Toward the Establishment of a Forensic Nursing Specialty in Brazil: An Integrative Literature Review

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Conflicts of Interest and Source of Funding: Rafael Braga Esteves' work on this manuscript was supported by an Exchange Scholarship (Academic Merit, University of Sao Paulo). No Conflicts of Interest and/or Sources of Funding were declared for the remaining authors,.

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Violence, a growing concern in all societies because it has direct consequence for health, is a topic of particular concern for nurses. In a major report on violence, the World Health Organization (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002) cite the rising number of violence-related injuries around the globe, particularly those involving women and children. The Report declared violence to be a major public health problem and encouraged its members to develop policies, programs, health and social services to prevent violence and mitigate its effects.

This call to action is especially relevant in Brazil where violence and injuries are a leading cause of morbidity and mortality (Reichenheim et al., 2011). In 2007, 47,707 homicides and 38,419 motor vehicle crashes in Brazil accounted for over two-thirds (67%) of all deaths from external causes (Reichenheim et al., 2011). Interpersonal violence is another concern. A population-based, multi-stage survey of 6,760 Brazilian women across 15 state capital cities and the Federal District of Brazil reported psychological aggression (78.3%), "minor" physical abuse (21.5%) and severe physical abuse (12.9%) (Reichenheim et al., 2006). This and other studies began to identify regional, sociocultural, and economic disparities in risk factors for domestic violence such as gender inequality, harsh physical punishment in childhood (Bordin, Paula, do Nascimento, & Duarte, 2006), low socioeconomic status (Reichenheim et al., 2006), and lack of social support (Reichenheim, Patricio, & Moraes, 2008). According to Reichenheim et al. (2011), young, black, and poor men are more likely to be involved in community violence (as both perpetrators and victims), while poor black women are the main victims of domestic violence.

Over the past two decades, Brazil has made considerable progress in bringing political and community attention to issues related to violence in general and more particularly to

violence against women. In 1994, the Brazilian government signed the *Inter-American Convention on the Prevention, Punishment, and Eradication of Violence against Women* (Organization of American States, 1994), enacted a number of important laws, and established the Special Secretariat for Women's Policy aimed at reducing gender violence. Nurses have been instrumental in developing targeted interventions and services such as women's shelters and groups for perpetrators being established throughout Brazil.

The recognition that intimate partner violence is a problem in Brazil has motivated proposals for broad and multi-sector action, with nurses and other health professionals increasingly coordinating these initiatives. This has intensified calls to accelerate the development of a forensic nursing speciality in Brazil.

In 2011, the Brazilian Nursing Federal Council/*Conselho Brasileiro de Enfermagem (COFEN)* identified forensic nursing as a nursing subspecialty (Brazil Federal Council of Nursing, 2011). Although Brazilian nurses had long been working with victims and perpetrators of violence, this declaration formalized the important role that nurses play in mediating the effects of violence on health. As in other jurisdictions, the specialty of forensic nursing in Brazil is still in its infancy and its inclusion in undergraduate and graduate nursing curricula is limited to a few lectures and scientific events in academic spaces (Silva & Silva, 2009).

With the aim of advancing forensic nursing in Brazil, this integrative review asks what lessons Brazilian nurses can learn from the experiences of other countries in developing a forensic nursing specialty. We begin with a brief history of forensic nursing as a specialty practice and an overview of Brazil's history and recent health reforms; we then offer an integrative review of the literature describing the evolution of the specialty and highlighting key themes; and discuss these lessons in the Brazilian context.

The Establishment of Forensic Nursing as a Specialty Practice

Forensic nursing was designated a specialty practice by the American Nurses Association Congress of Nursing Practice in 1995 (Lynch, 2011a). This event was the capstone on decades of work by nurses, nursing organizations, and other medico-legal practitioners to articulate, support, and develop the practice of nursing practice in spaces where health care and justice systems intersect. According to Kent-Wilkinson (2011), by the mid-1970s nurses were working in forensic settings (e.g., on forensic psychiatric units and in medical examiner offices) and were referring to themselves as forensic nurses. These nurses learned their specialty on the job as no formal education was yet available. The first formal education program for forensic clinical nurse specialists was established in 1986 at the University of Texas, Arlington School of Nursing (Lynch, 2013). Meanwhile throughout the 1970s and 1980s, Sexual Assault Nurse Examiner (SANE) programs were established in Tennessee (Speck & Aiken, 1995), Minnesota (Ledray & Chaignot, 1980), and Texas (Antognoli-Toland, 1985). The emergence of SANE programs and later, Sexual Assault Response Teams (SARTs), were part of a trend toward specialization in nursing. In this instance, it was a response to widespread recognition that nursing education programs were not adequately preparing graduates to meet the health and legal needs of sexual assault victims presenting to hospital emergency departments (Kent-Wilkinson).

In 1992, nurses from across the United States and two from Canada attended a meeting hosted by the Minneapolis Sexual Assault Resource Service and the University of Minnesota School of Nursing. During this meeting the International Association of Forensic Nurses (IAFN) was formed (Stokowski, 2008) and officially incorporated in the state of Georgia in November 1993 (IAFN, 2013). During the intervening years, the IAFN has steadily grown to include 3000 members in 24 countries; with five (5) countries offering SANE certification (Maguire, Daffern, & Martin, 2013).

[INSERT FIGURE 1 APPROXIMATELY HERE]

Brazil's History

In order to understand the current state of forensic nursing and relevance in Brazil, it is essential to consider a little of the history that led to Brazil's health care reforms over the past four decades. Brazil's health system reform is unique because it occurred in tandem with the country's democratisation and was fuelled by the efforts of health professionals and individuals involved in civil action.

