Neuroscience Nursing in Indonesia: Striving for Recognition through Education and Regional Collaboration.

Linda Nichols, Enny Mulyatsih

Abstract
As a speciality practice area, neuroscience nursing is internationally recognised. In 2014 the Australasian Neuroscience Nurses Association celebrated its 40th anniversary. For Indonesian neuroscience nurses, 2014 marked the inaguration of the Indonesian Neuroscience Nurses Association. The following paper provides an overview of health care in Indonesia and development of neuroscience nursing as a specialty through educational and regional collaboration. Postgraduate educational opportunities are open to all nurses in Australia, including neuroscience as a specialty for nurses. However within Indonesia, the focus has been on meeting basic nursing demands, with postgraduate specialisation still in its infancy. The focus on training and producing large numbers of nurses at a basic level has resulted in little regard for the ongoing development and acknowledgement of speciality practice areas, such as neuroscience nursing. The following paper outlines the challenges faced by Indonesian nurses as they strive towards the recognition of neuroscience nursing as a speciality. Through the provision of an overview of current nursing and the health care system in Indonesia, this paper will explore the geographical, economic, political and cultural factors that require consideration when translating experience and expertise.

Key Words: *Neuroscience nursing, education, Australia, Indonesia*

Introduction

Neuroscience nurses care for individuals with acute and chronic neurological conditions involving a complex mix of cognitive, sensory motor and emotional impairments. Neurological disorders constitute an increasing share in the burden of disease, with health care systems in both developed and developing countries inadequately resourced to meet the complex array of chronic and acute care needs. In pursuing professionalism and recognition as a specialist field, neuroscience nursing must take into account the vital role of postgraduate education (Slusarz, Ireland, & Green, 2012). In accordance with established nomenclature, postgraduate clinical specialisation is recognised as coursework, where Graduate Certificate and Graduate Diploma level qualifications prepare nurses to undertake roles within specialised practice settings. Building on this at a Clinical Masters level, nurses are further prepared for leadership roles within a range of practice settings. Regional collaborations are vital to the provision of postgraduate qualifications, with Australia and other western countries playing host to international students. For partnerships to prosper, consideration of the geographical, economic, political and cultural factors faced by Indonesian nurses are vital.

Questions or comments about this article should be directed to Linda Nichols, Academic Stream Coordinator Neurosciences, University of Tasmania at Linda.nichols@utas.edu.au

Background

Building on the background of informal ties and collaborations between Indonesian and Australasian Neuroscience nurses, the opening of the National Brain Hospital, Jakarta, in 2013, provided the opportunity for more formal collaborations between both countries. This celebration was also marked with the agreement between the Australasian and Indonesian Neuroscience Nursing Associations recognising the importance of supporting both formal and informal education for Indonesian Neuroscience nurses. The role of the Indonesian Neuroscience Nurses Association is fundamental; firstly to shape and represent neuroscience nurses and to secondly drive the formulation of a definition and competency criteria that both practice and educational standards can be measured against. Hennessy, Hicks, Hilan, and Kawonal (2006a) highlight this role as integral, as care standards can only be addressed when there are formal regulatory frameworks for education and practice. A second important role of such an organisation is

the assessment of current service delivery so that educational programs can be specifically targeted. Historically this drive for academic recognition has been overlooked in pursuit of technical competence (Andrew & Robb, 2011). Managing practical factors such as the availability of resources and education from a central point can overcome many of the accessibility challenges, whilst also providing motivation for individuals through a shared vision. Importantly as an organisation there is the ability to collaborate and share resources with other countries and neuroscience nursing organisations.

Within Indonesia, specialised nursing education has previously been focused on the generalised community, medical and surgical specialities, where there are larger gains to be made in terms of patient outcomes. However, economic growth and improved standards of care are reflected in the recognised need to focus on speciality nursing education, particularly within the neuroscience field. Melnyk and Fineout-Overholt (2011) maintain that quality patient outcomes are achieved when nurses improve knowledge within a speciality field and thus contribute to evidence based practice. Hamlin and Brown (2011) and Smith (2006) identify that in Indonesia, nursing has traditionally been considered a low status profession and that nurses are not used to leading and initiating change. This is further historically supported by Shields and Hartati (2003) who suggest that it has been an absence of evidence on the value of specialist nurses that has been the most significant factor in hindering recognition and support, particularly at a policy and government level. Whilst the educational needs of neuroscience nurses might be met in some part through hospital based educational programs, given the underlying complexities of neurological conditions and events, Smith (2006) identifies that the development of specific education is inherently difficult and complex and that educational programs should be academically supported.

