteristics of Nurse Managers (n=19)^

Nurse manager age group (years)	
30–39	3 (16%)
40–49	8 (42%)
50–59	5 (26%)
60–69	3 (16%)
Nurse manager sex	
Male	3 (16%)
Female	16 (84%)
Median time employed as nurse manager (months)	10.0 (IQR 5-36)
Level of education^	
Hospital certificate	1 (5.3%)
Diploma	3 (16%)
Bachelor's degree	10 (53%)
Graduate certificate	1 (5.3%)
Graduate diploma	1 (5.3%)
Master's degree	3 (16%)

^ Percentages may not total 100%, due to rounding

Table 2: Mean self-reported leadership practices inventory subscales scores (n=19)

Leadership practices Self-reported scores	Mean (SD)
Models the way (personal credibility)	46.47 (3.83)
Inspires a shared vision (clear picture of the future and encourages the team to work together towards a common goal)	40.46 (4.87)
Challenges the process (seeks opportunities and innovative ways to change, and improve)	42.38 (4.36)
Enables others to act (fosters collaboration)	49.26 (3.22)
Encourages the heart (recognises individual contributions and builds team spirit)	45.16 (4.21)

* Mean scores could have ranged from 6 to 60; higher scores indicate better leadership skills and more frequent engagement by Nurse Managers in the leadership dimension

Table 3: Organisational learning subscales scores* (n=19)

Learning capability dimensions	Mean (SD)
Clarity of mission and vision (the degree to which employees have a clear vision/mission of the organisation and understand how they can contribute to its success and achievement)	4.72 (1.56)
Leadership commitment and empowerment (the role of leaders in the organisation with respect to helping employees learn and elicit behaviours that are consistent with an experimenting and changing culture)	4.92 (1.44)
Experimentation and rewards (the degree of freedom employees enjoy in the pursuit of new ways of getting the job done and freedom to take risks)	4.94 (1.54)
Effective transfer of knowledge (the systems that enable employees to learn from others, from past failures and from other organisations)	4.86 (1.15)
Teamwork and group problem solving (the degree of teamwork possible in the organisation to solve problems and generate new and innovative ideas)	4.81 (1.35)
Overall organisational learning capability	**4.85 (1.41)**

*Mean values above 4 indicate agreement; mean values below 4 indicate disagreement (seven-point Likert scale).

Table 4: Self-reported attitudes and beliefs towards EBP (n=19)

Item	
How would you describe your attitude towards the current promotion of evidence-based practice? (0 = extremely unwelcoming to 100 = extremely welcoming)	
Median	80
Minimum	70
Maximum	100
Interquartile range	80–95
How would you describe the attitude of most of your nurse colleagues towards evidence-based practice? (0 = extremely unwelcoming to 100 = extremely welcoming)	
Median	70
Minimum	40
Maximum	100
Interquartile range	60–80
How useful are research findings in your day-to-day management of patients? (0 = totally useless to 100 = extremely useful)	
Median	80
Minimum	50
Maximum	100
Interquartile range	75–95
Overall, what percentage of your clinical practice do you consider is currently evidence based? (0%–100%)	
Median	80
Minimum	50
Maximum	95
Interquartile range	70–85
Practicing evidence-based practice improves patient care (0 = strongly disagree to 100 = strongly agree)	
Median	95
Minimum	50
Maximum	100
Interquartile range	90–100

Table 4: Self-reported attitudes and beliefs towards EBP (n=19)

Evidence-based practice is of limited value in nursing because much of the primary care lacks a scientific base*^ (1 = strongly disagree to 5 = strongly agree)	
Median	2
Minimum	1
Maximum	5
Interquartile range	1–3
The adoption of evidence-based practice, however worthwhile as an idea, places another demand on already overloaded nurses*^ (1 = strongly disagree to 5 = strongly agree)	
Median	3
Minimum	1
Maximum	5
Interquartile range	2–3.5

*Median values above 2.5 indicate agreement; values below 2.5 indicate disagreement.