Brazil is a country distinguished by its size and diversity. With an area of 8.5 million square kilometers, it occupies almost half of the South American continent (Instituto Brasileiro de Geografia e Estatística, 2010). A 2010 census estimated the country's population to be over 200 million, making it the fifth most populated country in the world (Central Intelligence Agency [CIA], 2013). Brazils' social and cultural diversity reflects the history and politics of its discovery and settlement. Pre-colonial Brazil was inhabited by millions of indigenous peoples, belonging to hundreds of tribes and language groups (Library of Congress, 2010). In the mid-16th century, Pedro Alvares Cabral claimed Brazil for Portugal and the country was ruled from Lisbon until 1808, when the son of Portuguese king declared independence and crowned himself Peter I, Emperor of Brazil (globalEDGE & Michigan State University, 2013). Almost four hundred years later, the monarchy was overthrown and the country became a federal republic. Over the next century, Brazil experienced a period of rapid industrialisation despite ongoing political instability driven by a series of regime changes, military takeovers, and high rates of inflation (globalEDGE & Michigan State University, 2013). By 1970, Brazil's economy was among the strongest in the world.

Brazil's multiethnic population is comprised of indigenous peoples of Tupi and Guarani language stock; the Portuguese; Africans brought to Brazil as slaves to work on coffee plantations; and immigrants from various European, Middle Eastern, Japanese and

other Asian countries (globalEDGE & Michigan State University, 2013). Each of Brazil's five regions (north, northeast, centre-west, southeast, and south) has its own unique geographic, demographic, socioeconomic, cultural characteristics and health concerns. For example, the southeast region occupies a relatively small portion (11%) of Brazil's land mass, but it is home to almost half of the total population (43%) and is responsible for more than half (56%) of the gross domestic product (GDP) (Paim, Travassos, Almeida, Bahia, & Macinko, 2011). In contrast, the north region contains most of the Amazon rainforest, is sparsely populated (3.9 persons per km²), and is the country's second poorest region (CIA, 2013). These regional and economic disparities mean that a small fraction of the population benefit from Brazil's wealth (Messias, 2003) and contributes to health inequities and high rates of violence and crime in cities and favelas, which are poor areas of Brazilian towns, where houses are in bad condition, generally roughly built and usually deficient in sanitary resources (Ferreira, Aurélio Buarque de Holanda, 2001).

Healthcare in Brazil

In 1988, Brazil adopted a new constitution, which declared health a right of every citizen and a duty of the state (Paim et al., 2011). Two years later, the Sistema Único de Saúde (SUS) or Unified Health System was established to uphold the principles of universal access, integrality, equity, and social control. Today, the Brazilian healthcare system is comprised of three subsystems: the public system (Sistema Único de Saude [SUS] or Unified Health System), which is coordinated by the federal government and administered through overlapping municipal, state, and federal authorities; the private sector, which is financed through private and public resources; and private health insurance (Brazilworks, 2012).

The Review

This integrative review was led by the first author (REB), a Brazilian undergraduate nursing student who had the opportunity to study at the University of Alberta, Canada (Oct.

2012 – Apr. 2013) supported by an Undergraduate International Student Exchange Scholarship from the Brazilian government's *Science Without Borders* in collaboration with CALDO, a consortium of Canada's leading research universities committed to international education. The project, which involved students and researchers from the University of Alberta, University of Saskatchewan, and University of Sao Paulo (Brazil) and the findings will contribute to knowledge development in Brazil and inform the preparation of qualified forensic nurses.

Aim

The aims of this review were to systematically examine and synthesize the published literature on the development of the forensic nursing specialty around the globe and to extract important lessons for the establishment of a forensic nursing specialty in Brazil. The intent is to offer practical guidance to Brazilian nurses who are working to expand and develop forensic nursing as a specialty in Brazil.

Design

Broome (1993) characterized an integrative review as one that synthesizes empirical or theoretical literature to inform a comprehensive understanding of a problem or phenomenon. Integrative reviews may include both qualitative and quantitative studies as well as theoretical literature thereby serving a wide range of purposes. According to Whittemore and Knafl (2005), integrative reviews advance disciplinary knowledge and can inform practice and policy. With this in mind, we followed their five (5)-step approach - problem formulation, literature search, data evaluation, data analysis, and presentation of findings.

Sample and Inclusion/Exclusion Criteria

Articles were included in the review if they met the following inclusion criteria: (1) the primary focus of the article was the establishment, evaluation, or existence of the forensic

nursing specialty; the implementation of courses or programs intended to support the establishment of a forensic nursing specialty; and/or the benefits of establishing a forensic nursing specialty to society and nursing; (2) published in a peer-reviewed journal; and (3) report original research, meta-syntheses of original research, and/or literature reviews. Dissertations, theses, guidelines, editorials and news articles were excluded from the review.

Databases Searched

For this review, electronic searches of the following databases were conducted between December 2012 and March 2013: CINAHL Plus with Full Text; Criminal Justice; Index to Legal periodicals; MEDLINE; Soc Index with Full Text; Social Work Abstracts; SCOPUS; and PsycINFO. The search terms used were: [(TI nurs* or SU nurs*) AND [TI (forensic* or penal or prison*) or SU (forensic* or penal or prison*)] AND (sexual assault nurse examiner*). In addition, all searches were systematically limited to peer-reviewed articles published in English, Portuguese and Spanish between 1998 and 2013.