For health care systems to continue to provide effective and efficient nursing care there needs to be an investment in the training and academic recognition of nurses as specialists within their field. Nurses must be accountable for participation in ongoing speciality education to ensure that decisions and actions are based on current standards of practice (Slusarz et al., 2012). Recognising this necessity, the Indonesian Ministry of Health has invested heavily in facilitating off shore postgraduate nursing education for nurses. However, Nursalam, Dang, and Arief (2009) suggest that the effort is insufficient compared to the actual need. This in part can be attributed to the fact that offshore studying has previously been limited to Research Masters and Doctoral Degrees, with the concept and value of speciality clinically focused nursing programs poorly understood. Slusarz et al. (2012) identify that speciality postgraduate education provides neuroscience nurses with the skills required to assume broader organisational roles contributing to health promotion, leadership and education, as well as the skills to undertake advanced nursing practice roles. For the status of nursing in Indonesia to improve, there needs to be recognition of the importance of both clinical and academic education at a postgraduate level.

Health Care in Indonesia

Like many developing countries, Indonesia is facing a number of health related difficulties including a rapidly expanding population and limited resources. During the Asian economic crisis (referred to as *krismon* in Indonesia) unemployment, malnutrition and preventable disease rates all increased (Firman, 1999). Limited resources, a decentralised system and geographical challenges have resulted in inequalities in the accessibility and provision of health care (Hennessy, Hicks, Hilan, & Kawonal, 2006b). Although the Indonesian economy has recovered, the impact has been significant. This has also been linked to a rapid increase in chronic and degenerative health conditions with diseases of the circulatory system now ranked within the top ten causes of death (Widiatmoko & Gani, 2002). The outcome of this is evidenced through increased neurological disorders and events that are being seen in increasingly younger populations, with the mean age of stroke only 58.8 years (Kusuma, Venketasubramanian, Kiemas, & Misbach, 2009). Given that disorders of the nervous system account for more and longer-term hospitalisations than other chronic conditions (Cowan & Kandel, 2001), it is paramount that funding and recognition of neuroscience nursing improves. Neuroscience nurses will need the skills and the ability to influence future policy as well as the opportunities within the health care services to create solutions to the changing health care setting.

There are approximately 1133 hospitals in Indonesia with around 35% of these facilities privately funded by religious groups, chari-

ties, foundations (*yayasan)* or as commercial enterprises (Rosser, 2012; Shields & Hartati, 2003). The quality of services in both private and public hospitals is managed by the Ministry of Health with all hospitals in Indonesia complying with National Accreditation Committee requirements (Widiatmoko & Gani, 2002). Despite this, Indonesia faces considerable administrative challenges, with the 34 provinces within the country comprised of nearly 400 regencies or districts that are responsible for the administration of government services at a local level (Lock, 2011). Whilst the central government has retained influence and responsibility for health care funding, following the Asian economic crisis, management of the public health system was transferred to a district level (Rosser, 2012). Previously in Indonesia, neurological care was provided within larger hospital systems however, specialised care (particularly stroke care) is now recognised as requiring specialised high quality nursing teams. With a number of major public and private hospitals now providing care, referral to the most appropriate hospital continues to be difficult to achieve. There are approximately 9671 primary health care facilities (Puskesmas) that are the main access and referral point for the majority of Indonesians seeking health care. Delays in referrals can have significant consequences as a number of interventions, such as post stroke thrombolysis, are time dependant.

