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The art of clinical supervision: its development and descriptive mixed method review

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KEYWORDS

clinical supervision, nursing clinical placements, belongingness, learning theory, attitude theory

ABSTRACT

Objectives

The Health Workforce Australia Clinical Supervision Support Program Discussion Paper (2010) highlighted the education deficits of health professionals responsible for the clinical supervision of students. This research aimed to develop, implement and evaluate a new education program for nurses to assist in the development of knowledge and attitude to supervise students whilst on clinical practicum.

Design

The impact of the ACS program was determined using a descriptive methodology involving the collection and analysis of quantitative and qualitative data using a triangulation approach. This included the use of surveys, online reflections and interviews.

Settings

The ACS program was presented in both the metropolitan and regional areas of Western Australia.

Subjects

Participants (n=199) were from both the public and private health care sector working in a variety of nursing specialties within both the inpatient and community setting.

Results

Analysis of the data determined that participants improved their knowledge and attitude towards students and clinical supervision.

Conclusions

The ACS was confirmed as a strategy for providing effective education for nurses.

INTRODUCTION

This paper describes the development and evaluation of the Art of Clinical Supervision (ACS) program for registered nurses in Western Australia (WA). The program was first introduced in 2012 as a PhD study involving 199 research participants, however due to the program's success it was contextualised for all health professions and presented across WA with funding from Health Workforce Australia (HWA). As of December 2015 approximately 2,800 participants from nursing, midwifery, medicine, allied health and health sciences had attended the program.

This paper will serve to assist those interested in implementing a clinical supervision program for health professionals to provide an effective learning environment for students.

BACKGROUND

Literature

There is no universal term or definition for describing the clinical supervision of nursing students. Within the literature, terms include, but are not limited to, 'preceptorship', 'clinical supervision', 'supervision' and 'mentorship' (Gleeson 2008; Andrews et al 2006). In addition, there are numerous models of student supervision; these include one-to-one, group/team supervision, buddysystem, and team leader model (Russell et al 2011). Whilst differences exist within each of these, all of these models provide students with a clinician to supervise their practice in the clinical environment.

In 2010 the Australian Government, Health Workforce Australia (HWA 2010) stated this lack of consistency across all health professions had left health services confused. In addition, the different university expectations of staff working with students, the learning requirements of students and the students' abilities, added to this state of uncertainty. HWA also recognised that good clinicians are not always naturally good supervisors and that education to supervise students was essential. The paper concluded a nationally consistent approach to the education of supervisors within the health professions was required. It suggested a national program for all health professionals, followed by discipline specific education.

In response to the HWA (2010) Clinical Supervisor Support Program Discussion Paper (CSSP), the Art of Clinical Supervision was developed and evaluated for the West Australian context. For this program and research, the HWA term and definition of clinical supervision was utilised to describe this clinical learning relationship between a student and a health professional:

the oversight either direct or indirect ...of professional procedures and/or processes performed by a student or group of students within a clinical placement for the purpose of guiding, providing feedback on and assessing personal, professional and educational development in the context of each student's experience of providing safe, appropriate and high- quality patient care (HWA 2011, p.4).

Clinical Supervision

The literature articulates the need for registered nurses to possess the knowledge, skills and attitudes of effective clinical supervision. If left unmet, there remains a risk that the next generation of nurses entering the workforce will do so without the essential professional attributes to become effective members of the health care team (Brammer 2008; Gleeson 2008; Kilcullen 2007). The literature paints an alarming picture of student nurses currently not being engaged as active members of the health care team, or being given the opportunity to practice in an environment that is conducive to learning (Barker et al 2011; Smedley et al 2010; Gleeson 2008). This practice places the profession at risk of the production of skills-based nurses who are unable to think critically about the delivery of patient care (Allan et al 2008; Brammer 2008). This can

have a detrimental effect on safe and effective health care delivery and patient outcomes (Gleeson 2008; Kilcullen 2007). A secondary risk is the loss of future nurses from the profession before they even begin, or early in, their career (HWA 2013b; Brammer 2008).

One of the current deficits identified is the lack of education and support provided to the nursing staff who supervise students. As stated, 'research has shown that mentors are often ill prepared (and) that their preparation varies from place to place, and that in reality most mentors learn on-the-job' (Andrews et al 2006, p.866).

A result of these ongoing concerns was the creation of Health Workforce Australia. HWA was created as a strategy to address the challenges of providing the Australian community with a skilled and innovative health workforce (HWA 2011).

Health Workforce Australia

HWA was an initiative of the Council of Australian Governments (COAG), and was established by the Commonwealth, State and Territory Governments after the 2008 National Partnership Agreement on Hospitals and Health Workforce Reform (HWA 2013a). HWA's functions included the provision of workforce planning and recruitment, and improving and expanding access to quality clinical placements for health professional students. Within HWA, the Clinical Supervision Support Program was established to assist with meeting the demands of clinical placements in Australia (HWA 2011). Strategies to date include the expansion of the current health service capacity for student placements and the development of a competent health workforce to provide quality clinical placements that promote learning and competence (HWA 2011).

The release of the HWA (2010) Clinical Supervisor Support Program (CSSP) Discussion Paper confirmed the concerns outlined in the national and international literature in relation to student clinical placements. This included a lack of preparation of clinical supervisors supporting clinical placements and the ongoing confusion by health care facility staff regarding the role of the clinical supervisor. The report stated the learning of clinical supervisor skills was separate to professional education requirements to gain entry into a health profession, and the role must therefore be addressed with its own specific education programs (HWA 2010).

The HWA (2010) paper described that many of the existing programs for clinical staff failed to provide them with the necessary knowledge and skills to effectively supervise students. Thus, the CSSP developed core themes for good supervision practice for all health professionals involved in the supervision of students. The seven core skills identified were: competent clinical skills, teaching and learning skills, effective feedback, communication skills, assessment skills, understanding of remediation processes and interpersonal skills.

RESEARCH

The purpose of this research was to design, implement and evaluate an education program that addressed the core skills of HWA (2010), as well as deficits and requirements identified in domestic and international literature, in order to prepare nursing staff for the role of clinical supervision.

On the development of the program, and ethics approval from the University of Notre Dame, Australia (UNDA) Human Research Ethics Committee, flyers for the ACS program were forwarded to health care facilities within WA. Nurses were able to attend sessions at the University or host health care facilities in both metropolitan (one public and one private) and regional WA (one public and one joint public/private). A convenience sample of 199 participants meeting the inclusion criteria attended the program in 2012. Inclusion was based on employment in a role involving the supervision of students, and more than one year's nursing experience. Participants were provided with an Information Sheet, written consent was obtained, and participants were informed that they were free to leave the study at any time.

DEVELOPMENT OF THE ART OF CLINICAL SUPERVISION (ACS)

The term 'art' was used in the naming of the program to identify the soft skills of the role in supporting students. In particular the importance of a positive attitude towards students and student learning. A search of the national and international literature did not identify the term 'The Art of Clinical Supervision' for existing supervision education. Whilst the term 'art' was used to define a style of supervision, its definition varied from undergraduate support to practicing health professionals (Estadt et al 2005; Titchen and Binnie, 1995). Titchen and Binnie (1995) defined the art of clinical supervision as a set of tailored teaching and learning strategies for nursing clinical education as opposed to the then traditional ward teaching of right versus wrong. Estadt et al (2005) demonstrated that the 'art' of supervision was a style of supporting peers through their professional development. The book included various stories shared by senior clinical supervisors. These experiences were themed at promoting the clinical supervisor role as a journey of support through shared learning. Whilst in the field of psychology, Falender and Shafranske (2014) discussed the competency requirements for the provision of effective clinical supervision and the current practices within supervision. They define the 'art' as being the current state of practice of clinical supervision within psychology and the need for a formal competency based approach to its delivery.

In developing the ACS the researcher considered the findings from the national and international literature, as well as HWA's (2012, 2011, 2010) publications. The aim of the program was to provide an environment conducive to learning that would assist the participants to understand the bigger picture of student placements in Australia, the future directions and requirements of clinical placements, the role of clinical supervisors and the positive and negative influences of clinical supervisors.

One of the aims of the ACS was to promote a positive attitude toward clinical supervision. To achieve this the work of Katz (1960), related to the theories of persuasion, was applied. Katz (1960) highlighted that changing individuals' attitudes can be achieved through the use of external forces. To achieve this an understanding of the motivational reason for, or function of, the held attitude is required. This allows motivators/educators to develop a persuasive message that will assist individuals to reason with and change their current attitude. Katz (1960) stated that by provoking individuals to analyse their attitudes, this could change the attitude; however, the success of this approach is usually linked to the charisma and quality of the message.

The ACS teaching plan incorporated the principles of attitude and persuasion (O'Keefe 2002; Katz 1960) by: utilising the behaviourist theories of learning by role modelling positive behaviour and rewarding and encouraging positive attitudes; cognitivist theory by adapting ones teaching and facilitating strategies that ensured the days content and discussions were applicable and relevant for each group; and constructivism through story telling which, highlighted the impact of poor and positive behaviours, therefore encouraging participants to reflect and question the purpose of their own attitude towards students (Knowles et al 2011; Kolb 1984; Knowles 1978).

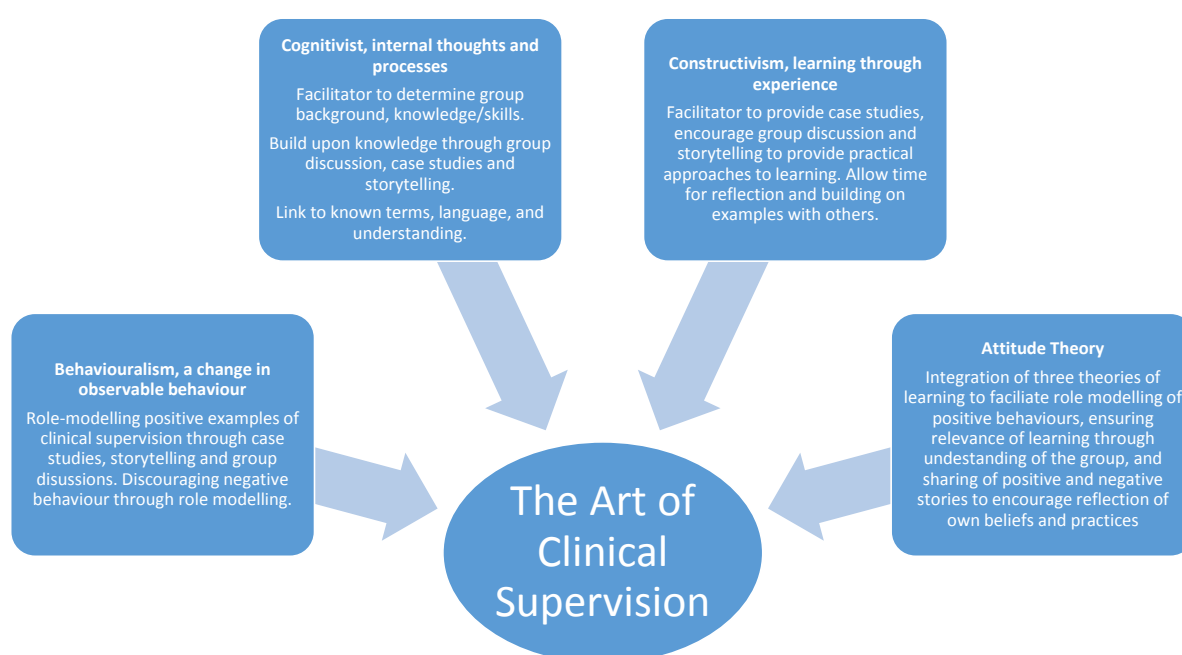
Research on belongingness led by Levett-Jones (2009, 2008, 2007) was a key topic in the study day to provide participants with an opportunity to analyse their attitude and develop strategies that could create a positive attitude towards students and student placements, whilst also highlighting the effect of negative and poor behaviours. The importance of belongingness and its impact on student learning highlighted that the attitude of the clinical supervisor had a significant impact on the ratings of clinical placement satisfaction by students. As a strategy to promote these findings the ACS program included a 90-minute session critiquing this research and developing implementation strategies.

The sessions on communication, feedback, reflection, learning styles, critical thinking and clinical reasoning were included to give participants the knowledge and confidence to provide effective teaching and supervision.

To meet industry demands for succinct education in a climate where staff can be released from the workplace for a limited time, the program was developed as an intensive one-day seminar with a comprehensive resource file.

The use of these theories and principles of learning guided the researcher in the development of the ACS teaching plan—that is, the delivery method of the content. These theories and principles were chosen due to their ability to assist with attitude change, an essential component of the program. Consumer input into the program was sought with the development of an expert group (five WA nurse educators) for content validity. This process was augmented by the experience of the author, who has extensive experience in this area as well as a Masters in Health Science Education. The application of the theories and principles of learning and attitude are demonstrated in figure 1.

Figure 1: Application of the Theories of learning and attitude to the ACS



DATA COLLECTION, ANALYSIS AND FINDINGS

The research process involved a Descriptive Study with mixed methods data collection and analysis. Participants completed pre (199) and post surveys (198), which detailed their knowledge and understanding of the principles of supervision and application of these principles, whilst a five point Likert scale attitude survey by Stagg (1992) was utilised to evaluate attitude. Participants were also invited for a further eight weeks to share their experiences of student supervision, work place practices, changes to practice etc. since attending the program via an online reflection. During this time 117 emails were received. Participants again completed the survey tools after a period of eight weeks (71), with a further 12 participants interviewed.