Search Outcome

The initial search retrieved 2,170 articles, which were exported to RefWorks and the duplicates (757) were removed. The first author (RB) reviewed the titles and abstracts of the remaining 1413 articles to ensure that they met inclusion/exclusion criteria. Full-text of the remaining 69 articles were then retrieved and reviewed for eligibility. Twenty-two (22) articles were included in the full review along with one additional article that was identified during a hand-search of the reference lists, for a total of 23 articles. Figure 2 summarizes the review process using the PRISMA flow diagram (adapted from Moher, Liberati, Tetzlaff, Altman, & The PRISMA Group, 2009).

[INSERT FIGURE 2 APPROXIMATELY HERE]

Findings

The articles in this review were published in eight (8) different countries – Australia, Canada, England, Finland, Germany, Sweden, Turkey and the United States. Nine (9) articles address issues associated with forensic nursing education and curricular issues; nine (9) focuses on some aspect of the Sexual Assault Nurse Examiner (SANE) role; and four (4) relate to various aspects of psychiatric forensic nursing practice.

Forensic Nursing Education and Curricular Issues

Nine papers in the review address topics related to the history and development of specialized forensic nursing knowledge; forensic nursing content in undergraduate and graduate curricula; and recommendations to expand forensic nursing specialty practice around the world (see Table 1). Although nurses have long worked in forensic settings in forensic nursing roles, specialized forensic education was not available until the 1980s and there was little to no forensic content in the general nursing curricula (Kent-Wilkinson, 2009a). As elsewhere, nurses in Turkey were working in settings that require knowledge and skill in the forensic sciences (e.g., emergency departments, trauma, drug treatment facilities, forensic psychiatry, etc.) yet they had no formal education in the area (Gökdoğan & Erkol, 2005). This situation sparked calls in the literature for the inclusion of forensic nursing content in undergraduate nursing education programs to ensure high quality nursing care (Gökdoğan & Erkol) and also to prepare practitioners who can help break the cycle of violence and improve health care delivery for individuals affected by violence (Freedberg, 2008).

[INSERT TABLE 1 APROXIMATELY HERE]

Rutty (2006) points out that increasing rates of global violence rationalizes the need for forensic nursing content in all nursing programs to enable registered nurses to provide holistic and medico-legal care for patients and participate as full members of medico-legal

teams. Rutty also calls for the establishment of clearly defined roles for forensic nursing and standards for specialist practice in the United Kingdom and around the globe.

Radzyminski (2006) from the United States offers support for the American Association for the Colleges of Nursing (AACN) recommendation that master's level graduate programs prepare nurses as generalists creates a gap in the educational ladder when master's clinical nurse specialist (CNP) and nurse practitioner (NP) programs are reconfigured as doctoral programs. Radzyminski argued that a population health framework is an ideal foundation for a generalist curriculum for graduate in forensic nursing education because it addresses complex care situations related to particular populations, practice settings, or systems issues. With these competencies, forensic nurses would have requisite skills and knowledge to address complex forensic healthcare issues at all levels of practice.

Writing from Germany, Lambe, and Gage-Lindner (2007) describe collaborative efforts involving German educators and international forensic nursing scholars to revise university-based nursing curricula to include forensic nursing content. These authors suggested that additional support for the continued development of the forensic nursing specialty in Germany might include international “train-the-trainer” and visiting scholar programs though which German nursing instructors can refine their knowledge and skills as they relate to the care of forensic clients.

In the United States, Freedberg (2008) highlights the important role of nurse educators in preventing and reducing the consequences of domestic violence and abuse. Freedberg asserts that integrating forensic nursing concepts and skills into the undergraduate nursing curricula will help prepare practitioners who can help break the cycle of violence and close the gap that exists in health care delivery for individuals affected by violence.

In the first of a series of papers, Kent-Wilkinson (2009a) explored forensic nursing education in North America, by interviewing educators that had developed some of the first

forensic nursing courses and programs in their area. Through a constructivist approach to her data analysis, Kent-Wilkinson affirmed the definition of forensic nursing as "… a recognized global specialty of nursing, integrating the application of nursing art and science at the clinical/legal interface serving the human health experience as a response to violence in society" (p. 208). Evidence in the data delineated how forensic nursing was different from nursing in general and different from other forensic nursing disciplines. Forensic nursing is different from nursing in general in that forensic nurses are: more likely to be caring for patients who are victims or offenders on a continual basis; therefore, our practice has a high likelihood of interfacing with one of the justice systems; more likely to rely on the knowledge from law and forensic science; and more likely that the case and the documentation will end up in court. Forensic nursing is different from other forensic disciplines in that forensic nursing is: more likely to have knowledge applied at the clinical/legal interface; more likely to provide care and services to both victims and offenders, living and deceased; and more likely to be responsible for medication administration, supervision, and evaluation of the impact of medication. Different from other forensic disciplines that also lay claim to a caring paradigm, forensic nursing is: more likely to include not only therapeutic aspects of caring, but also a holistic and objective approach; more likely to have a social sense of responsibility for the continuous 24/7/365 care across the life span, where care and contact is maintained with the client, and care is extended to the family and to the community (Kent-Wilkinson). When making a case for the need for the specialty roles and education of forensic nursing, it is important to be aware of how forensic nursing is different and being able to articulate these differences when lobbying for initiating this specialty in our own and in their countries.

The thematic analysis of Kent-Wilkinson's (2009a) forensic nursing education study in 2008 also revealed that forensic nursing involves differential knowledge, and dual knowledge. She further contends that dual knowledge makes forensic nursing practice unique

and requires curricula that integrate both nursing knowledge and knowledge from forensic science and the forensic behavioural sciences along with the legal and scientific processes.