Within Indonesia, hospitals are classed depending on size and the services available. However one of the major criticisms of this system is the lack of governance to manage referrals to larger centres (Rosser, 2012). The public health care system provides different levels of care depending on access to private health insurance or the ability to pay for services (Dewi, Evans, Bradley, & Ullrich, 2014). The nation's poorest are provided for through free health schemes, such as the Health Insurance for the Population, the Jaminan Kesehatan Nasional or National Health Insurance scheme (Rosser, 2012). The majority of the health system operates on a "user pay system" where payment is required for equipment, medications and consultations (Rosser, 2012; Shields & Hartati, 2003). The costs associated with neurological events can be significant, particularly given that a high proportion of events are not curable and individuals often require long term care. Thus the challenge for nurses in Indonesia is to not only develop the clinical skills required, but also to practice in adverse environmental conditions often with limited resources (Hennessy et al., 2006b). As a speciality, neuroscience nurses need to demonstrate their efficiency, effectiveness and cost benefits to ensure that their role is recognised as an integral part of the health care system. Central to this is building on core themes identified by Hickey (1993) who recognised that empowerment for neuroscience nursing is centred on being proactive and demonstrating an understanding of the complexity of neuroscience practice.

The majority of nurses in Indonesia are female. For example from a staff of 320 nurses at the National Brain Hospital only 27,9% are male and male nurses tend to work in areas such as the emergency room, operating room and critical care. Based on Indonesian culture, women have a responsibility to serve others, including caring for ill or unwell family within the home environment. Whilst female nurses can take care of both female and male patients, this interaction is limited as most Muslim patients prefer to be cared for by someone of their own gender.

Indonesian culture, epesially the Muslim population, believe that the most important thing in their lives is togetherness and helping their family, relatives and extended family. Indonesian's culture also encourages family to visit patients and pray for them. Therefore, almost all patients are accompanied 24 hours a day by at least one family member during hospitalisation. This is in contrast to the Australian health care system that can only generally supports this for paediatric patients and during palliative settings. This part of Indonesian culture impacts the hospital system in terms of space and seating. Within the critical care setting, twice daily visiting times were allowed until the hospital accreditation in 2012, when this was reduced to daily visiting to minimise hospital infections.

Nursing Education in Indonesia

The Indonesian nursing sector has been marred by rapid growth, a weak accreditation system and the lack of a competency based system to certify graduates (Rokx, Marzoeki, Harimurti, & Satriawan, 2009; Shields & Hartati, 2003). Two institutional bodies manage nursing education in Indonesia at a national level. The National Board for Development and Empowerment of Health, Human Resources Ministry of Health, which manages the Diploma in Nursing, and the Bachelor program which is managed by the Director of

Higher Education (Munir, Ramos, & Hudtohan, 2013). Prior to 1997, when the minimum educational standard for nursing entry to practice was established, nurses could graduate from a basic nursing course "*Sekolah Perawat Kesehatan*", at the age of 17. Despite no longer being offered, nurses that were trained under this system still represent an estimated 60% of nurses practising, with close to 40% of nurses holding Diplomas. Only 1% of nurses are educated at a Bachelor or above level (Depkes, 2005; Hennessy et al., 2006a). The Bachelor of Nursing Degree "*S1 or sarjana keperawatan*" is a four year course that is offered at selected government Universities, with admission based on a national examination. The program has developed significantly using the national curriculum or *Kurikulum Ners* and is arranged by the Indonesian Nursing Board and Asosiasi Institusi Pendidikan Ners Indonesia. With natural attrition, positions are being increasingly filled by nurses with a Diploma or Bachelor level, however it is still rare for nurses in rural areas to hold a Bachelor degree or higher, with University trained nurses tending to work in the larger centralised hospitals (Depkes, 2000; Rokx, Giles, Satriawan, Marzoeki, Harimurti, & Yavuz, 2010; Rokx et al., 2009).

The Indonesian government is positively progressing towards standardisation and accreditation for nursing education, registration of practising nurses and an ongoing commitment to provide a legal basis for nurses. However, despite the submission of the Nursing Practice Bill in 2005 and Ministry of Health Decree No 1239/2001 (Ministry of Health, 2005), considerable misunderstanding and misperception remains in terms of defining nurses' rights and duties (Nursalam et al., 2009). This has left Indonesian nurses struggling to increase their capability and competency, with Sitorus, Hamid, Azwar, and Achadi (2012) suggesting that despite educational developments the quality of nursing care in Indonesian hospitals has not improved. Improving health care and the recognition of neuroscience nursing as a specialty requires a change in the perception in terms of postgraduate nursing education. George, Roach, and Andade (2011) identify that clinical specialisation is essential, as nursing care improves when led by nurses with specialist higher degrees. However, the clinical skills and knowledge required as a specialist nurse cannot be achieved through a higher degree that is purely research focused. Herein lies the difficulty, as nursing continues to be viewed as a dual profession, comprised of those who teach and research and those who practise clinically (Andrew & Robb, 2011). The recognition and validation of clinical qualification is essential and agreement to recognise and legitimise the concept of speciality clinical qualifications is vital to the future identity of nursing in Indonesia.