Quantitative

The quantitative findings were divided between the two survey instruments. The first, the knowledge survey, was developed by the researcher, and validated through a nurse educator expert group and tested for reliability with a test-retest approach of two weeks with 30 nurses. An Intraclass correlation coefficient (ICC) of 0.976 confirmed tool reliability.

The knowledge survey findings demonstrated that participants experienced a statistically significant increase in the mean score from the pre-program (42.5%) to the post program surveys (immediate post 58.7%, eight week post 68.3%), and this occurred across all subgroups that were analysed (p value <0.001). These subgroups included the participant demographics of age, area of employment, years of nursing, frequency of clinical supervision and previous education relating to clinical supervision. Although not statistically significant, it was noted with the knowledge survey that participants who were: employed in the metropolitan area, in a public hospital, had the most involvement in clinical supervision, with 21–30 years of nursing experience and were 41 years or older had the highest mean score.

The second survey, an attitude survey on clinical supervision developed by Stagg (1992), also demonstrated a statistically significant (p value <0.001) increase in the mean score from the pre-program (83.4%) to the immediate post-program (87.2%) and eight week survey (86.3%) (p value <0.004). Stagg's (1992) attitude survey highlighted that those with the highest attitude mean score towards students were: employed in the metropolitan area, within public health, and were between 20-30 years of age, however it must be noted that there was only a 2% difference between all age categories. Of note was that participants who supervised students 'most days' had a lower result in the attitude survey compared with those who supervised 'some days', with the most positive results found within the 'some days' group across all phases of data collection. These two groups always supervised students each week; however, it would appear that the 'some days' group also had an opportunity each week to experience some time without students. This is an important finding for educators and ward managers to consider when allocating students to clinical supervisors in the workplace. Other frequency categories included 'Infrequently – on occasions each month', 'Rarely – once or twice within six months' and 'Not at all'. These findings indicate that the more engagement with student supervision the more positive the staff members attitude.

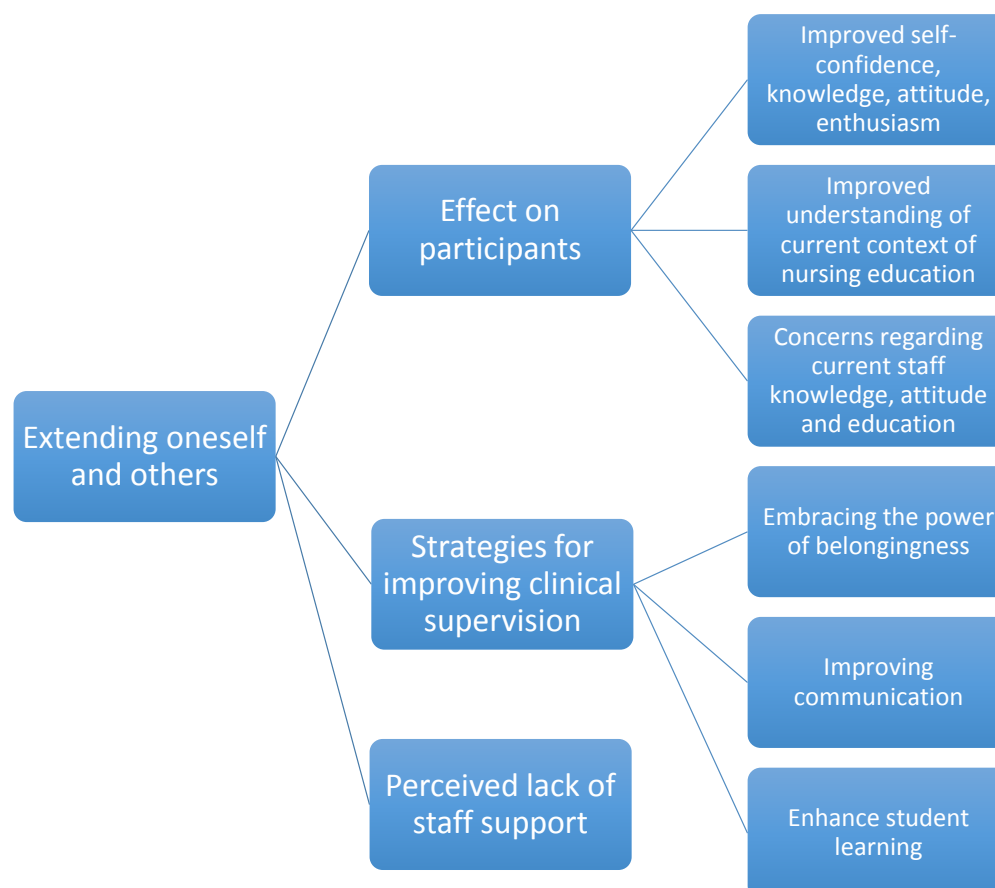
Qualitative

The qualitative data collection and analysis involved collecting participants' words about the effect of the ACS through short statements in the post-program knowledge survey, online reflections and interviews. Each data source was analysed in relation to the principles of thematic data analysis according to Braun and Clarke (2006).

Braun and Clarke (2006, p.79) define thematic analysis as "a method for identifying, analysing and reporting patterns (themes) within data". This method of analysis utilises a 'realist' method, which "reports experiences, meanings and the reality of the participants" (p.79). Six stages of analysis are identified. This involves familiarisation of the data, initial code development, identifying themes, review of themes, naming and defining of themes and the final stage of writing the report.

Upon reviewing the themes from each data source, the researcher determined that similar themes were evident in all of the data collection methods. The overarching theme of the qualitative data was entitled 'extending oneself and others'. Throughout the different qualitative data collection methods, participants commented on the effect of the program on themselves and how they could use this information and renewed enthusiasm and attitude to benefit students and other staff.

All three sources of qualitative data collection supported the findings of each individual source. Different depths of information and stories were obtained by using these different data collection methods within the qualitative phase. These themes and subthemes are articulated in figure 2.

Figure 2: Overall qualitative themes of the ACS study

The qualitative findings of the research indicated that participants found the ACS to be a positive learning experience, participant 119 stated the program “Gave me more confidence and expertise to be an effective mentor for my students”, while 177 wrote that the program “Gave me the confidence and education to work with students to improve needs, on role modelling, and working with them”. Participant 184 confirmed this view: “It increased my confidence in my ability to supervise students and taught me things that I had not thought about before”. Participant 17 stated, “I was expecting to leave the program with a better understanding of teaching undergraduates. I have that and feel empowered to take action”. Whilst participant 90 stated, “I think I feel more confident having done this course to be more assertive and a better advocate for them (students)” and participant 164:

“To highlight the importance of student nurses coming through and the value of putting effort into enriching their clinical experience...to be reminded of what it is like to be a student and prompt simple actions an experienced nurse can do to improve the clinical experience of a student.”

It was felt by the participants that this positive experience needed to be shared with others, participant 87 commented that the ACS was “Essential learning for all RNs who mentor students, it will enhance the students experience if all RNs know how they can contribute”. Whilst participant 8 wrote “I would like all nurses in my area to have completed this”, and “My colleagues have not had any formal training and this would be invaluable for staff” (42).

This positive experience was achieved by improving participants’ understanding of the role of clinical supervisor, describing the bigger picture and the students’ learning journey, discussing the skills of effective

clinical supervision, highlighting the implications of both poor and positive clinical supervision, promoting the importance of belongingness and positive attitudes, and developing a sense of teamwork and collaboration towards the role of clinical supervision. Participant 71 stated:

"I had no idea at the start what to expect but this has been the most comprehensive and informative session I have been to on preceptor role and what it entails...It has given me a great resource in the way of the folder. Much more confident in what I am supposed to be doing and what my role entails."

Whilst participant 21 stated:

"I just found it was a very positive experience for me...it just raised my awareness of where the students are coming from and picked up the little fine points that perhaps we weren't doing as well as we could have done with them, and being very conscious of their need to achieve their competencies and to make the most of every moment that they were there, and also trying to give them the best experience that was the most appropriate for them."

The sessions related to critical thinking, clinical reasoning and reflection provided practical strategies for their implementation to assist with student learning, participant 40 stated:

"Relaxed presentation, really interesting information that was research based, current and relevant. I particularly enjoyed the styles of learning and also to have an understanding of how to promote clinical reasoning, critical thinking and reflection in practice."

And participant 10:

"I particularly enjoyed the styles of learning and also to have an understanding of how to promote clinical reasoning, critical thinking and reflection in practice...it will certainly aid me in trying to ascertain how my students learn best and adapt my supervision to optimise their learning and development while on prac."

All three data sources discussed the future of the program and its availability to assist staff to undertake this role. Participants felt that health services and education providers needed to promote and support the role of the clinical supervisor and that this could in part be achieved through the ongoing commitment to staff education. The ACS was seen as a strategy to improve staff knowledge and promote a cultural change in staff attitudes towards students, by providing the speciality education requirements to achieve this. Participant 68 stated:

"I think there's a huge gap out there in nursing...I think a lot of education needs to come in...most of them (nurses) don't have a clue what the code of conduct is, or the code of ethics, let alone professional boundaries."

With participant 92 commented:

"Education in clinical supervision is really poor, very poor...the education from the university is expected to be given by people with Masters and above, not only in their clinical skills but also in their education ability...so why when you're on the front line can we expect people to suddenly become expert teachers? We can't. We have to teach them how."

While participant 76:

"I think it was an excellent initiative to have a proper study day, and it would be nice if it would be, the best word I can think of is compulsory, to get facility staff to take seriously the role of working with students and developing students, that we can't just pretend I'm a nurse, I've got a student, I know about nursing. We can do with it being quite a formal part of staff members development that they come to study days"

such as that, that they've got a decent insight into what the role of the supervisor and the mentor is and how to deal with having a student."

Participant 92 also supported this belief:

"Clinical supervision education should be taken more seriously...each nurse [should] get the opportunity to get that education...I hope to goodness it [study day] does continue along to get bigger and bigger."

Participants also related the importance of improving workplace culture, supporting first year nurses and how this related to the future recruitment and retention of student nurses, and nurses, in nursing. Participant 101 wrote, *"To help nurses...be more supportive of students, to help develop our future nurses stay in the job and enjoy their chosen career paths and put back into nursing"*. Whilst participant 39 commented that *"As a profession which is known to be ageing it is important to know how to guide students in a caring and sufficient manner, as we need more nurses and one day they too will become facilitators to students"*. Participant 57 linked this to the concept of belongingness, *"Put into realisation how nursing students need to be treated, and how easily they may no longer like the profession should they be treated wrongly"*.

LIMITATIONS

There were limitations to this research project. The main limitation related to measuring the impact of the study. The effectiveness of the program was measured through the attending nurses. Whilst results from the data indicated a change in knowledge and attitude, it may not transcend to a change of practice. The researcher considered the inclusion of fieldwork to observe these nurses in practice. This would have involved pre and post observations to measure a change in practice. Due to the many uncontrollable variables, this was not included. As a result, the use of the online reflection by participants was incorporated to provide the researcher with access to the thoughts and examples of experiences of supervision. The researcher also acknowledges that in the recruitment process these participants choose to attend this program and therefore may have a stronger interest in this role than the general nursing population. This may bias the results of the data, and may either set higher expectations of the program content, or a proactive approach in implementing the programs objectives.

DISCUSSION

The findings of this research demonstrate that a positive effect on participants' knowledge and attitude can be achieved with a dedicated study day program. The participants endorsed the ACS as an education strategy that could provide nurses with the necessary knowledge, skills and attitudes to facilitate positive clinical supervision placements.

Findings from the research also suggest that the ongoing success of the program on participants' effective implementation of the role could not be guaranteed without ongoing organisational support and commitment to the role. Participants felt that more support from the health care facilities and education providers was required, including greater recognition of the role, responsibilities, barriers and time requirements.

Due to the success of the study, a further three years of support for the program was provided through Health Workforce Australia (until its cessation in November 2014), and modified (terminology only) to facilitate the inclusion of the wider health care team. Study day evaluations from these days continued to be positive and supportive of the program.

The implications of these findings are an important take-home message for hospital executive staff, educational institutions and clinical supervisors who want to improve their organisational culture and the role of the clinical

supervisor. These findings suggest that the success of the clinical supervision relationship between nursing students and registered nurses is co-dependent on all of these factors. Health care facilities and education providers need to consider these findings and their implications for future policy and strategy development.

CONCLUSION

The Art of Clinical Supervision aimed to assist nursing staff to develop the essential knowledge and attitude to provide nursing students with a positive learning experience. The research study confirmed the success of the program, and the program continues to provide learning opportunities for all health professionals in Western Australia. This articles intent has been to provide other health care services with a background to this program and its evaluation to assist with further clinical supervision education strategies.

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Home oxygen therapy assessment for COPD patients discharged from hospital: Respiratory NP Model of Care

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Author statement

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KEYWORDS

home oxygen therapy, COPD, hypoxia, discharge, nurse practitioner

ABSTRACT

Objectives

The research aim was to examine the impact of the introduction of the Chronic Respiratory Disease Nurse Practitioner (CRD NP) Model of Care (MOC) on the assessment for short term oxygen therapy (STOT), provision of care, and patient outcomes for patients discharged with oxygen therapy post an acute exacerbation of chronic obstructive pulmonary disease (COPD).

Design

A retrospective uncontrolled comparative clinical audit was conducted in two six-month periods pre (2009) and post (2011) the introduction of the CRD NP MOC.