By the mid-1990s, the first forensic nursing education programs were in existence. In her analysis of social factors influencing forensic nursing education, Kent-Wilkinson (2009b) attributed the growth of forensic nursing education programs to the following: (1) the proactive efforts of nurses dedicated to providing better care to victims and offenders; (2) the efforts of local champions who initiated and sustained programs; (3) the support of governments and institutions of higher learning; (4) administrators who understood and supported the role of forensic nurses; (5) flexible curricular structures that allowed for elective options; (6) heightened public awareness of forensics through mass media; and, (7) increased market demands and job creation.

Despite these social supports and broader availability of forensic nursing education programs, Kent-Wilkinson's (2011) recent review of the literature demonstrates that role development and education across all forensic nursing subspecialties was uneven. The role of the SANE is well developed as are clinical training certificate programs to prepare nurses with the skills needed to practice in the role. However, there is a lack of forensic nursing education programs available for other major forensic subspecialties such as death investigator, clinical forensic nursing, and psychiatric forensic nursing.

Burgess, Piatelli, and Pasqualone (2011) described collaboration between the Boston College Biology Department and the Connell School of Nursing's graduate forensic nursing program to develop and offer 12 forensic modules in an undergraduate biology lab course. The authors suggest that forensic science courses and laboratories could become foundational courses for the application of forensic science to nursing practice.

Sexual Assault Nurse Examiner (SANE) Roles

The nine articles in this section focus on the Sexual Assault Nurse Examiner (SANE), the first and most developed forensic nursing subspecialty (see Table 2). The articles address the development, characteristics, and evaluation of adult SANE (SANE-A) roles and programs across North America; the training needs and outcomes of SANEs who work with pediatric populations (SANE-P); and the experiences of SANEs' provision of expert testimony.

[INSERT TABLE 2 APPROXIMATELY HERE]

Fifteen years ago, Ciancone, Wilson, Collette, and Gerson (2000) surveyed SANE programs in the United States and described their characteristics. Of the sixty-one of 92 programs in existence at the time of those who returned the survey (66%), over half of the programs (55%) had been operating for less than five (5) years, and just over half (52%) provided the initial sexual assault examination in a hospital emergency departments. The median wait time for initial examination and evidence collection was three (3) hours (range 1 - 8 hours) and follow-up was offered consistently to all clients. Respondents reported similarities in their programs with respect to staffing, training, sexually transmitted infection (STI) and pregnancy prophylaxis, and documentation techniques. There was however, wide variability in the use of sexually transmitted infections (STI) cultures, HIV testing, and alcohol and drug screening, and most programs were unable to provide information concerning follow-up and legal outcomes. The authors conclude that there is not a single, best structure for a SANE program and that future programs need to take into account community needs and resources when developing programs.

In 2006, Logan, Cole, and Capillo reported that there were 549 SANE programs in operation across the US. The researchers randomly sampled 231 of these programs by state with the aims of: examining SANE and law enforcement policies and working relationships with community organizations; describing the perceived benefit of SANE programs for

sexual assault survivors; and identifying barriers and potential solutions to common program issues. The majority of programs surveyed provided service 24 hours a day, seven (7) days per week (82.7%) from hospital emergency or other hospital departments (60.1%); the remaining SANE programs were housed in rape crisis centers (15.2%), free standing clinics (8.2%), criminal justice system agencies (e.g., police department, prosecutor's office, or victims assistance program; 9.6%). Eighty percent of SANE programs reported having excellent working relationships with their local rape crisis centers. Respondents also endorsed excellent working relationships with law enforcement agencies (53%), domestic violence agencies (63.3%), the prosecutor's office (52.6%), and hospital administrators and hospital staff (51.5%) (Logan, Cole, & Capillo, 2006). The perceived benefits of SANE programs for survivors reflected those in the literature and included client-centered care, high quality of evidence collection, and follow-up referrals to support services. Challenges to the development and maintenance of SANE programs include staffing, funding, and conflicts or lack of communication with various stakeholders (Logan et al., 2006).

An example of tailoring a SANE program to a community's needs and resources was evident in Dandino-Abbott's (1999) article describing the establishment and one-year outcomes of the Lucas County Sexual Assault Response Team (SART). This initiative was a unique intersectoral collaboration involving the Prosecutor's Office, Sheriff's Department, Police Department, two competing acute care facilities in the Toledo area, and the Toledo YWCA Rape Crisis Center. After one year of operation, there were clear improvements in the care provided to victims of sexual assault including shorter time-to-care; decreased length of hospital stay; improved documentation quality, and better coordination of interagency services. Dandino-Abbott underscored the vital importance of specialized training for SANEs, multidisciplinary involvement, and intersectoral communication and collaboration to

build and maintain a high quality SART. The longer the Team and their respective agencies worked together, the greater the improvements in care to victims of sexual assault.

In Ontario, Canada, Stermac and Stirpe (2002) examined hospital records of 515 women to compare services provided by SANEs with that of physicians. Women seen by SANEs and physicians were similar in demographic characteristics: their reported use of alcohol and drugs prior to the sexual assault; the type of coercion they experienced during the assault; and in the incidence of vaginal and anal rape perpetrated against them. The major difference between care provided by SANEs and physicians was that physicians treated women with more physical trauma as per the program's protocol. Consistent with existing literature at the time, the average assessment time was shorter for women seen by SANEs than for those seen by physicians (3¼ hours vs. 4 hours) and physicians had more interruptions (25.1%) than did SANEs (20.0%) (Stermac & Stirpe). Based on these findings, Stermac and Stirpe supported the SANE model as an effective approach for providing high quality and effective care to victims of sexual assault victims.