Table 5: Organisations' readiness to accept change #

Shared values					
	A lot	**A little**	**Not at all**	**Unsure**	
Overall, in your opinion, are the healthcare professionals in the hospital receptive to using evidence-based guidelines? (n=19)	14 (74%)	5 (26%)	0	0	
In your view, is there a positive culture towards guideline implementation within the hospital? (n=19)	16 (84%)	3 (16%)	0	0	
Structure					
	A lot	**A little**	**Not at all**	**Unsure**	
To what extent has the process of guideline dissemination and implementation been built into the organisational structure/knowledge management systems of the hospital (i.e., responsibility for guideline dissemination and implementation is designated to individuals and/or departments at different tiers of the hospital hierarchy)?^# (n=19)	14 (74%)	4 (21%)	1 (5.3%)	0	
Strategy					
	Strongly agree	**Agree**	**Neither agree nor disagree**	**Disagree**	**Strongly Disagree**
My organisation provides multi-professional forums or networks to facilitate dissemination and implementation of guidelines into practice. (n=19)	6 (32%)	7 (37%)	4 (21%)	2 (11%)	0

* 'Always' or 'sometimes' indicates agreement; 'never' or 'unsure' indicates disagreement.
^ 'A lot' or 'a little' indicates agreement; 'not at all' or 'unsure' indicates disagreement.
#Percentages may not total 100 due to rounding or missing data.

Table 5: Organisations' readiness to accept change # (continued)

Systems				
	Yes	**No**	**Unsure**	
Does the hospital have a strategy to communicate new guideline information? (n=19)	17 (89%)	2 (11%)	0	
	Always	**Sometimes**	**Never**	**Unsure**
In your experience, is the hospital able to allocate resources (e.g., dedicated staff time for policy development and action planning) for guideline dissemination and implementation?* (n=19)	4 (21%)	6 (31%)	2 (11%)	7 (37%)
Staff				
	Yes	**No**	**Unsure**	
Does the hospital have staff whose role is specifically designated to the implementation of guidelines?* (n=19)	16 (84%)	2 (11%)	1 (5.3%)	
If your hospital does have a staff member whose role is specifically designated to the implementation of guidelines, does this staff member have the expertise to lead on the coordination of guideline dissemination and implementation? (n=16)	15 (94%)	0	1 (6.3%)	
If your hospital does have a staff member whose role is specifically designated to the implementation of guidelines, does this designated staff member have the designated time to lead in the coordination of guideline dissemination and implementation? (n=16)	5 (31%)	9 (56%)	2 (13%)	

* 'Always' or 'sometimes' indicates agreement; 'never' or 'unsure' indicates disagreement.
^ 'A lot' or 'a little' indicates agreement; 'not at all' or 'unsure' indicates disagreement.
#Percentages may not total 100 due to rounding or missing data.

Table 5: Organisations' readiness to accept change # (continued)

Style				
	Always	**Sometimes**	**Never**	**Unsure**
Are staff given an opportunity to feed back on the relevance of the guideline recommendations to their practice?*# (n=19)	10 (52%)	8 (42%)	1 (5.3%)	0
Skills				
	Yes	**No**	**Unsure**	
Is there an organised programme of training to develop staff skills to implement guidelines? (n=19)	14 (74%)	5 (26%)	0	
	Always	**Sometimes**	**Never**	**Unsure**
Do managers support staff requests for acquiring new skills and knowledge with regards to the implementation of evidenced-based guidelines?* (n=19)	17 (90%)	1 (5.3%)	0	1 (5.3%)

* 'Always' or 'sometimes' indicates agreement; 'never' or 'unsure' indicates disagreement.
^ 'A lot' or 'a little' indicates agreement; 'not at all' or 'unsure' indicates disagreement.
#Percentages may not total 100 due to rounding or missing data.

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