Setting

Tertiary referral centre in central Victoria, Australia.

Subjects

A total of 301 patient admissions with a discharge diagnosis of COPD were examined for hypoxia at rest and on exertion prior to discharge.

Main outcome measures

The audit focused on the incidence of assessment for STOT prior to discharge, supply of STOT where indicated on discharge, and incidence of re-admission within 28 days of discharge with COPD related symptoms.

Results

A statistically significant increase in the proportion of appropriate patients assessed with arterial blood gas analysis for eligibility of STOT from 7.7% in 2009 to 45% in 2011. Provision of STOT on discharge increased from 26.7% to 44.4%. Re-admission to hospital within 28 days of discharge for patients with STOT decreased from 25% in 2009 to 12.5% in 2011.

Conclusion

Since the introduction of the CRD NP MOC there has been an increase in patient assessment for STOT, provision of STOT, reduction in hospital re-admissions, improved adherence to procedure protocols, improved patient outcomes and cost savings for the hospital.

INTRODUCTION

Oxygen is a drug that has been used for centuries for its therapeutic purposes (McDonald and Crockett 2009) and was first used in the treatment of lung disease in 1922 (Ringbaek 2006). With increasing fiscal pressure to discharge patients as early as is practicable from hospital it is common practice worldwide to discharge patients who have been admitted for chronic obstructive pulmonary disease (COPD) and remain hypoxic at the time of discharge with short term oxygen therapy (STOT) (Ringbaek 2005; Eaton et al 2001). These patients traditionally have been assessed for STOT according to the guidelines for the provision of long term oxygen therapy (LTOT) that applies to their respective country. It is expected many of these patients who are assessed for STOT will be clinically stable and will not fulfil the criteria for LTOT when reassessed within one to two months of discharge. Therefore STOT provides optimal medical management that appropriately balances patient care and timely discharge (Eaton et al 2001).

At a regional health facility in Central Victoria, Australia it was recognised that potential enhancement could be made in the areas of access, provision of care and improved client outcomes. Consequentially, a Model of Care (MOC) that could address the gap in service to improve patient outcomes was proposed and one of the authors was appointed to the position of Chronic Respiratory Disease Nurse Practitioner (CRD NP) in 2008. Subsequently, a CRD NP MOC was developed in 2009 which included the assessment and management of COPD patients who required home oxygen therapy on discharge from hospital. With the introduction of the CRD NP MOC in 2010 the existing hospital policy and procedure for home oxygen therapy was revised to specify that medically stable patients who remain hypoxic should be assessed appropriately for STOT within the 48-hour time period prior to discharge from hospital.

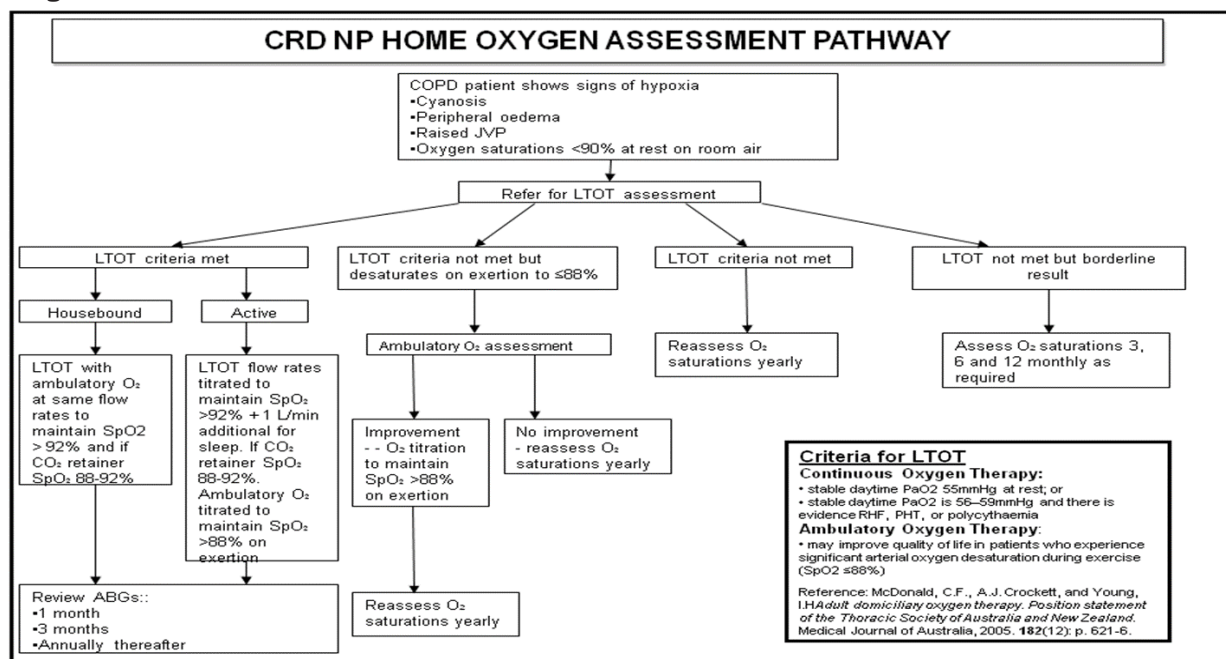
The CRD NP reviews patients discharged home with STOT at one and three weeks post discharge for oxygen titration, education of home oxygen therapy and to ascertain the need for assessment of long term oxygen therapy. The CRD NP refers patients who remain hypoxic for the required arterial blood gases (ABG) on room air and on oxygen and also for a Six Minute Walk Test (6MWT) prior to their review appointment at approximately four weeks, however this time frame may be longer to ensure the patient is medically stable when assessed. An Outpatient Department Oxygen Clinic (OPD OC) was established to review patients discharged with STOT in 2010. At the OPD OC the patient's results were reviewed by the CRD NP in collaboration with either of the two respiratory physicians, and eligibility for LTOT was determined. If the patient initially was only eligible for portable oxygen therapy then they may be reviewed in the clinic at three, six or twelve months for assessment for an oxygen concentrator depending on the degree of chronic hypoxaemia present.

BACKGROUND

COPD is a slow progressive disease that is characterised by a reduction in airflow that is not fully reversible which may lead to severe disabling breathlessness on minimal exertion and often leads to chronic hypoxaemia and respiratory failure, increased hospital admission and premature death. Chronic hypoxaemia, is defined by O'Driscoll et al (2008) as a low oxygen tension or partial pressure of oxygen $\text{PaO}_2 < 60$ mmHg in the blood, or $\text{SpO}_2 < 90\%$ on room air. Chronic lower respiratory tract disease is expected to be the third leading cause of death by the year 2020 (Crockett et al 2002). Worldwide, COPD is a major cause of morbidity and mortality and in Australia it is estimated that there are approximately two million people with a diagnosis of COPD, with 1.2 million people suffering from moderate to severe COPD (McKenzie et al 2011). It is estimated that 14% of Australian adults over the age of 40 years have some degree of COPD when assessed under the Global Initiative for Obstructive Lung Disease (GOLD) criteria and with an aging population the burden of disease is likely to increase (Toelle et al 2013). COPD has been ranked as the fifth highest contributor to the overall burden of disease estimated by the Australian Institute of Health and Welfare (Australian Institute

of Health and Welfare 2008). COPD death rates in Australia are now ranked sixth for both men and women as common causes of death and in the indigenous population death rates are five times higher than that of non-indigenous Australians (Access Economics 2008; Australian Institute of Health and Welfare 2008). COPD is also associated with other conditions such as heart disease, lung cancer, stroke, pneumonia and depression (Abramson et al 2015).

Diagram 1



LTOT benefits have been demonstrated in two landmark randomised clinical trials by the Nocturnal Oxygen Treatment Trial (NOTT) group and Medical Research Council (MRC) working party in the early 1980's (Nocturnal Oxygen Therapy Trial 1980; Medical Research Council Working Party 1981). As a result of the NOTT and MRC trials, guidelines for the prescription of LTOT have been implemented in many countries around the world with the first guidelines being developed in the United Kingdom (UK) in 1985 (Kelly and Lynes 2008). The American Thoracic Society (ATS), European Respiratory Society (ERS), British Thoracic Society (BTS) and the Thoracic Society of Australia and New Zealand (TSANZ) have all established their own similar criteria for LTOT in patients with COPD based on these two multicentre studies (Wijkstra et al 2001). In Australia the guidelines for the management of LTOT recommend that it is prescribed for at least 18 hours per day and it has been found to be the only component in the management of COPD patients with severe daytime hypoxaemia that improves survival, quality of life and reduces mortality (McDonald et al 2014).

In Australia the major cause of chronic hypoxia is COPD, but is a feature of many other cardio-respiratory diseases. Oxygen is prescribed according to the adult domiciliary oxygen therapy position statement of the TSANZ. This position statement is a 'consensus statement' that was first developed in 1998, then revised in 2005 and again in 2014 (McDonald et al 2014; McDonald et al 2005). The TSANZ suggest that home oxygen therapy is beneficial for patients with evidence of chronic hypoxia but also for patients whose resting oxygen levels are satisfactory during the day however desaturate on exertion and at night when sleeping despite the lack of strong evidence to support this practice (McDonald et al 2014). STOT and LTOT are prescribed differently across the various states and territories within Australia due to varying policies and funding bodies (Serginson et al 2009).

As a result of an acute exacerbation of COPD, patients may be prescribed STOT on discharge from hospital if hypoxaemia persists. The criteria that has been traditionally used for the assessment for STOT is the same as for LTOT. If the patient is hypoxic ($\text{SpO}_2 < 90\%$) when awake, at rest and breathing room air, then an ABG sample should be obtained for assessment of hypoxaemia. If the arterial oxygen pressure is low, $\text{PaO}_2 \leq 55$ mmHg (7.3 kPa), or if PaO_2 is from 56 to 59 mmHg (7.4-7.9 kPa) together with clinical evidence of pulmonary hypertension, cor pulmonale or polycythemia (hemoglobin level $> 170\text{g/l}$), then the patient would qualify for STOT that is funded by the hospital. These patients require reassessment within one to two months when their condition is stable and on optimal medical management for LTOT. COPD patients that are most likely to benefit are those who have an increased arterial $\text{PaCO}_2 > 45\text{mmHg}$ (6 kPa). The criteria for patients requiring ambulatory oxygen are that during exercise they may experience a significant arterial oxygen desaturation of $\text{SpO}_2 \leq 88\%$. Criteria for nocturnal oxygen therapy is $\text{SpO}_2 \leq 88\%$ ($\text{PaO}_2 < 55$ mm Hg or 7.3 kPa) for more than a third of the night and who have evidence of hypoxia-related sequelae. Absolute contraindication for assessment or provision of STOT or LTOT is current smoking of cigarettes (McDonald et al 2014; McDonald et al 2005).

AIMS

The aim of the study was to examine the impact of the introduction of the CRD NP MOC on the assessment for STOT, provision of care, and patient outcomes for patients discharged post an acute exacerbation of COPD at a regional hospital in central Victoria, Australia.

ETHICAL CONSIDERATIONS

Ethical approval for this study was obtained from the Bendigo Health Human Research Ethics Committee (HREC) and was assessed as being low risk. Patient consent was not required as it was a clinical audit.

METHODS

A retrospective uncontrolled comparative study was conducted based on a clinical audit of the medical records for all patients discharged from hospital with a primary diagnosis of COPD during two six month periods. The first period was prior to the introduction of the CRD NP (pre-NP), from 1 January to 30 June 2009 and the second was the corresponding period in 2011, after the CRD NP MOC was implemented (post-NP). A total of 301 patient admissions during the two periods for patients with a discharge diagnosis of J44.0 (COPD with acute lower respiratory infection), J44.1 (COPD with acute exacerbation unspecified), J44.8 (other specified COPD) or J44.9 (COPD unspecified) were examined. Records for patients who were discharged to other units and health facilities for ongoing management or for convalescence were excluded from the analysis, as were those for patients already commenced on LTOT and receiving both an oxygen concentrator and portable oxygen cylinders. Records for patients who were identified as smokers (and hence ineligible for STOT) were initially included but removed from the analysis once it was evident that the TSANZ guidelines on domiciliary oxygen had been applied stringently and no smokers were provided with STOT.

DATA CAPTURE

The key data that was extracted from each record and examined were the following:

- Oxygen saturations at rest and on room air within 48 hours prior to discharge.
- If resting oxygen saturations $\leq 90\%$ was an ABG sample taken for analysis of hypoxaemia within 48 hours prior to discharge.

- If patients had a functional walk test (performed by the physiotherapist over a 40 metre distance) and oxygen saturations on exertion $\leq 88\%$ within 48 hours of discharge.
- Whether or not the patient was eligible for STOT.
- Whether or not the patient was discharged with STOT.
- Whether or not the patient was re-admitted within 28 days with a COPD diagnosis.

The data was transcribed into the Statistical Packages for Social Science, version 19 (SPSS) software for analysis. Evidence of differences in treatment practice and/or patient outcomes between the pre NP and post NP periods were examined using Fisher's exact test.

RESULTS

In the analysis there were a total of 182 patient admissions: 82 in the pre-NP period (2009) and 100 in the post-NP period (2011). However due to some patients having multiple admissions in total there were 221 individual presentations and admissions (91 pre-NP and 130 post-NP). Whether or not treatment practice or patient outcomes correspond to different episodes for the same patient is unimportant in this analysis so the numbers and proportions that are provided correspond to 'patient admissions'. However, it is convenient in the discussion that follows to refer to them simply as 'patients'.