The importance of intersectoral and multidisciplinary collaboration along with effective communication among stakeholders is noted by several authors as being critical to the development and maintenance of SANE successful SANE programs (e.g., Houmes, Fagan, & Quintana, 2003; Logan et al., 2006). Hutson (2002) contends that

> [t]hrough a multidisciplinary approach, including SANEs, physicians, police, and prosecutors, nurses can combine their expertise to improve not only the medical care of the victims but also the safety of the community in which they live and practice their professions. (p. 87)

Two articles in the review focused on the role of the SANE with children and adolescents. Bechtel, Ryan, and Gallagher (2008) conducted a retrospective chart to determine whether the use of SANEs in one pediatric emergency department (PED) improved

the care of children and adolescents who had been sexually assaulted. The authors reviewed the medical records of patients who presented to a Connecticut PED between December 2004 and December 2006 for documentation of a genitourinary (GU) exam and the presence of injury; evaluation for STIs; prescription of prophylaxis for STIs, HIV, and pregnancy; evaluation by a PED social worker; and referral to sexual assault crisis services. Of the 114 children and adolescents whose records were reviewed, 60 had been evaluated by a SANE and 54 patients had not. Those seen by SANEs had more complete examinations in that they were more likely to have had a GU examination (71% vs 41%) and GU injury documented (21% vs 0%). SANEs also had higher rates of screening for STIs, pregnancy prophylaxis, and referrals to mental health services and the Rape Crisis Centre (98% vs 30%); there were no significant differences however, between service providers with respect to an evaluation by a PED social worker (Bechtel et al). The authors, Bechtel and colleagues concluded that even when SANEs provided care, not all eligible patients had documentation of a GU examination, STI testing, and/ or STI and HIV prophylaxis. This led them to recommend that SANE services require ongoing monitoring and quality assurance to ensure optimal medical evaluation of children and adolescents with sexual assault.

In 2012, Marchetti, Fantasia, and Molchan employed focus groups to describe the attitudes of SANE-As (SANE-A meaning adults/adolescents) regarding the possibility of cross-training to care for patients <12 years old (Marchetti, Fantasia, & Molchan, 2012). The majority of participants supported the notion of cross-training, although a few opposed the proposal citing the emotional toll of working with children who have been sexually assaulted and the need for adequate educating, training, and support. The authors suggest that their findings can inform the acute care and evidence collection practices used in the care of for pediatric patients who have been sexually assaulted (Marchetti et al.).

Finally, Rebecca Campbell and her colleagues (2005) reported the results of their national study of SANE programs (n=110) to describe nurses' most recent expert testimony experiences and determine whether characteristics of the nurses or the SANE programs with which they were affiliated predicted difficulty during their expert testimony. Forty-three percent of the SANEs reported no difficulties during their most recent experience of giving expert testimony. Logistic regression revealed that younger nurses, more experienced SANEs, and those who worked as administrators reported fewer difficulties in their most recent expert testimony. Nurses' education level was not significant, but nurses with forensic nursing training were less likely to report difficulties in recent expert testimony. At a program level, nurses affiliated with larger SANE programs and those with stronger collaborative relationships with prosecutors also reported fewer problems (Campbell et al.).

Forensic Psychiatric Nursing

The four (4) articles in this section of the review address various topics related to the education, culture, and practices of forensic psychiatric nurses. (See table 3). The articles were published between 2006 and 2011 in Australia (2), Finland (1), and Sweden (1).

[INSERT TABLE 3 APPROXIMATELY HERE]

In Australia, Martin, Donley, Parkes, and Wilkins (2007) examined the adequacy of the Graduate Nurse Program (GNP) at the Thomas Embling Hospital of the Victorian Institute of Mental Health (trading as Forensicare). The GNP, established in 1994, employed preceptorship, in-house lectures, competency examinations, and placement evaluations to prepare students for psychiatric nursing practice. Participants reported that the environment was safe and supportive and graduates felt confident and prepared as psychiatric nurses. Although limitations of undertaking a graduate nurse program in a forensic setting were identified, the participants from the past program who had gone on to work in other services did not believe that their nursing careers had been disadvantaged. The authors conclude that

although a forensic setting is a suitable context for a GNP, graduates also require a foundation year of psychiatric nursing theory (Martin et al., 2007).

Also in Australia, Cashin and colleagues (2010) used ethnographic methods to explore the experience of providing nursing care in a forensic setting, where the routines, regimes and regulations of the custodial environment dominate. Through participant observation, semi-structured interviews, and artefacts, the authors sought to understand 'cultural migration' (changes in nursing culture over time) in a forensic hospital. An earlier study at the same hospital described nurses as "entrapped in and disempowered by routines and battles with custodial staff leaving the nurse–patient relationship as non-therapeutic" (Cashin, Newman, Eason, Thorpe, & O'Discoll, 2010. p. 44). The current study revealed a shift in the way that nurses described their practice and articulated the desire to increase therapeutic engagement with patients, although there was a lack of clarity concerning how nurses could enact therapy in the forensic environment.