Education is perhaps one of the most limiting factors when striving for specialist recognition, with poor educational profiles reflected in suboptimal clinical standards. Hennessy et al. (2006b) contend that within the context of restricted resources, a significant challenge is presented for Indonesian nurses. Indonesia struggles to fill academic positions and nurses are often employed in teaching roles immediately after graduating, thus lecturers have not had exposure to clinical practice or time to consolidate their skills (Nursalam et al., 2009; Shields & Hartati, 2003). In contrast to Australia where university lecturers hold a degree above the one that is being taught, the majority of lecturers in Indonesia have not had the opportunity to progress their qualifications. Without the status of professionalism, nurses are faced with a disempowered position and reduced capacity to advocate for change. Recognising the need to improve the educational preparation and skills of nurse education has been a priority for the Minister of Health with collaborations developed with a number of international Universities, enabling nurses to study Masters and Doctoral degrees abroad.

This recognition includes the opportunity for Indonesian nurses to complete a one year professional nursing course following the completion of the Bachelor of Nursing (Munir et al., 2013). The Ministry of Education and Culture also formed the Health Professional Education Quality Institution and implemented the compulsary Indonesian Nurses Competencies Examination. In addition, the Indonesian Neuroscience Nurses Association is developing a model of Neuroscience Nursing competencies which is classified into four levels. Whilst each level is equal to one level higher than the General Nurses Competencies, they lack an underlying qualification based framework. Hennessy et al. (2006a) notes that it is impossible to monitor the delegation, quality, roles and work undertaken by nurses in Indonesia. In the absence of standards that are specific in terms of scope of practice related to educational preparation, nurses can undertake the same tasks and have the same level of responsibility and accountability regardless

of education (Hennessy et al., 2006b). Indonesian nurses are also restricted by a curriculum that is focused on the biomedical model, with the current course design failing to impress or promote independence or professional practice (Munir et al., 2013). Brown, Rickard, Mustriwati, and Seiler (2013) describe nursing practice in Indonesia as being based on routine and ritual, where there is limited application of clinical judgement and thus there is no analysis of weaknesses or a systematic method for improving clinical performance. This is in contrast to Australian expectations where nurses undertake self-directed learning that involves critical thinking, designing needs, formulating goals and evaluating outcomes. In light of the forces of globalization, Indonesian nurses face the ongoing challenge of embracing a global perspective. However opportunities are limited while nursing education is taught in Indonesian and students are not prepared to explore global literature on topics. To embrace global perspective, nurses must be able and willing to challenge their conventional values, roles and practice (Nursalam et al., 2009). The success of this lies with specialty associations such as the Indonesian Neuroscience Nurses Association who are striving towards the incorporation of international literature and critical thinking into nursing education.

In Indonesia, the General Nursing Competencies are directed by the Indonesian National Nurses Association (PPNI) and are divided into Diploma and Bachelor of Nursing Competencies. However, the specialty competencies (Cardiovascular, Oncology, Critical Care, Emergency and Neuroscience) were developed by the related nursing associations. These competency standards are very specific and are focused on clear competency skills that are related to clinical practice as a nurse and specific physical tasks. This in contrast to the Australian Nursing and Midwifery Council National Competency Standards that are broad and can be applied to a variety of settings. Nursalam et al. (2009) discuss the need to move away from rote learning to awaken the curiosity in students to become life long learners. This is vital for neuroscience nurses as the field of neuroscience is so vast it is insurmountable to class an expert or specialty nurse as one who knows every drug, disease process and treatment. Smith (2006) identifies that neuroscience nursing education needs to be balanced in terms of broad principles of care and disease specific information. Whilst the introduction of the professional year has been a significant move towards modern educational notions, it is still predominantly focused on the biomedical model rather than a humanistic or holistic paradigm. Change is occurring and it is being recognised that nurses can no longer focus on clinical skills and that nurses must be proactive in influencing policy and meeting future challenges with creative solutions that are nurse led and driven. This includes reviewing regulatory processes and enhancing the diversity and experiences of nursing students. Essential to lifelong learning and the development of nurses who can function effectively in complex health environments, are the skills of problem solving, critical thinking and the emotional intelligence for clinical decision making (Dalley, Candela, & Benzel-Lindley, 2008; Hegarty, Walsh, Condon, & Sweeney, 2009).