Table 1 lists the numbers and proportions of (non-smoking) COPD patients with rest $\text{SpO}_2 \leq 90\%$ in the two six month periods for whom an ABG sample was taken within the 48 hour period prior to discharge. In the six month period in 2009, prior to the introduction of the CRD NP role, one patient (7.7%) had an ABG sample taken of the 13 patients with rest $\text{SpO}_2 \leq 90\%$ for whom an ABG sample was warranted according to hospital guidelines. In the six month period in 2011 with the implementation of the CRD NP MOC, nine of 20 qualifying patients (45%) had ABG samples taken. This represents a statistically significant increase in the proportion of qualifying patients being appropriately assessed (using ABG) for eligibility for STOT (Fisher's exact test, $p = 0.026$).

Table 1: Qualifying COPD Patients for whom an ABG was taken

Year	Qualifying patients (Resting $\text{SpO}_2 \leq 90\%$)	ABG taken	
		Yes	No
2009 (pre NP)	13	1 (7.7%)	12 (93.3%)
2011 (post NP)	20	9 (45.0%)	11 (55.0%)
Total	33	10	23

In 2009 during the first six months, 26.7% of COPD patients who met eligibility criteria for STOT (based on outcomes of ABG and/or functional walk test) were provided with STOT on discharge (table 2). In 2011 the proportion of patients meeting the criteria increased to 44.4% during the same six month period. The increase in the proportion of eligible patients being provided with STOT is not statistically significant (Fisher's exact test, $p = 0.245$).

Table 2: Eligible COPD patients provided with STOT on discharge

Year	Patients eligible for STOT	STOT provided	
		Yes	No
2009 (pre NP)	15	4 (26.7%)	11 (73.3%)
2011 (post NP)	18	8 (44.4%)	10 (55.6%)
Total	33	12	21

The numbers of patients in each six month period who were discharged with STOT and who were subsequently re-admitted to hospital within 28 days for further treatment of COPD are given in table 3. As the numbers observed in both years examined were relatively small there was not a statistically significant difference observed (Fisher's exact test, $p = 0.576$).

Table 3: Re-admission rates for patients discharged with STOT

Year	Discharged with STOT	Re-admitted within 28 days	
		Yes	No
2009 (pre NP)	4	1 (25.0%)	3 (75.0%)
2011 (post NP)	8	1 (12.5%)	7 (87.5%)
Total	12	2	10

DISCUSSION

At the time of writing this paper there is a lack of research in the area relating to COPD and STOT. Currently there are no evidence based Australian or international guidelines that refer to the assessment and provision of STOT for patients with COPD prior to discharge from hospital. Abramson et al (2015, p.76) states that "although effective, it is a potentially expensive therapy that should only be prescribed for those in whom there is evidence of benefit". In the 2011 COPD-X Plan, McKenzie et al (2011, p.64), states that "patients should be weaned off supplementary oxygen therapy as soon as possible, with none for 24-48 hours before discharge, unless home oxygen is prescribed". However, as stated in the new revised version of the COPD-X Plan 2015, the above statement has been omitted from the document and replaced with a statement by Abramson et al (2015, p.97), that indicates a patient's readiness for discharge is when "oxygen delivery has ceased for 24 hours (unless home oxygen therapy is indicated)". Neither these guidelines indicate when an optimal time for ABG sampling prior to discharge would be appropriate.

In the BTS Guideline for emergency oxygen use in adult patients (O'Driscoll et al 2008) it is suggested that a small number of patients who may have experienced a major respiratory or cardiac injury will need to be provided with STOT to facilitate a safe discharge from hospital. Oxygen therapy is aimed at achieving oxygen saturations between 88-92%. The criteria for assessment prior to discharge from hospital after an exacerbation has been determined by the Royal College of Physicians – "clinical guideline for domiciliary oxygen" (1999), which is in line with other countries for assessment of LTOT when the patient is clinically stable (O'Driscoll et al 2008). Again, this document does not specify the optimal time to assess patients need for home oxygen therapy prior to discharge from hospital. In a UK study by Gruffydd-Jones et al (2007) on the needs of patients following discharge from hospital after an acute exacerbation of COPD, nine out of 24 patients (38%) had oxygen saturations $\leq 92\%$ on room air, however only three patients (12.5%) were discharged from hospital with home oxygen therapy. Gruffydd-Jones et al (2007) suggest there was a possible under-referral for assessment for oxygen therapy and the patients perceived that there was a need for oxygen therapy but were uncertain as to why it had not been provided.

In contrast, in the United States of America, under the current health system 'Medicare', it is a requirement that a patient is assessed with qualifying data within 48 hours prior to discharge. It is an expectation that after an admission with an acute exacerbation of COPD that acute hypoxaemia will improve (Department of Health and Human Services Centers for Medicare and Medicaid Services 2011; Gronkiewicz and Borkgren-Okonek 2004). The need for oxygen is assessed as per the Global Initiative for Chronic Obstructive Lung Disease (GOLD) Standards for the management of COPD using the existing criteria set out for the assessment of LTOT (Global Initiative for Chronic Obstructive Lung Disease 2014; Gronkiewicz and Borkgren-Okonek 2004). The GOLD Standards have discharge criteria that state the patient must be clinically stable and that ABG assessments have also been stable for 12-24 hours. It also states that prior to discharge from hospital after an exacerbation, patients that remain hypoxaemic should be assessed with either ABG and/or pulse oximetry and then reassessed within three months. The standards do not indicate the level of hypoxaemia that would not be considered acceptable for discharge and the need for oxygen is assessed as per LTOT criteria (Global Initiative for Chronic Obstructive Lung Disease 2014).

After the introduction of the CRD NP MOC, and the subsequent redevelopment of the hospital policy for home oxygen therapy, there has been a significant increase in the number of ABG's being obtained for assessment of hypoxaemia in patients with COPD prior to discharge from hospital (table 1). The revised policy stated the patient must be medically stable and ABG's obtained on room air within 48 hours prior to discharge. This decision to specify that the assessment must be performed within this timeframe was to ensure (1) the patient was medically stable, (2) to provide the oxygen distributor adequate notice that the patient would require home oxygen therapy at discharge and to ensure that patients living outside of a locality also received the service in a timely manner, and (3) for the CRD NP to provide education and resource material to patient (and carer if available) prior to discharge and to make follow up arrangements one week post discharge for assessment and oxygen titration.

The CRD NP attributes the increase in patients being assessed appropriately for home oxygen therapy to an enhanced educative program regarding the home oxygen policy and STOT pathway for medical, nursing and allied health staff across the organisation aimed at improving patient outcomes post discharge, along with the implementation of a new assessment form designed to ensure that hospital policy is followed and the required assessments for ABG and functional walk test are performed. Each department across the organisation received education, targeting medical, nursing and allied health staff, on the new home oxygen policy. Education included a resource package with flow charts for assessment and referral to the CRD NP for STOT. The CRD NP also concurred that, as suggested by Gruffydd-Jones et al (2007) that under-referral for assessment for STOT may be due the high cost involved in supplying oxygen therapy to patients post discharge who may not be eligible for LTOT when reassessed at a later date.

The data in table 2 indicates an increase, from 26.7% in 2009 to 44.4% in 2011, in the proportion of patients assessed as eligible for STOT actually being provided with STOT on discharge. Whilst this increase is not statistically significant it does represent a substantial improvement in clinical terms. Nevertheless, there is clearly a need for continued action given the non-prescription for STOT of 55.6% of eligible patients. The CRD NP suggests that under referral for STOT prescription may also be due to an expectation that a patient experiencing a severe exacerbation may improve once discharged home from hospital and therefore not require oxygen for discharge. According to Eaton et al (2001, p.582), "there is an expectation that when clinically stable a proportion will not fulfil LTOT criteria". In a New Zealand study, 38% of patients when reassessed at the two month review were not eligible for LTOT (McDonald et al 2005). In another study by Andersson et al (2002), 70% of patients studied did not require oxygen therapy one month post discharge. Ringbaek (2006) acknowledges there are a number of patients who, when reassessed at three months post discharge, would

not fulfil the eligibility criteria for LTOT, the provision of STOT on discharge can therefore be justified due to symptoms of hypoxaemia and high mortality in the period of time post discharge from hospital.

In a study by Eaton et al (2006) who compared cylinder oxygen versus cylinder air versus usual care in patients who were discharged from hospital after an exacerbation found that those who were discharged home with cylinder oxygen represented to hospital for admission at a lower rate in the first month compared to cylinder air or usual care group. With the introduction of the CRD NP MOC and redesign of the hospital home oxygen policy patients are now being assessed more appropriately and considered for STOT. An important aspect of the CRD NP MOC involves follow-up assessment at one and three weeks post discharge and oxygen flow rates are adjusted to meet required oxygen target saturations for at rest and on exertion. As seen in table 3 the decline in re-admissions for these patients is attributed to this aspect of the MOC. As the numbers observed in both years examined were relatively small, if the observed proportions of re-admission rates are realistic then samples roughly 10 times larger would be required to achieve sufficient power to detect the difference at the 5% level of significance.

LIMITATIONS

This study has some limitations. Sample size of patients being assessed and discharged home with oxygen was small in patients with a discharge diagnosis of COPD and it is not known whether the results would have been different had other lung diseases been included in the study that were discharged home with STOT. The study was performed in only one organisation over two six-month periods with no control.

CONCLUSION

The analysis of data for COPD patients in two six-month periods, the first prior to the introduction of the CRD NP model of care and the second following the introduction, reveals improvements in patient outcome and service delivery measures at which the CRD NP role were targeted. A significant increase in the proportion of COPD patients with resting oxygen saturation $\leq 90\%$ being assessed for STOT with ABG sampling within the specified 48 hours prior to discharge was observed. The proportion of COPD patients assessed as eligible for discharge with oxygen therapy for 30 days who were actually provided with STOT improved and a reduction in the re-presentation rate to hospital within 28 days of discharge occurred. Nevertheless, the audit reveals that whilst there is evidence of substantial improvement in practice adherence to policy it falls well short of 100% so continued emphasis of the required processes is important from the perspective of better patient outcomes and more effective service delivery.

This study heightens the awareness of the need to assess patients within a specified time prior to discharge with STOT for optimal medical management. The CRD NP recommends further research be carried out in this area to promote appropriate assessment of all COPD patients prior to discharge from hospital within a specified time for STOT.

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The role of advance care planning in end-of-life care for residents of aged care facilities

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KEY WORDS

Advance Care Planning, Advance Care Directive, nursing homes, residential aged care facilities, end-of-life, dying with dignity

ABSTRACT

Objective

This report will present the case of an elderly woman with rapidly declining health admitted to hospital from a nursing home. It will discuss benefits of advance care planning for residents of aged care facilities who have expressed opinions/wishes regarding their end-of-life care, and identify barriers, varying legal status, the need for documentation of discussion outcomes specifying residents' wishes, and the importance of education and expert support for nursing staff.

Setting

Nursing home and acute tertiary referral hospital.

Subject

Female resident of a nursing home, aged 97 years, with acute onset of abdominal pain and multiple co-morbidities.

Primary Argument

The majority of nursing home residents do not have advance care planning initiated, nor is this routinely raised by nursing staff. While wishes may be discussed with family, they may not be fully respected if undocumented. Acutely ill residents are frequently hospitalised, especially when death is imminent, and often die alone in unfamiliar surroundings, tended by strangers. Many of these admissions could be avoided with Advance Care Planning, as could the resultant medical interventions which may cause the resident acute pain and discomfort.

Conclusion

Advance Care Planning can lead to avoidance of non-essential hospital transfers and their inherent risks and is likely to facilitate a dignified, peaceful death in familiar surroundings for nursing home residents, averting medical interventions which may cause needless pain and prolonged suffering.

INTRODUCTION

Advance care planning (ACP) is a means of enabling the difficult subject of end-of-life care to be openly discussed between loved ones and the healthcare team, whilst the person is still able to effectively communicate their wishes in relation to their future health care in the event of incapacitation through illness or accident (Sellars et al 2015; Amjad et al 2014; Boot and Wilson 2014; Thomas 2008; Shanley and Wall 2004). Both in Australia and globally, most residents of nursing homes are transported to acute care facilities when their health declines rapidly and/or there is reasonable concern that death may be imminent (Gardhouse et al 2014; Caplan and Meller 2010). The availability of, and participation in, ACP may assist in preventing non-essential transfers of the resident from their residential aged care facility (RACF) to the emergency department (ED) of the nearest hospital (Reymond et al 2011). It is not the aim of the ACP to prevent transfers to hospital altogether, but rather to reduce the non-beneficial transfers and resultant complications which may be avoided by keeping the resident at their RACF (Van Gaal et al 2014; Caplan et al 2006; Shanley and Wall 2004). It is common for critically ill people to be sent to ED, despite evidence that those who avoided hospital transfers have fewer diagnoses of increased confusion or delirium (McCloskey 2011; Bezzina 2009; Caplan et al 2006).

LITERATURE REVIEW

Every competent adult has the right to consent to and to refuse medical treatment. This right is the fundamental basis of advance care planning (Advance Care Planning 2015).