A study conducted in Finland by Tenkanen, Tiihonen, Repo-Tiihonen, and Kinnunen (2011) assessed the importance of core interventions (CIs) and the mastery of the core competencies (CCs) of registered nurses (RNs) and practical mental nurses PMNs) and appraised how RNs and PMNs mastered that knowledge and those skills. The authors report statistical between group differences ($p \leq 0.05$) in the importance of and ability to master the following CCs: (1) pharmacotherapy; (2) knowledge in forensic psychiatry and violent behavior; (3) treatment of violent patients; (4) processing patient's and own emotion; and (5) need adapted treatment of the patient. The authors conclude that RNs, rather than PMNs, should be recruited for work in forensic psychiatric nursing settings, although a considerable amount of specific training is still be required to achieve competence. All nurses working in this area need to receive further education in forensic psychiatry and in forensic psychiatric nursing (Tenkanen et al.).

Rask and Brunt (2006) studied Swedish patients' and nurses' perceptions of the frequency and importance of their verbal and social interactions on a forensic psychiatric nursing unit. Seventy-three (73) patients and 87 nursing staff completed surveys for the study; 78% of the nursing staff was licensed mental nurses (LMNs) and 13% were registered nurses (RNs) with postgraduate training in psychiatry. The patients perceived 'supportive/encouraging interactions' and 'reality orientation interactions' to be the most frequent and 'supportive/ encouraging interactions' and 'social skills training' to be the most important interactions. In contrast, nurses perceived the 'supportive/encouraging interactions' and the 'practical skills training' as the most frequent and the 'supportive/encouraging interactions', 'interpretative interactions' and 'practical skills training' as the most important interactions. Overall, patients reported that interactions occurred less frequently than what the nurses reported. The authors call for further research to elucidate patient perspective of the daily life on a forensic psychiatric unit and the nature of verbal and social interactions between patients and nurses (Rask & Brunt).

Discussion

Around the world, children, women, and the elderly are among the most frequent victims of interpersonal violence, including sexual violence (Krug et al., 2002). This review demonstrated the effectiveness of SANEs in emergency departments in the immediate care of adult (e.g., Houmes et al., 2003; Stermac & Stirpe, 2002) and child victims (Bechtel et al., 2008; Ciancone et al., 2000; Marchetti et al., 2012). With its high rates of sexual assault and interpersonal violence (Reichenheim et al., 2006), Brazil has a need for a category of health professionals that can create and maintain effective linkages between the healthcare and justice systems to meet the physical, psychosocial, and legal needs of victims of violence. Research by Logan and colleagues (2006) demonstrates that SANEs are ideally suited to fulfil this mandate as they have excellent working relationships with law enforcement and

domestic violence agencies; prosecutors; and hospital administrators and other hospital staff. Other benefits of SANEs for victims of violence include client-centered care, high quality of evidence collection, and follow-up referrals to support services. Given its resonance with current directions in Brazilian nursing education (Brazil National Council of Education, 2001), there is a growing interest among Brazilian nurses (Silva & Silva, 2009) and nursing organizations (Brazil Federal Council of Nursing, 2011) in the establishment of SANEs roles, standards of practice, and specialty certification.

The mentally ill are an underserved group whose care needs often intersect with the health and justice systems. In Brazil, mental health policy is legislated by Law Number 10.216 (Government of Brazil, 2001), which ensures that persons experiencing a mental disorder will have access to the highest quality care in the least restrictive therapeutic environment. In most instances, the preference is for community-based mental health services within the context of family-centered care. International experience (e.g., Tenkanen et al., 2011) shows that nurses who work with these individuals require specialized education in forensic psychiatric nursing.

Not surprisingly, the findings of this review echo calls around the world for curricular changes to increase forensic nursing content in undergraduate, graduate, and specialty in nursing education (Gökdoğan & Erkol, 2005; Lambe, & Gage-Lindner 2007). Given the longstanding acknowledgment of violence as a healthcare issue (Krug et al., 2002), forensic nurses remain an "… untapped resource in anti-violence strategies and a critical link in the administration of justice" (IAFN, 2006). In Brazil, where there is increasing attention to the health and healthcare needs of individuals affected by violence (Reichenheim et al., 2011), there is a window of opportunity to contribute the theoretical foundations of forensic nursing science and to advance nursing specialty practice in the areas of SANEs and forensic psychiatric nurses (Backes, Erdmann, & Buscher, 2010; Dantonio, 2010; Mason, 2002). In

Brazil, as well as in countries like England (Rutty, 2006), Germany (Lambe and Gage-Lindner (2007), and Turkey (Gökdoğan, & Erkol, 2005) increasing forensic nursing content in nursing curricula and establishing certification in forensic nursing are the critical first steps to advance and promote Forensic Nursing as a specialty.

Currently in Brazil, nursing educators are revisiting curricula, pedagogical, and political projects with the aim of implementing curricula and dynamic teaching strategies to support critical, reflective and meaningful learning. This is an opportune time to advance forensic nursing education to meet the cultural, socioeconomic and policy demands of the nation. The development and strengthening of nursing as profession throughout history has been motivated by social demands to meet the dynamic needs of human beings. This is an evolving process that involves both knowledge development and political mobilization. The time is right for developing forensic nurse science and forensic nurse specialty practice in Brazil as a way to increase nurses' autonomy and improve Brazilian healthcare.

In Brazil, the educational preparation and regulation of nursing practice governed by laws to ensure that practitioners have the knowledge and skills to provide care in a variety of contexts and in response to new and complex challenges of modern societies, but always considering the human being in its essence (Brazil National Council of Education, 2001; Monteiro, 2009). International experiences highlighted in this study emphasize the potential for forensic nursing to respond to social demands and points the way for policy makers and administrators of Brazil's the National Health System [SUS], which is grounded in the ideals of prevention and health promotion. For example, basic health units and family health strategies are scattered throughout the country and, as primary health care services, are gateways to the public health care system. If employed in these settings, forensic nurses could liaise with local schools to provide education for students; provide community-based services

for women, children, and the elderly affected by violence as well as to those living with psychiatric illness; and serve as resources to other professional groups.