While the opportunities and potential for Indonesian nurses to study offshore appear promising, the transfer of internationally gained qualification can be difficult. The Indonesian Directorate General of Higher Education has made a number of recommendations that expresses concern with the certificate assessment guidelines of foreign college graduates. The procedure and translation of a foreign degree in Indonesia can be varied, with an evaluation team reviewing each case individually. This has particular implications for Indonesian nurses who wish to undertake education at a Clinical Masters level in countries such as Australia. Unlike a traditional Master by Research, the Clinical Masters program focuses on critical thinking, conceptualising within specific specialities and providing nurses with the knowledge and leadership skills to practise at an advanced level. Within Indonesia both the Doctoral degree (S3) and the Masters program (S2) are research based with the expectation of a thesis component. The thesis component is considered important, with the inclusion of a thesis also a significant component of the Bachelor degree. Changing the conceptual thinking and the focus on a thesis component for postgraduate education is vital to improving opportunities for neuroscience nurses to explore offshore educational opportunities.

English proficiency is also a significant challenge for Indonesian nurses when looking at offshore educational opportunities. Bahasa Indonesia is the national language and the medium for instruction in both nursing education and daily conversation (Munir et al., 2013). Whilst offering an English- based

nursing course in Indonesia would initially appear to be the logical solution, the question remains as to who would teach it? As a significant number of Indonesian nursing lecturers are only able to communicate in Indonesian, the growth of nursing and the inclusion of global and international perspectives are limited. Perhaps one of the most challenging aspects for developing neuroscience nursing as a speciality for Indonesian nurses is that the main textbooks and most recent literature are published in English. Suwandono, AnhariAchadi, and Aryastami (2005) identify the quality of some educational programs coupled with teacher capabilities and a reduced capacity to speak and write in English as the main reasons for this high level of unemployment. Australia has an English Language Testing System (IELETS) Registration Standard score of 7 or above, with most universities setting an IELETS score of 6 to 6.5 to study nursing or postgraduate nursing courses. Given the limited exposure to formal English education, it is expected that Indonesian nurses would struggle to meet the expected IELETS score for postgraduate study within Australia. Herein lies the importance of mentorship and the support that can be offered through collaborative practices and regional partnerships.

Conclusion

Neuroscience nursing is a relatively new speciality within Indonesia. Developing adequate resources and collaborative partnerships to support the recognition of neuroscience nursing in Indonesia is a large challenge. However, Indonesian nurses are motivated to change practices and strive towards a more professional standing of nursing in Indonesia. This includes ensuring that nurses receive appropriate postgraduate qualifications. The founding of the Indonesian Neuroscience Nurses Association has enabled the development of competency criteria as well as working towards defining the scope of practice for neuroscience nurses. With this status, Indonesian neuroscience nurses will be instilled with the skills to achieve wider societal gains. Nursing leadership is focused on change and improvement, motivation and enthusiasm for interventions and collaborations, which leads to improved practices (Brown et al., 2013). As neuroscience nursing continues to develop as a specialty so will quality standards. The translation of the experience to the Indonesian setting requires consideration of geographical, economic, political and cultural factors. The development of national practice competencies, clear definitions of grades of nurses as well as national registration are all vital developments for Indonesian nurses. Without these changes it is difficult to benchmark current practices and plan for future training and skill development needs (Hennessy et al., 2006b). To optimise the development of nursing education in Indonesia collaboration is vital to enable benchmarking, to increase exposure to new and dynamic practices as well as examples of nursing leadership. This includes the continued support of English-based learning opportunities through both formal learning as well as collaborative and informal opportunities and the support of international professional bodies.

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