The importance of ACP and ongoing communication between older persons, their families and healthcare professionals is progressively becoming recognised (Sellars et al 2015; Amjad et al 2014; Baughman et al 2014; in der Schmitte et al 2014; Stone et al 2013; Storey and Sherwen 2013) especially in Australia (Bird 2014). However, evidence persists that initiating ACP discussions with residents of RACFs remains difficult for staff (Boot and Wilson 2014; Dempsey 2014; Schubart et al 2014; Robinson et al 2013; Stone et al 2013). Notwithstanding the recognition that ACP is integral to person-centred care, a significant proportion of older persons do not have this in place (Schubart et al 2014; Boerner et al 2013; Rhee et al 2012). A number of barriers to the implementation of ACP have been identified, starting with, from the patient's perspective, a lack of knowledge, limited time if they are critically ill, emotional responses, cultural background, and denial of mortality. From a health professional's perspective, again, lack of knowledge is a factor, together with ambiguity regarding its processes (Sellars et al 2015; Boddy et al 2013). There are systemic barriers relating to the different requirements of each State or Territory as there is no uniform legislation and registry, nor is there definition of roles and responsibilities for those involved in the provision of care. There are also procedural issues, especially in the area of assessment of capacity which Boddy et al (2013) have identified in Australia as a medically-based decision. Some practitioners consider there is uncertainty regarding the stage at which capacity is lost and may not be aware of the procedure for determining absence of capacity.

ACP has its roots in the ethical principal of autonomy, in particular, the tenet of informed consent as established in the landmark 1914 court case, *Schloendorff v Society of New York Hospital*. In his widely quoted judgment for this case, Justice Cardozo ruled that competent adults were entitled to sole control regarding their own bodies. This decision has since been followed in Australian courts under Common Law to uphold the rights of persons to determine consent or refusal for medical treatment including in circumstances where death is the likely outcome (Advance Care Planning 2015). In 2009 a New South Wales judge ruled that compliance with advance care directives is appropriate, especially when the person is competent at the time of making such directive, was not unduly influenced, has not changed their mind, and met the existing medical circumstances (New South Wales Supreme Court 2009).

Whilst Common Law is well-defined, legislation has also been passed by State and Territory governments reiterating a person's rights in relation to medical treatment, or the refusal thereof; and all States/Territories, with the exception of Tasmania, legally recognise ACDs and the right to refuse treatment. However, consistency is lacking in policies and laws which support ACP. Indeed, the National Framework for Advance Care Planning (National Advance Care Directives Working Group 2011) identified multiple issues including disparities in terminology, inconsistent legislation, and restrictions on enacting advance care directives.

The need for ACP and its effective communication becomes apparent when an individual who is acutely ill develops physical and/or cognitive deterioration, and is incapable of accepting or declining medical interventions (Scandrett et al 2014; Boerner et al 2013; Dempsey 2013). ACP enables an individual to stipulate what their wishes are for future medical care should they be rendered incapable of making such decisions and, moreover, reduces the worrisome obligation on loved ones to function as proxy decision makers (Amjad et al 2014; Boot and Wilson 2014; Brinkman-Stoppelenburg et al 2014; Dempsey 2014; De Vleminck et al 2014; Boddy et al 2013; Jeong et al 2007). The implementation of ACDs is proven to reduce over-treatment when death is approaching, being consistent with the person's preferences and increasing satisfaction with the end-of-life care from both the family's and the person's points of view, thereby moderating stress (Sellars 2015). There is also evidence that initiation of ACP discussions has led to a decrease in depressive symptoms, especially in the early stages of dementia (Hilgeman et al 2014).

ACDs have also reduced the number of inappropriate hospital presentations and subsequent admissions for residents of RACFs (Sellars et al 2015; Boddy et al 2013; Silvester et al 2013; Stone et al 2013). This is an important reason for their use, as RACF residents may encounter complicating factors in the ED, such as unfamiliar doctors who do not know their history, and rapid health assessments which may compromise their complex needs, especially if they are unable to communicate effectively or are cognitively impaired (Arendts et al 2012). Those who are admitted to a ward face the increased possibility of adverse outcomes, including falls, pressure injuries, delirium, incontinence, and mortality (Renjel and Eeles 2014; Van Gaal et al 2014; Doran et al 2013; Arendts et al 2012; Ashcraft and Champion 2012; Lamb et al 2011; Codde et al 2010). Approximately half of RACF residents who present to the ED will be admitted to a ward, and 75% of those admitted will die by the fifth day (Ashcraft and Owen 2014).

CASE REPORT

Background

The aged care rapid response team (ARRT) received a telephone call from a registered nurse (RN) at an RACF who advised that a 97 year old female resident (Mrs K) had developed acute onset abdominal pain overnight with vomiting and nausea. Mrs K had informed the staff that she had felt some abdominal discomfort the previous evening, but in the morning had awakened with severe pain, despite taking her regularly prescribed analgesia. The RN had contacted Mrs K's general practitioner who directed her to administer an enema, which was done with little effect. As the day progressed, Mrs K's condition worsened, she was uncharacteristically drowsy, and her abdomen was distended, firm and painful to touch. Mrs K had recently been prescribed diclofenac, which, when combined with her already prescribed aspirin, may interact and could cause gastric bleeding. Mrs K had no written end-of-life care pathway or advance care directive (ACD) in place, so the RN was advised to contact Mrs K's daughter, Anne, and have Mrs K transferred to the ED as her condition could be very serious and required immediate investigation.

Diagnosis

A diagnosis of a perforated peptic ulcer was made, and Mrs K was admitted to a ward for treatment.

Health history

Mrs K had an extensive medical history including surgical procedures and hospital stays. She was cognitively intact and aware of the invasive procedures she could face if hospitalised again.

Plan

The admitting medical officer documented a plan which included investigative procedures, insertion of an indwelling urinary catheter, intravenous fluids, and nil oral intake.

Management and treatment

On admission, it was documented in the Multidisciplinary Assessment Form by the medical officer, in capital letters and underlined:

NO CPR, NOT FOR RESUS, NO ICU, NO INTUBATION, NO SURGERY, NO IVABS, D/W DAUGHTER

Mrs K was accepted under the care of the gastroenterology team and transferred to a ward where it was subsequently decided, after consultation with Anne, that she would receive palliative care.

Despite this, her medications were then varied considerably, including the introduction of intravenous antibiotics and the abrupt cessation of opiate analgesia, an anti-inflammatory, and a sedative. This caused her acute discomfort, nausea, vomiting, and diarrhoea which necessitated regular administration of an anti-emetic. In fact, ongoing administration of those ceased medications may have benefitted Mrs K the most. Her urine output dropped to 5-10mL/hour, a clear indication of potential kidney failure, however her treatment continued unchanged. Anne was not aware until the third day that Mrs K was receiving intravenous antibiotics, and advised medical staff that this was in direct contravention of the agreed treatment plan. The intravenous antibiotics were ceased and, when Anne made the observation that her mother was exhibiting signs of strong pain, subcutaneous morphine 2.5-7.5mg was prescribed as needed every two hours. Mrs K's intravenous fluid was reduced to 40mL per hour.

Anne consented to be interviewed for this report in relation to the care given to her mother. She advised that she knew her mother was not going to improve, and had wondered why her mother was prescribed intravenous antibiotics when recovery was so unlikely, given her obvious deterioration, and further, that within two days of hospitalisation her mother's condition had deteriorated to such an extent that she did not recognise her daughter and was no longer able to communicate.

When questioned about ACP, Anne stated that she knew nothing about it and that this subject had not been introduced by RACF staff nor her mother's GP. When given a brief overview of the purpose of ACP, Anne recalled a recent conversation during which her mother said:

"I've had a good life – when my time comes, I'm ready to go. Don't stick me full of needles and tubes. Don't hang on to me – I think I'd hate that. Let me go quick, in my own bed, with you holding my hand."

Anne enquired if that constituted advance care planning and was advised that it did, albeit informal and undocumented. It is clear from that statement that Mrs K would not have wanted the treatment she received in the hospital.

Outcome

Mrs K's condition continued to deteriorate over the course of her hospitalisation. Blood tests revealed multiple deranged results which worsened over three days, indicating excessive intravenous intake, renal failure, and infection. She became increasingly drowsy and delirious, and on the morning of day four, during early morning ward rounds at 0520hrs, she was found with no discernible signs of life. The cause of death was noted as 'perforated viscus'.

DISCUSSION

In the past decade, hospitalisation rates for men and women over the age of 85 have increased by 48% and 35% respectively (Swerissen and Duckett 2014). It is not at all uncommon for residents of RACFs to be transferred to hospital for many reasons, including diagnostic testing, acute illness, falls, and traumatic wound care (Van Gaal et al 2014; Shanley et al 2011). Often residents, are transferred when they are acutely ill and/or death may be imminent (Gardhouse et al 2014), which removes their privilege to die peacefully in a place of their choosing.

As residents of RACFs are usually frailer than their community counterparts, it is not surprising that they present more frequently to hospital (Wysocki et al 2014; Jayasinghe et al 2007). Due to their raised levels of morbidity, their risk of being admitted and dying during their admission is increased (Ingarfield et al 2009). Discussion of end-of-life care should therefore be considered an integral aspect of RACF care, which would entail offering residents, their families, and significant others the option of discussing views and preferences for care should a critical event occur (Dempsey 2014; De Vleminck et al 2014; Allen et al 2003). The outcome of these discussions can then be clearly documented (Bird 2014; De Vleminck et al 2014; Robinson et al 2013).

Although it has been shown that older persons residing in RACFs who discuss their wishes with family members are more likely to have documented ACP in place than those in the community (Allen et al 2003), this did not occur in this instance, most likely due to a combination of Anne's lack of understanding what ACP constitutes and the facility's failure to initiate a conversation in this regard. It would appear that this would have been an ideal situation for discussion and implementation of ACP in the RACF, particularly as Mrs K had openly discussed her wishes with Anne. It may well have precluded Mrs K's transfer to hospital, where she became delirious, a development not uncommon in hospitalised older persons (Renjel and Eeles 2014). In fact, evidence substantiates the benefits of persons remaining in their place of residence, citing familiarity, comfort, and continuity of care (Evans 2011; Allen et al 2003).

In this particular case, Mrs K's acute onset of symptoms did require investigation and diagnosis, so ACP may not have prevented her transfer to hospital. However, documentation of her wishes would have avoided the abrupt cessation of opiate analgesia and a sedative and the initiation of a strong intravenous antibiotic regime, which caused severe nausea and vomiting and significantly increased Mrs K's level of discomfort in her last days. Persons who do not have documented ACP may be given unwanted medical treatment, and indeed are often over treated (Boerner et al 2013), which appears to be the case here. Further, had Mrs K specified a desire not to be transferred to hospital in the event of an acute decline in her health status, this in fact may have been honoured. It was not known to Anne or the RACF that Mrs K's express wish to die in her own bed constituted a desire not to be transferred from her place of residence. Research has identified a statistically significant difference in the proportion of older persons with ACP who have died in hospital compared with those who remained in their place of residence, finding the former much lower (Bischoff et al 2013).

ACP has been proven to lead to a reduction in emergency presentations and subsequent hospital admissions (Boddy et al 2013; Stone et al 2013), and may also guarantee the provision of care as specified by the resident (Brinkman-Stoppelenburg et al 2014; Shaw et al 2010; The Gold Standards Framework 2010; Badger et al 2007). The crucial aspect of planning for end-of-life care should not be assigned to fate by its omission (Evans 2011) but should be a customary feature of care, clarifying health care needs of the resident (Baughman et al 2014; The Gold Standards Framework 2011). This is important when residents are no longer able to speak for themselves, thereby ensuring, where possible, a dignified and peaceful death (Phillips et al 2011). But the issue of raising ACP and its subsequent documentation is a difficult one, particularly in RACFs where new residents and their families are often not ready to consider or discuss such options. Language barriers

may also be a factor, together with cultural taboos (Boot and Wilson 2014; Dempsey 2014; Thomas 2008; Shanley and Wall 2004). However, lack of knowledge about ACP has been identified as the foremost barrier to its implementation in RACFs (Boddy et al 2013; Jeong et al 2007). Jeong et al (2007) suggested that a designated expert in ACP would assist in providing guidance in RACFs. At the time of writing, in the Local Health District where Mrs K resided, such an expert is not employed. However, the ARRT regularly raise the issue of ACP with RACF residents they visit.

ACP achieves success when a multi-system method is implemented, including involvement and support from the community, development of administrative policies and procedures, staff education, and appropriate documentation practices (Sellars et al 2015). In its Interim Report the Clinical Excellence Commission (CEC) (2008) recommends the use of prioritised approaches to facilitate practice change. This may well improve ability of RACF staff to initiate discussions with the resident and family. One such approach is the use of a forcing function, a feature that precludes completion of an action unless a specific task is first performed (Patient Safety Network 2015); for example, completion of the admission forms cannot take place until a section on ACP is filled out.

Had Mrs K not clearly made her wishes known to her daughter, she may have been subjected to even more prolonged treatment which may have extended her life with pain and suffering. This would have been in contravention of her wishes since she was no longer capable of making decisions. If ACP had been broached by the RACF staff, Mrs K's wishes may have been documented, and subsequently followed.

CONCLUSION

Mrs K died alone in hospital, which was not her wish. The circumstances of her illness would have been ideal for the implementation and documentation of ACP. According to her daughter, Mrs K had no difficulty discussing her end-of-life care wishes with her and, presumably, would have been amenable to discussions with the RACF staff had the issue been raised. Mrs K's decisions could have been documented in an Advance Care Directive which may have avoided the active, invasive medical interventions that exacerbated her acute discomfort in her last days.