Limitations of the Integrative Review

This integrative review was limited to articles written in English or Portuguese and published in a peer-reviewed journal. All articles included in the review focused on the establishment, evaluation, or existence of the forensic nursing specialty; the implementation of courses or programs intended to support the establishment of a forensic nursing specialty; and/or the benefits of establishing a forensic nursing specialty to society and nursing. Our review yielded no articles published in English and most focused on the SANE and forensic psychiatric nursing subspecialties. That said, most of the articles acknowledged the existence and potential value to society of all forensic nursing subspecialties.

Conclusion

This paper provided an integrative review of the establishment and practice of specialty forensic nursing practice around the world. Its aim was to distill out lessons for Brazilian nurses who are seeking to advance forensic nursing education and specialty practice in their country. The review supports the ongoing efforts of Brazilian educators to increase forensic nursing content in undergraduate and graduate nursing programs to prepare graduates who can effectively respond to the needs of Brazilian society, particularly those whose health, psychosocial, and legal needs intersect.

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Figure

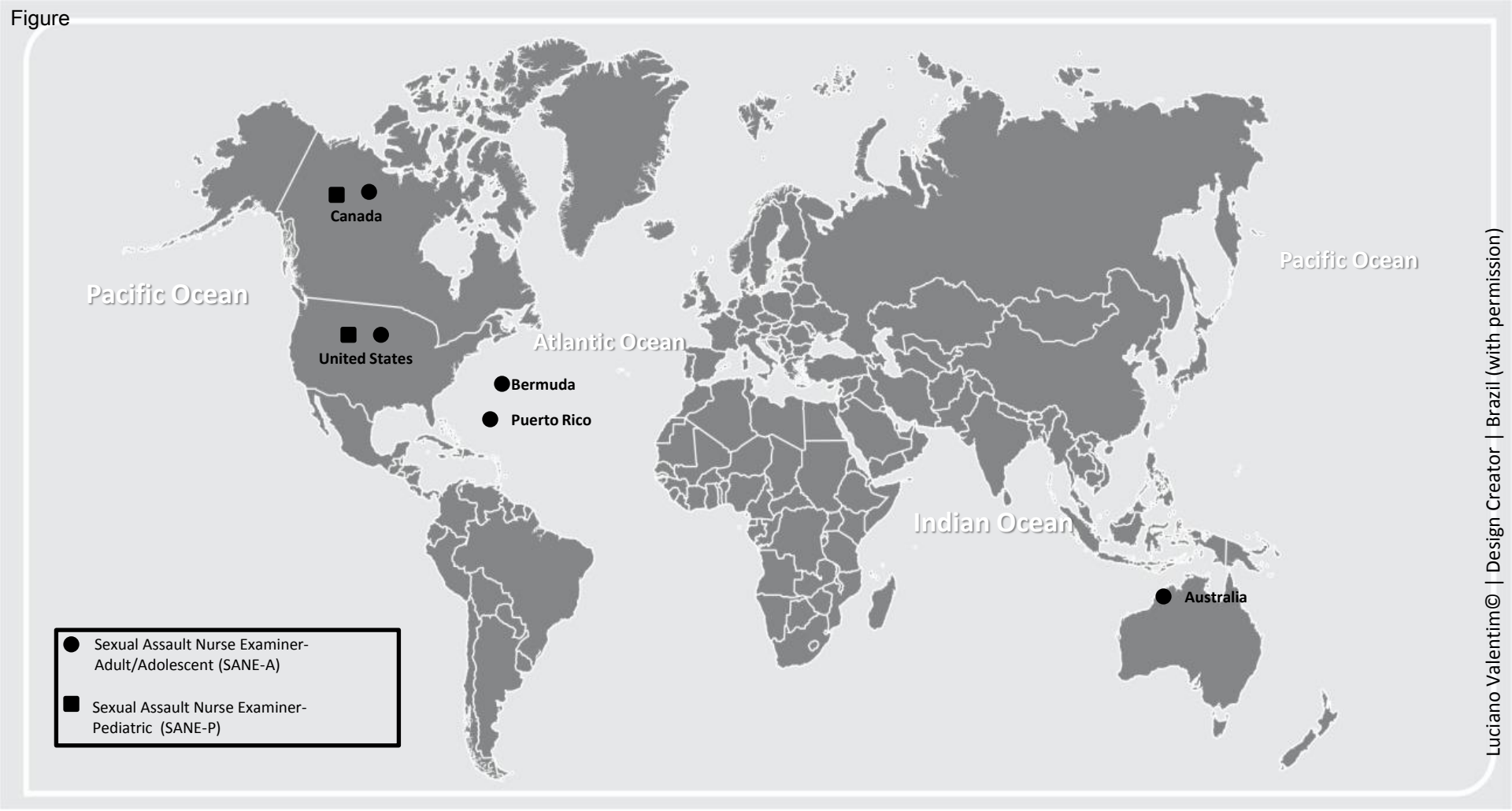

Figure 1. Number of IAFN Certified SANEs by Country (K. Maguire, personal communication March 21, 2013)

Sexual Assault Nurse Examiner-Adult/Adolescent (SANE-A): United States 1161; Canada 65; Australia 2; Bermuda 1; Puerto Rico1
Sexual Assault Nurse Examiner-Pediatric (SANE-P): United States 357; Canada 10