This case study highlights the fact that ACP is not routinely discussed with residents upon their entry to RACFs, and that this omission may, in consequence, have detrimental effects on the quality of life, and death, of the residents. The barriers to such discussions are becoming clear, and it would be beneficial to address these by investigating solutions to the obstacles, and requirements for further education and support of staff in RACFs in relation to ACP, its discussion, documentation, and implementation.

RECOMMENDATIONS

Generally, alignment between the States/Territories' requirements and documentation may resolve discrepancies. This, together with ready access to standardised procedural information and documents from a central source, is likely to reduce the confusion and uncertainty surrounding ACP expressed by professionals and patients alike. The formation of a working party to address these issues is warranted.

A systematic method for the practice of ACP, particularly in RACFs, is required for person-centred care to ensure the residents' wishes are known and respected. This should include education for staff on initiating discussions with residents and their families, and the subsequent documentation of decisions reached. Furthermore, the development and implementation of a standardised form, including a forcing function, across these facilities would enhance this process. Support from professionals experienced in the practice of ACP, for example a clinical nurse consultant, may prove useful in initiating and reinforcing these practices. The feasibility of a designated expert employed in the community sector to regularly visit RACFs should therefore be investigated.

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Key milestones in the operationalisation of professional nursing ethics in Australia: a brief historical overview

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ABSTRACT

Objective

To provide a brief historical overview of the achievement of key milestones in the development of mechanisms for operationalising professional nursing ethics in Australia; examples of such milestones include: the publication of the first Australian text on nursing ethics (1989), the provision of the first Australian national distance education course on nursing ethics for registered nurses (1990), the adoption of the first code of ethics for Australian nurses (1993), and the commissioning of the first regular column on nursing ethics by the *Australian Nurses Journal* (2008).

Setting

Australian nursing ethics.

Primary argument

An historical perspective on the achievement of key milestones in the development of mechanisms for operationalising professional nursing ethics in Australia has been poorly documented. As a consequence an authentic 'Australian voice' is missing in global discourses on the history and development of nursing ethics as a field of inquiry. Compared with other countries, the achievement of key milestones pertinent to the operationalisation of nursing ethics in Australia has been relatively slow. Even so, over the past three decades an Australian perspective on nursing ethics has gained a notable voice in the international arena with Australian nursing scholars now making a significant contribution to the field.

Conclusion

Nursing ethics in Australia remains a 'work in progress'. Although significant achievements have been made in the last three decades, the ongoing development of mechanisms for advancing nursing ethics in Australia would benefit from the development and implementation of a strategic agenda of collaborative, internationally comparative, cross disciplinary scholarship, research and critique.

INTRODUCTION

The history of 'modern' nursing ethics in Western countries can be traced back to the late 19th and early 20th centuries, where its inception and development paralleled the beginning and advancement of the new modern nursing profession credited with having progressed under the influence of the legendary reforms lead by British nurse Florence Nightingale (1820-1910). During this early period, those leading reforms in the thinking, teaching and practice of nursing ethics were clear in their aims, notably, to advance a professional nursing ethics that was secular, scientific and humanitarian in its outlook and, as such, which could be readily distinguished from a professional morality based on traditional religious vows and values, such as those upheld by religious-order nurses at the time (Johnstone 2015a, 2015b).

Ethical codes and statements developed and published for the specific purpose of guiding the conduct expected of a given occupational group have long been recognised as the hallmarks of a 'profession' and the mechanisms by which a profession's ethical values are operationalised. One reason a profession's statements of and commitment to its ethical values stands as a professional hallmark is because, as Churchill (1989, p.30) explains, 'a profession without its own distinctive moral convictions has nothing to profess' and will be left vulnerable to the corrupting influences of whatever forces are most powerful – be they religious, legal, social, political or other in nature. In recognition of this, professional ethics are characteristically comprised of a set of rules which 'govern individuals, which compel them to act in such and such a way, and which impose limits to their inclinations and forbid them to go beyond' (Durkheim 1957, p.7). In short, professional ethics have had – and continue to have – the unique and special task of governing functions which only certain professional people 'can do, actually do, and ought to do' (Durkheim 1957, p.6). In keeping with this stance, the task and purpose of professional nursing ethics is fundamentally concerned with guiding and governing what nurses 'can do, actually do, and ought to do' during the course their everyday professional practice (Johnstone 2015a).

The iterative development of the conceptual and theoretical underpinnings of nursing ethics from the late 19th century up until the present time, and the implications of these developments for the nursing profession across the globe, have already been comprehensively documented and thus there is nothing to be gained by rehearsing this history here (see Johnstone 2015a, 2015b, 2015c). Less well known, however, is the achievement of key milestones in the operationalisation of professional nursing ethics in specific countries over time (e.g., the development of national codes of ethics and position statements; the publication of home grown pedagogical literature on nursing ethics).

An historical perspective on the development and achievement of key milestones in operationalising professional nursing ethics in the United States of America (USA), the United Kingdom (UK), and some Western European countries has been well documented in the academic nursing literature (Fowler 2010; Fowler and Tschudin 2006). Since 2006, the development and achievement of key milestones in operationalising nursing ethics in a small number of other countries, for example, Columbia, Hungary, Israel, Malawi, Spain and Turkey, have also been documented in the academic nursing literature (Davis et al 2006). The achievement of key milestones in operationalising nursing ethics in Australia, however, has not been formally published. It is a key aim of this article to redress this oversight.

In keeping with the above stated aim, the purpose of this article is threefold: to formally document the key milestones achieved in regard to the operationalisation of professional nursing ethics in Australia; to enable developments in Australian nursing ethics to be given a rightful place in global discourses on nursing ethics; and to provide a basis for enabling the identification of opportunities for future scholarship, research and policy initiatives that would contribute to the ongoing advancement of nursing ethics locally and globally.

To this end, in the discussion to follow, attention will be given to providing a brief historical overview of the achievement of key milestone in the development of mechanisms for operationalising nursing ethics in Australia. Brief commentary will also be provided on the possible future of nursing ethics in Australia and the need for a strategic nationally coordinated agenda to advance nursing ethics as a field of inquiry and practice in the Australian cultural context.

EARLY TREATISES ON ETHICS FOR AUSTRALIAN NURSES

The first Australian nursing periodicals the *Australasian Nurses Journal (ANJ)* (established March 1903, and the official journal of the Sydney-based Australasian Trained Nurses Association (ATNA)) and *Una* (established April 1903, the official journal of the Victorian Trained Nurses Association (VTNA)) arguably provide the most definitive starting points from which to provide an examination of the nature and early evolution of the mechanism developed for operationalising nursing ethics in Australia (Lemin 1999). As has been previously shown, articles ostensibly published on the subject of 'ethics' in nursing during this period had as their focus 'etiquette' (not ethics) and prescribing behaviours traditionally expected of the proverbial 'good woman', such as submission, obedience, silence, self-sacrifice, and self-restraint – a stance that did not change until well after the second world war (Lemin 1999; Johnstone 1993).

The earliest mention of the notion 'nursing ethics' can be found in a 1903 report published in the inaugural issue of *Una*. The report was of a lecture on 'nursing infectious fevers' by Miss Martha D Farquharson, then Matron of the Bendigo Hospital (1902-1913) and previously Lady Superintendent of the Melbourne Hospital (1895-1900), Matron of Melbourne's Alfred Hospital (1890-1895), and who had also been a member of the provincial council of the International Council of Nurses (ICN) in 1900. In this lecture, Miss Farquharson speaks of her 'life pleasure' in instructing nurses, 'not only in the theory and practice of your profession but also in the ethics of nursing and in the etiquette that should exists between you yourselves in hospital and between your medical attendants, and you and your patients in hospital and private nursing' (Farquharson 1903, p.3). While this statement also stands as probably the first in the Australian nursing literature that hints at a recognised distinction between 'ethics' and 'etiquette' and the relationship between the 'theory' and 'practice' of ethics, nothing more is said about these topics in Farquharson's address.

Three years later, the *ANJ* published its first article on 'Ethics in Nursing'. The article, originally presented as an address to members of the local Branch of the ATNA, was written by Miss Edith Best (1906), Matron of the Children's Hospital, Brisbane. Its contents were in keeping with the conservative conventions of the day apropos extolling the imperatives of the 'moral or the character side of nursing' and the virtues of 'ministering women' qua nurses.

In the decades following the publication of these inaugural articles the theme of 'moral manners' and of the 'moral imperatives' of nurses upholding the virtues of the ideal 'good women' were constantly reiterated (the characteristics of a 'virtuous nurse' commonly reiterated in articles published in the journals are listed in table 1).

It is important to clarify that many of the contributions on the subject of ethics in nursing (e.g., editorials, lectures, commentaries and articles) published respectively in the *ANJ* and *Una* during this period stopped short of presenting an authentic Australian perspective or indeed the 'voice' of Australian nurses. There are two reasons for this. First, contributions by Australian nurses were at best limited, with many of the articles published being written by doctors and hospital superintendents (Lemin 1999). Second, many of the early articles appearing in the Australian journals were in fact reprints from their sister journals in other countries including the USA, Canada, the UK and New Zealand (e.g., *American Nurses Journal*, *Pacific Coast Journal*,

Canadian Nurse, Trained Nurse and Hospital Review, the Queen's Nurses Magazine, The Trained Nurse, Nursing Mirror and Midwives Journal, and Kai Tiaki) as well as from medical journals (e.g. JAMA, and the *British Medical Journal*) (Johnstone 2015a, 2015b; Lemin 1999).

Table 1: Characteristics of the 'virtuous nurse'.*

Characteristics of the 'virtuous nurse'

absolute loyalty (to doctors/hospitals)	gentleness	prudence
absolute obedience (to doctors/hospitals)	good fellowship (with fellow nurses)	quietness
abstinence (from drugs, alcohol and sex)	good manners	refinement
altruism	good temper	respectful (of authority)
bravery	good will	secrecy
charity	grace	self-command
chastity	healthfulness	self-control
cheerfulness	helpfulness	self-reliance
cleanliness (morally and physically)	honesty	self-respect
common sense	honour	self-restraint
compliance (with authority)	hopefulness	self-sacrifice
conscientiousness	ideal womanliness	silence (particularly 'controlled tongues')
compassion	kindness (in word, deed and manner)	spirit of service to humanity
courtesy	love (of patients)	strength (of body, mind, character)
culture (education)	loyalty (to doctors/hospital)	submission
discretion	ministering	sympathy
discipline	nobility of character	tact
empathy	obedience	trustworthiness
endurance (physical and mental)	patience	unselfishness
fidelity	perseverance	versatility
forbearance	pleasing and attractive manner(s)	willingness (to serve, to obey, to oblige)
gentle demeanour	pitiful	womanliness

*Source: Johnstone (1993). Reprinted with permission.

In 1953 the *Australasian Nurses Journal* changed its name to the *Australian Nurses Journal* thus enabling it to retain its ANJ acronym. In 1976 the ANJ and *Una* merged to become the *Australian Nursing Journal* (rebadged in 2013 as the *Australian Nursing and Midwifery Journal (ANMJ)*), the official journal of the Australian and Nursing Midwifery Federation (formerly the RANF and ANF). In keeping with its longstanding commitment to addressing issues of relevance to the Australian nursing profession, in 2008, just over 100 years after the first article on nursing ethics was published in *Una*, the journal began publishing its first regular (bi-monthly) column on the subject of 'ethics in nursing'. Since debuting in the February 2008 issue of the ANJ (now the ANMJ), over 50 essays on a wide range of ethical issues relevant to Australian nurses and to the nursing profession as a whole have been published under this segment.

CODES OF ETHICS, POLICIES AND POSITION STATEMENTS

The development and ratification of the International Council of Nurses (ICN) *Code of International Nursing Ethics* in 1953 marked a significant turning point in the nursing ethics debate in Australia and saw the emergence of a more sophisticated level of thinking on the nature and importance of ethics in nursing. An example of this can be found in the reported comments contained in an address by Miss I S Hall MBE, given to nurses at a graduation ceremony at Sydney Hospital; she is reported to have stated:

“nurses should be encouraged to do some thinking about moral principles [...] Nurses are professional people and among essential qualities of members in a profession is a certain breadth of vision of liberty of thought” (Hall 1959, p.74).

From 1953 until the mid-1970s, the ICN Code (the latest revision of which was undertaken in 2012) emerged as a dominant focus of attention in journal articles published on nursing ethics during this period. The issues considered ranged from how to teach the Code, to how to ensure it was seen as an ‘integral part of nursing practice’ and not merely a printed document (ANJ 1953, pp.251-253; see also Hughes-Ford 1976; Aydelotte 1973; Lancaster 1962; Swaby 1960; Hall 1959; Haines 1957).

Despite recognising the importance of having a professional code of ethics for nurses, the Australian nursing profession was relatively slow compared to its counterparts in other countries in adopting its own national code of ethics, which did not occur until 1993. Countries that were among the first to adopt their own national codes of ethics included Liberia (1949), the USA (1950), Poland (1973), Canada (1980), the UK (1982), Ireland (1983), Norway (1983), and New Zealand (1987) (Sawyer 1989). One explanation for this is that, like the nursing profession in other countries, the Australian nursing profession had primarily relied on the ICN *Code for nurses* for guiding the ethical practice of nursing (Sawyer 1989). This was so even though the ICN had encouraged its ICN member states in 1977 to devise their own national codes for administration within their own respective cultural and jurisdictional boundaries (Esterhuizen 1996).

The impetus for change in Australia eventually came from two key sources: the findings and recommendations of a working party established by the Royal College of Nursing, Australia (RCNA) in 1990 (now the Australian College of Nursing); and the independent evaluation in 1990 of a list of competencies expected of the beginning registered nurse, which had been developed and endorsed by the then Australian Nurse Registering Authorities Conference (ANRAC) (Grealish 2012).

NURSING ETHICS WORKING PARTY (NEWP)

A significant although little-known initiative undertaken during the early 1990s was the establishment by the RCNA of a Nursing Ethics Working Party (NEWP) to consider the College’s role in relation to nursing ethics. Operating under the acronym NEWP, the working party began to address its Terms of Reference (presented in table 2) in 1990 and presented its final report and recommendations to the RCNA Council in May 1991 (RCNA 1991). Among the recommendations made by the NEWP was that an Australian *Code of Ethics* be developed and that the ethics education needs of nurses be formally reviewed and addressed as a matter of priority. In making these recommendations, NEWP noted that a key obstacle to improving the ethical competencies of nurses was a ‘paucity of literature and research’ formally addressing key issues of concern (RCNA 1991, p.21). Issues of particular concern identified by NEWP are summarised in table 3.

Table 2: RCNA Nursing Ethics Working Party (NEWP) Terms of Reference

To make recommendations to Council regarding:

- mechanisms through which the collective experience of nursing can be gathered, recorded and shared
- mechanisms through which policy decisions can be monitored and reviewed for their implications for nurses and nursing practice
- structures through which individuals, groups or the profession as a whole can consult on ethical issues
- ways in which the professional stance of nurses on ethical issues can be enunciated and communicated to the public
- ways to improve nurses' knowledge in ethical issues and skill in ethical discussion and decision making (RCNA 1991).

Table 3: Key issues identified by the RCNA Nursing Ethics Working Party 1991

- The nurse's ability to act as an effective ethical negotiator, mediator, and decision-maker
- The ethical and legal content of nursing curricula across Australia
- The adequacy and appropriateness of courses (both nursing and non-nursing) designed to improve nurses' ethical and/or legal knowledge and decision making skills
- The awareness of nurses reading the ethical and legal dimensions and implications of nursing practice (RCNA 1991).

ANRAC COMPETENCIES

Coinciding with the work of the RCNA, in 1990, an independent evaluation of the list of competencies expected of the beginning registered nurse endorsed by ANRAC indicated 'many of the practising nurses had difficulty in assessing the ethical aspects of the competencies' due in large to their 'inability to identify ethical issues in the workplace' (Kelly and Woodruff 1995, pp.93-94). These findings, together with a recommendation made by NEWP that nurses needed education and guidance on ethical decision-making in practice, convinced ANRAC a code of ethics for Australian nurses was needed (Kelly and Woodruff 1995, p.94). To this end, in 1991, ANRAC commissioned the distribution of a discussion paper on a code of ethics for Australian nurses that would complement the competency standards (Kelly and Woodruff 1995). In 1993, following a prolonged period of consultation with nurses and nursing organisations around Australia (including state and federal professional associations, industrial and regulating authorities), the final version of the *Code of ethics for Australian nurses* was adopted and disseminated under the auspices of the then Australian Nursing Council Inc. (ANCI), the Royal College of Nursing, Australia (RCNA), and the Australian Nursing Federation (ANF) (Australian Nursing and Midwifery Council 2002). The 1993 Code was reviewed in 2002 and again in 2008. Significantly, in response to the changing social, cultural and political environments that nurses were working in, the 2008 review resulted in a radical revision and rewriting of the Code (Nursing and Midwifery Board of Australia (NMBA 2008). The Code is, once again, under review.

It should be noted that although Australia was relatively slow to develop its own national code of ethics, Australian nurses were not bereft of guidance on ethical issues. What may not be widely known is prior to the publication of the 1993 Code of ethics for Australian Nurses, Australian nursing organisations had nonetheless been active in adopting a suite of policies and positions statements on issues that their members faced and which were perceived as not being covered by the ICN Code of ethics (Sawyer 1989). A list of the policies and position statements 'active' prior to the adoption of the Australian code is presented in table 4. Although some of these position statements have since been rendered obsolete and are no longer available, most have been and remain the subject of regular review, updating and reaffirmation (see, for example, the ANMF suite of policies and position statements available via its homepage at <http://anmf.org.au/pages/anmf-policies>). In several instances, commensurate with the ongoing emergence of issues relevant to the

profession and practice of nursing, entirely new policies and position statements have been adopted – some examples of which are presented in table 5.

NURSING ETHICS PEDAGOGY AND PRAXIS

Nursing ethics pedagogy and the teaching of ethics to nurses were topics rarely mentioned in the early journals. The first article on the subject titled 'Teaching ethics to probationer', published in *Una* in 1917, was a reprint from the US journal *The Trained Nurse* (The Trained Nurse 1917). Aside from an article by a French nurse in the aftermath of the second world war, in which a plea was made for nurses to be given 'a strong moral education' (Clamageran 1948), the topic of nursing ethics education received little coverage until the 1980s when 'references to the need for courses and the teaching of ethics' became more frequent (Lemin 1999, p.65).

Table 4: Examples of ANMF nursing organisations' policies and position statements adopted or endorsed pre-1993 Australian Code of ethics*

- Biomedical research involving human subjects (1984)
- Children's rights (1986)
- Detainees and prisoners (1986)
- Disabled persons (1986)
- Dying - Assuring quality of care for those who are dying (1986)
- Family planning (1986)
- Female circumcision (1983)
- Health care and quality of life (1986)
- Health hazards (1986)
- HIV/AIDS and the nursing profession (1987)
- Human rights (1983)
- International nursing migration (1986)
- Nuclear disarmament (1983)
- Nuclear war (1986)
- Nursing care of the elderly (1984)
- Nursing research (1986)
- Patient rights (1984)
- Policy making and planning (role of the nurse in)(1983)
- Refugees and displaced persons (1984)
- Safe-guarding the human environment (1986)

*Source: ANF (1989) Index to policy and position statements 25 March, 1988. In *Ethics: Nursing perspectives*, Volume 2 (pp.84-86). North Fitzroy, VIC: ANF.

Table 5: Policy and position statements endorsed by ANMF since 1994***Policies**

- Conscientious objection (E: 1994; R&R: 1996, 2004, 2007, 2011)
- Privacy (E: 2014)
- Whistleblowing (E: 2004; R&R: 2007, 2011, 2014)

Position statements

- Child abuse and neglect (E: 2007; R&R: 2010, 2013)
- Climate change (E: 2011)
- Organ and tissue donation for transplantation (E: 1994; R&R: 1996, 2005, 2008, 2011)
- Voluntary euthanasia/assisted suicide (E: 2007; R&R: 2009, 2012)

* E- Endorsed

*R&R – Reviewed and Re-endorsed

The rise in interest in nursing ethics pedagogy in the journals during the mid-to-late 1980s is unsurprising given that the period in question coincided with the transfer of Australian nurse education from the hospital to the higher education sector (i.e., colleges of advanced education and universities). The transfer, which occurred circa 1985-1993, was enabled following the passage of legislation in August 1984 and the provision of funding from the Australian Commonwealth Government (Mason 2013). It was during this period that unprecedented attention was given to the subject of professional nursing ethics in the curricular of both undergraduate and post-graduate nursing programs and demand for 'locally grown' (as opposed to USA and UK authored) texts and references began to grow. This period also saw the first national distance education course on 'Ethics and nursing' for registered nurses being offered. Administered by the Distance Education Division of the then RCNA (which became the Australian College of Nursing in 2012 following the merger between its two predecessors, the RCNA and the NSW College of Nursing), the course was offered between 1990 and 1992 (RCNA 1992, 1990). After this period the course was discontinued due to decreasing demand as nurses took up opportunities to study ethics via the new tertiary nurse education programs which had been established following the transfer of nursing education to the higher education sector.

Another significant milestone achieved during this period was the publication of the first comprehensive text book on nursing ethics written from an Australian perspective and published by an Australian-based imprint of Harcourt Brace Jovanovich Group (Australia). The work *Bioethics: a nursing perspective*, first published in 1989, instantly became a bestselling nursing title and today is regarded internationally as a classic in the field (Johnstone 1989). Revised editions of the work were published respectively in 1994, 1999, 2005, and 2009. A 6th revised edition of the work was published in 2016 (Johnstone 2016), marking its 27th year of being in print. Other Australian books on nursing ethics published over the past two decades include Hawley's (1997) *Ethics workbook for nurses* (one print run only and now out of print), and Atkins, de Lacey and Britton's *Ethics and law for Australian nurses* (first published in 2011 and published as a second revised edition in 2014) (Atkins et al 2014).

NURSING ETHICS LEADERSHIP

The achievement of key milestones in operationalising nursing ethics in Australia during the 1980s and 1990s would not have been possible had it not been for the progressive initiatives lead by Australia's lead national nursing organisations, in particular the RANF/ANF (now the ANMF) and the new schools of nursing that were established following the transfer of nursing education from the hospital to the higher education sector. Notwithstanding the findings and recommendations of commissioned reports on nursing (e.g., the much touted Marles (1988) report *The study of professional issues in nursing*, and the Monash University,

Centre for Human Bioethics (1988) report *The ethical, legal and social dilemmas in nursing*), it was primarily due to the efforts of Australia's peak nursing organisations and schools of nursing which, during the 1990s, saw an unprecedented number of workshops, seminars and conferences being organised specifically on the subject of ethical issues in Australian nursing (e.g., RANF 1987; ANF 1989; School of Nursing, Phillip Institute of Technology 1988, 1989, 1991). This period also saw the establishment in 1996 of the RCNA inaugural Nursing Ethics Society open to members of the RCNA (now the Australian College of Nursing). As nurse academics from around Australia pursued higher degrees and completed minor and major theses on nursing ethics-related topics, nursing ethics research and scholarship began to increase.

THE FUTURE OF AUSTRALIAN NURSING ETHICS

Australian nursing ethics has an uncertain future. Reasons for this are both complex and multifaceted and include, but are not limited to: the lack of a strategic nationally coordinated agenda for progressing nursing ethics in Australia, the legacy of historical deficits in nursing ethics pedagogy and praxis (comprehensively considered in Johnstone 2015b), and the lack of a critical mass of nursing scholars with formal education and grounding in the theoretical foundations of moral philosophy and a substantive track record of peer reviewed publications on nursing ethics. While it is acknowledged that many nurses have a strong interest in and 'passion' for nursing ethics, this is not the same as – and should not be mistaken for – expertise in the discipline, as has sometimes been the case.

Arguably one of the most pressing issues facing the Australian nursing profession at this time is how best to address the deficits in nursing ethics pedagogy and praxis. Although the Australian Nursing and Midwifery Accreditation Council (ANMAC) *Registered Nurse Accreditation Standards* requires teaching and learning approaches that promote 'ethical practice and leadership skills expected of registered nurses' (ANMAC 2012, Standard 2.4i) and program content that 'supports the development and application of knowledge and skills in legal and ethical issues in health care and research' (ANMAC 2012, Standard 4.4d), a cursory search of Australia's 37 university programs offering undergraduate and postgraduate nursing courses reveals significant disparities in the approaches taken to meet these standards. For example, where as some university programs have discrete subjects/units addressing 'ethical issues in health care', others have none with content being 'sprinkled' through the curriculum (in one case, anecdotally reported to be as little as four hours over the entire three year Bachelor of Nursing program). Still others have units that combine the content of law and ethics, which risks limiting the depth of inquiry that is otherwise warranted for these distinct subject areas. There is also variation in the level of offerings in a course, ranging from ethics being situated as a core subject to being offered as an elective only; offered in undergraduate, but not postgraduate courses, and vice versa; and a taking a 'generic' approach (i.e., for health care professionals generally) as opposed to a nursing-specific approach (i.e., for nurses only) to the content being taught.

Unfortunately it is beyond the scope of this present article to explore this issue in the depth that is warranted, suffice to say that unless the issue of nursing ethics pedagogy and praxis is comprehensively addressed at a national level, the moral competency of Australian nurses will stand in doubt (see also Johnstone 2015d). More worryingly, it will leave Australian nurses vulnerable to being ill-prepared for the major ethical challenges that lay ahead, such as those posed by antimicrobial resistance (Johnstone, in press), climate change, peak oil, pandemic-influenza, and the potentially catastrophic health inequalities associated with these things (Johnstone 2016). Ultimately, the professional ethics of Australian nurses – and what they 'can do, actually do, and ought to do' – will rest on whether and what response Australia's national nursing organisations responsible for setting the agreed ethical standards of the profession will give to this issue.

CONCLUSION

Nursing ethics in Australia, as in other countries, stands as an 'enduring and intimate concern of the profession' (Fowler 2010, p.31). Despite the operationalisation of Australian nursing ethics having a slow start, an Australian perspective on nursing ethics has gained a noticeable presence in the international arena with Australian nursing scholars making a significant contribution to the field. A notable example of this can be found in the Sage major reference work titled *Nursing ethics* (three volumes) curated by Johnstone (2015a, 2015b, 2015c). This work, which spans 127 years and encompasses more than 1,000 pages of pioneering articles on nursing ethics, has the distinction of being the first of its kind in the world (ANMJ 2015).

The Australian nursing profession is committed to achieving the ever expanding moral goals of the profession and practice of nursing. There is, however, room for improvement in regard to the development and practice of nursing ethics in Australia. To this end, the advancement of nursing ethics in Australia warrants being situated as a strategic priority – in education, research, scholarship and practice. Meanwhile, it would be both timely and instructive for a robust program of collaborative, comparative international and interdisciplinary nursing ethics scholarship, research and critique to be progressed. This would help to ensure that the nursing profession in Australia is appropriately positioned to not only meet the moral challenges that it will face in the future, but also contribute to global discourses on how best to meet these challenges.

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A nurses' guide to mixed methods research

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research methodology, qualitative research, quantitative research, mixed methods, triangulation, evidence based practice (EBP).

ABSTRACT

Objective

This article provides a breakdown of the components of mixed methods research methodology. The intention of the article is to simplify the terminology and process of mixed methods research to enable novice readers of research to have a better understanding of the language and concepts involved. The Survey method, using both qualitative and quantitative research methods, will be used to explain the principles of mixing methods.

Primary Argument

Australian nurses work in an environment where evidence-based practice is mandatory. Understanding the research process and terminology used may benefit nurses to implement research in their day-to-day practice. Gaining knowledge of the different approaches used in mixed methods research is paramount if nurses are to base their care on research which has utilised this style.

Conclusion

As mixed methods are used in nursing, social and behavioural research it is essential that nurses understand the methodology. The main components of mixed methodology will, therefore, be discussed in a systematic, logical order.

INTRODUCTION

Currently the Nursing and Midwifery Board of Australia include a requirement for nurses to evaluate and implement research in their care (Borbasi and Jackson 2012, p.22; Nursing and Midwifery Board of Australia 2013a). All nurses are expected to be actively involved in implementing or undertaking research (Borbasi and Jackson 2012, p.22) as a major goal of nursing research is to improve health care and outcomes (Moxham 2015; Benner 1984). Evidence based or 'best practice' nursing in Australia is supported by the Joanna Briggs Institute (Chang and Daly 2012). As evidence based practice and research are threaded through professional work and study in the health sciences (Wright-St Clair et al 2014, p.5) nurses, particularly novice nurses, may benefit from a discussion that helps them understand the sequence of a research paper (Moxham 2015) using mixed methods.

The emergence of mixed methods, which was considered a third methodological movement, began during the 1980's (Tashakorri and Teddie 2003). The first and second movements were quantitative methodology and qualitative methodology. Mixed methods are also known as 'multi-methodology' or 'triangulation' and are considered to have high validity due to the variation in data collection (Bulsara 2015; Taket 2013). Mixed methods research is further defined by Jirowong et al (2014, p.360) as research that 'systematically combines the collection and analysis of both qualitative and quantitative data in the same study'. This style of research allows investigators to combine both numeric and narrative data in their analysis (Lewis, 2013 p.166). Mixing methods offers a richer explanation than single use of either qualitative or quantitative methods as it can draw on the strength of each approach and overcome their weaknesses (Lewis 2013, p.167; National Institutes of Health 2011). The range and description of how methods can be mixed is extremely wide (Wurtz 2015; Taket 2013) therefore this paper will address mixed methods very broadly.

THE MIXED METHODS RESEARCH PAPER

The rationale behind using a mixed methods approach

Many authors and investigators have discussed the rationale behind combining qualitative and quantitative research methodology. The following discussion provides a breakdown of the main reasons for using mixed methods.

Mixed methodology can answer a research question from a number of perspectives and ensures there are no, or fewer, 'gaps' to the information collected (Bulsara 2015; Jirowong et al 2014). Pre-existing assumptions from the researcher are less likely to occur, and inferences made stronger, as different approaches can yield broader information given that one method may not be able to provide all the information required (Bulsara 2015; Jirowong et al 2014). As Wurtz (2015) explains, using mixed methods can provide a deeper understanding of behaviour, or a better idea of the meaning behind what is occurring. Most significantly mixed method research can include culture in the design by giving a voice to everyone involved in the behaviour being examined (Wurtz 2015). As Taket (2013) further explains, mixed methods can empower research participants by providing appropriate means for them to choose how and whether to participate. For example, a self-completion questionnaire excludes those who do not have the ability to read or write (Taket 2013), however, if an interview is also included in the methodology, they may be able to participate with greater autonomy (Liamputtong 2013, p.326).

There are six categories of Mixed Method Designs (Wurtz 2015) described in the grid at the end of this paper. Creswell and Plano Clark (2011, pp.69 - 101) agree there are six major designs but attribute several differing names to those given by Wurtz (2015).

In brief, a mixed methods study is not two separate studies addressing a specific issue but one study that employs different methods to address a specific research question or hypothesis (Jirojwong et al 2014, p.281).

Survey Method

The Survey Method will be used as an example of how qualitative and quantitative frameworks can be used together to research subjects. A survey is defined as a data collection tool to gather information about individuals (Privitera 2014). It may aim to collect factual information (quantitative data) and/or opinions of individuals through interviews (qualitative data). Surveys may be wholly quantitative but using mixed methods allows for greater depth. It is one of the most commonly used methods in social science research (Hamer and Collinson 2014).

Abstract/Summary

An abstract or summary of a mixed methods paper using survey technique will provide a brief objective summary of the research report. The rationale and background of the study should be provided and also include the theoretical and methodological processes for gathering information (Borbasi and Jackson 2012).

Identifying the problem

Survey designs can use a hypothesis (Privitera 2014) or research question (Jirojwong et al 2014, p.273). A hypothesis is defined by Johnson and Hengstberger-Sims (2014, p.35) as a statement about the relationship between two or more variables (also known as factors or characteristics). Whilst a survey can be used as a measurement tool in many research designs, survey research specifically refers to the use of surveys to quantify, describe or characterise an individual or group (Privitera 2014).

Literature Search

The literature review is generally found in the introductory section of a research paper (Polit and Hungler 2013). The function of a literature search in mixed method research varies depending on the classification of the study. As a survey consists of many questions, or statements, to which participants respond, the literature may be used to inform the researcher of questions or approaches previously used.

METHODOLOGY

Design

The survey research design can be administered either in written form and/or through interview. The survey will include a series of questions or statements, called items, used in a questionnaire and /or interview to measure responses (Privitera 2014, p.226).

There are three types of questions or statements used in a survey, namely open-ended items, partially open-ended and restricted items (Privitera, 2014). The open-ended questions can be used in interviews on an individual basis, or within a focus group, to glean qualitative information. A focus group is based on group discussion to elicit the respondent's perceptions, opinions, beliefs and attitudes (Jirojwong et al 2014, p.359). The participants are able to express their views by interacting within a group discussing an issue or number of issues (Liamputtong 2013). Partially open questions have several set answers but allow the researcher to ask extra questions (Jirojwong et al 2014; Liamputtong 2013). An example of a restricted item, also known as a closed-ended item, includes restricted answer options and commonly uses a Likert scale (Privitera 2014). The Likert scale usually has between three and seven columns with options such as strongly agree, agree, not sure, disagree and strongly disagree. Whilst the Likert scale can be used to elicit responses regarding attitudes and beliefs, statistics can be produced from the responses as the responses can be assigned a numerical value (Jirojwong et al 2014, p.360).

Other response formats may include verbal rating scales where a range of verbal responses are provided and the participant circles the one that most closely mirrors their view, or visual analogue scales, which asks the respondent to mark a position on a line between 0 and 10 or 0 and 100 depending on the nature of the question (Liamputtong 2013, p.212)

Sample

The sample population is very variable in mixed methods research. It can vary from small groups to huge populations. Subjects of survey research may be called participants, informants or subjects. Samples may be selected using convenience (purposive) or probability (random) techniques which means the sample was specifically chosen to ensure the data gathered is 'information-rich' (Borbasi and Jackson 2012, p.135). The quantitative element will mean the sample can be larger but sampling decisions need to be based on the research question. As Lewis (2013 p.277) further explains, mixed methods research has at least two components, elements or phases which means drawing a sample is hard to specify but, very generally speaking, a qualitative (purposive) sample would be less than 30 and a quantitative (probability) sample would be greater than 50.

Concurrent designs (merging qualitative and quantitative research) include the need for adequate sample sizes and being consistent in analysis whereas sequential designs (one phase of qualitative research which then builds on quantitative research or vice versa) results in decisions needing to be made on choosing appropriate sampling and sample sizes for both phases (National Institutes of Health 2011). To put it simply, it is very hard to match qualitative data to quantitative data as investigators, who hold different philosophical positions, may find mixed methods research to be challenging because of the tensions created by their differing beliefs (National Institutes of Health 2011).

Ethics

Consent should be obtained after full explanation of the study's intent (Borbasi and Jackson 2012). All nursing research should consider ethics and potential harm (Nursing and Midwifery Board of Australia 2013b). For example, data collection from web surveys should be undertaken so identities cannot be accessed. Participants should be de-identified (Liamputtong 2013, p.30). The investigator is obliged to consider the implications of the proposed research for the participating subjects, their families and society (Burns and Grove, 2009). Permission for nursing research is sought from an ethics committee appropriate to the situation (Jirojwong et al 2014, pp.63-66; Elliott et al 2013, p.93). The ethical principles of autonomy, beneficence, non-maleficence and justice are widely acknowledged in contemporary regulatory research ethics frameworks (Liamputtong 2013, p.27).

Pilot Study

A pilot study as a trial run of the research which is conducted on a small number of participants (Polit and Hungler 2013; Nieswiadomy 2012). The pilot study allows the researcher to assess the adequacy and feasibility of the intended research (Moxham 2015, p.35). With mixed methods research, using a survey technique, is important to identify problems or 'flaws' and strengthen the combination of qualitative and quantitative methodology by identifying practical and methodological issues (Bulsara 2015). Modifications can be made prior to the main study (Kim 2011).

Main Study

Issues of validity are challenging as qualitative and quantitative research have developed through different pathways (Jirojwong et al 2014, p.279). The essential component for the researcher is to ensure the research demonstrates the established research rigour required by each method (Teddie and Tashakkori 2009, cited in Jirojwong et al 2014). It is generally accepted that the qualitative or quantitative elements in a mixed methods study can have equal status or that one approach may be dominant.

In mixed methods research the investigators intentionally integrate and combine both qualitative and quantitative data rather than separate it. The challenge is how to integrate it (National Institutes of Health 2011). As Liamputtong (2013, p.339) states the combination of qualitative and quantitative data can produce a richer understanding of a number of different factors within a piece of research.

Analysis and Results

Investigators may use codes or colour coding to identify common themes. The codes can be counted and totals given for a response frequency (Bulsara 2015). This works well with survey questions and responses which generate figures but the data can also be considered qualitative if the researcher is seeking opinions and attitudes (Bulsara 2015). The main findings will be discussed according to which design was used (refer to GRID below). Issues may arise when analysing the data because of the combination of the qualitative and quantitative designs. This may mean the researcher has to gather more data or revisit databases (National Institutes of Health 2011).

Two articles in this series discuss this section in more depth, namely, A nurses' guide to Quantitative research (Ingham-Broomfield 2014) and A nurses' guide to Qualitative research (Ingham-Broomfield 2015).

Discussion/Recommendations

Whatever method is used in research papers, this section usually tries to clarify what the results mean. There should be an interpretation of the results, the study limitations and possible implications for further research to advance knowledge (Polit and Hungler 2013; Nieswiadomy 2012). The researcher will discuss problems encountered including the methodology chosen.

Conclusions of the research paper using mixed methods

Any research study design and findings need to be critiqued by the author(s) in the research study's discussion section. The investigators may discuss the complexity of the mixed methods approach. Most conclusions summarise the main points, review the research method, repeat the findings, discuss the limitations and offer suggestions for future research related to the subject researched (Nieswiadomy, 2012).

Reference list

The Reference List will contain research papers including books and other journal articles which may contain a selection of qualitative, quantitative and mixed methods sources to support the concepts outlined (Ingham-Broomfield 2014).

CONCLUSION

The methodological approach used in this paper has discussed mixed methods, using the survey method as an example, in a logical and systematic order. This paper has discussed the main components of mixed methods research for nurses who are new to this process and its terminology.

GRID

Quantitative (QUAN) and Qualitative (QUAL)

Category	Sequential Explanatory Design	Sequential Exploratory Design	Sequential Transformative design	Concurrent Triangulation Design	Concurrent Nested Design	Concurrent Transformative Design
Collection and analysis of data	QUAN stage followed by QUAL stage	2 stages -Priority given to QUAL data followed by QUAN	2 distinct stages -theoretical perspective used to guide the study	QUAL and QUAN data collection is concurrent – only one data collection phase	QUAL and QUAN data collection is concurrent	Guided by a specific theoretical perspective. QUAL and QUAN collected during the same phase
Priority given to which data	QUAN	QUAL	Whichever serves the theoretical perspective best	Ideally equal priority to both QUAL and QUAN	Either QUAL or QUAN dominate the design	Ideally equal priority to both QUAL and QUAN
Integration of data occurs during this research phase	Interpretive phase	Interpretive phase	Interpretive phase	Interpretive phase	Analysis phase mixes both QUAL and QUAN data	Analysis phase but can also occur in the interpretive stage
Purpose	QUAL results used to help explain QUAN results	QUAN data used to help interpret QUAL phase	Whichever serves the theoretical perspective best	Focuses on similarities and differences, with the primary purpose to support each other	QUAL used to better explain QUAN data	The purpose is to use methods that will best serve the theoretical perspective of the researcher

(Wurtz 2015; Lewis 2013)

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