Table.1 Forensic Nursing Education and Curricular Issues

Citation	Country	Purpose	Major Findings/ Recommendations
Burgess, Piatelli, & Pasqualone (2011)	United States	Describe collaborative efforts of the Boston College Biology Department and the Connell School of Nursing's graduate forensic nursing program to develop and offer 12 forensic modules in an undergraduate biology lab course. The course employs a student-centered, inquiry-based approach and the course content meets Forensic Nursing Standards issued by the American Nurses Association and the International Association of Forensic Nurses.	Forensic science courses and laboratories could become foundational courses for application of forensic science to nursing practice by increasing the specialized knowledge and skills relevant to forensic nursing practice.
Freedberg (2008)	United States	Highlight the important role of nurse educators in preventing and reducing the consequences of domestic violence and abuse.	Integrating forensic nursing concepts and skills into the undergraduate nursing curricula will help prepare practitioners who can help break the cycle of violence and close the gap that exists in health care delivery for individuals affected by violence.
Gökdoğan & Erkol (2005)	Turkey	Report the results of a survey is to identify knowledge about forensic nursing by nurses in the province of Bolu, Turkey and determine the influence of education at the undergraduate level and continuing education programs in Istanbul.	Although nurses have been working in settings that require knowledge and skill in the forensic sciences (e.g., emergency departments, trauma, drug treatment facilities, forensic psychiatry, etc.), they have no formal education in the area. Formal education programs must be developed at both, the undergraduate and postgraduate levels to ensure high quality nursing care.
Kent-Wilkinson (2009a)	Canada	This study explored forensic nursing education in North America. Constructed definitions of forensic nursing were generated from the data.	Thematic analysis reveals that forensic nursing involves unique knowledge, differential knowledge, and dual knowledge. Based on these findings, a constructed definition of forensic nursing was offered, as well as a delineation of how forensic nursing was different from nursing in general and how forensic nursing was different from other forensic disciplines.
Kent-Wilkinson (2009b)	Canada	Reports findings of a qualitative study of forensic nurse educators on social factors that facilitated and impeded educational development of the forensic nursing in North America.	The social factors reported have both positive and negative effects on the development of forensic nursing: organizations, institutions of higher learning, social media, economic, technical, and political factors.

Kent-Wilkinson (2011)	Canada	Describes the historical development of each of the forensic nursing subspecialties in North America and identifies gaps in specialty nursing education.	Specialty forensic education did not begin until the mid-1990s, which means that it lagged behind the role development in most of the forensic nursing subspecialties. The findings point to a need for future studies to explore and evaluate forensic nursing educational development.
Lambe, & Gage-Lindner (2007)	Germany	Examines the global response to violence, the role of forensic nursing within this context, and calls for the implementation of a forensic nursing specialty in Germany	Violence remains a major public health problem around the world. The authors call for members of the international nursing community to support the establishment of a forensic nursing specialty in Germany. This support might come in the form of a "train-the-trainer" program, hosting German nursing instructors at their respective facilities to refine their nursing skills as they relate to the care of forensic clients.
Radzyminski (2006)	United States	Offers support for the American Association for the Colleges of Nursing (AACN) recommendation that master's level graduate programs prepare nurses as generalists creates a gap in the educational ladder when master's clinical nurse specialist (CNP) and nurse practitioner (NP) programs are reconfigured as doctoral programs.	A population health framework is an ideal basis for a generalist curriculum for graduate nursing education as it addresses complex care situations related to aggregates, practice, or systems issues. Developing these competencies allows the forensic nurse experts to identify complex forensic healthcare issues at all levels of practice.
Rutty (2006)	England	Reviews the global picture of violence, argues for the worldwide development of the forensic nurse examiner, and debates the boundaries of this advanced nursing role.	Nursing is not making a significant academic contribution to medico-legal care and forensic science despite a major leap in the role development of forensic nursing globally. In many parts of the world, expanded nursing roles in the legal arena currently exist for nurses to be coroners, forensic nurse death scene examiners, custody nurses, SANES, and clinical forensic nurse examiners in hospital emergency rooms.

Table 2. Sexual Assault Nurse Examiner Roles

Citation	Country	Subspecialty	Purpose	Major Findings/Recommendations
Bechtel, Ryan, & Gallagher (2008)	United States	SANE - PED	Evaluate whether the use of SANEs in a pediatric emergency department (PED) improves the medical care of pediatric and adolescent sexual assault victims.	SANEs in a PED led to a greater documentation of the physical examination more screening for STIs, provision of pregnancy prophylaxis, and referral for mental health service for victims of sexual assault. Ongoing education and quality assurance are necessary to ensure optical medical care, adherence to medical evaluation.
Campbell, Long, Townsend, Kinnison, Pulley, Adames, & Wasco (2005)	United States	SANE - A	Describe SANEs' most recent expert testimony experiences and determine whether characteristics of SANEs or their programs predicted difficulty during expert testimony.	43% of the SANEs reported no difficulties during their most recent experience of giving expert testimony. Younger nurses, more experienced SANEs, and those who worked as administrators reported fewer difficulties in their most recent expert testimony. Nurses' education level was not significant, but there was a trend that nurses with forensic nursing training were less likely to report difficulties in recent expert testimony. At a program level, nurses affiliated with larger SANE programs and those with stronger collaborative relationships with prosecutors also reported fewer problems.
Ciancone, Wilson, Collette, & Gerson (1999)	United States	SANE - A	Report findings of a descriptive study of the Sexual Assault Nurse Examiner (SANE) programs and their characteristics in the United States	SANE programs are similar across the US with regard to staffing, training, STD and pregnancy prophylaxis, and documentation techniques. Programs are inconsistent in the use of STD cultures, HIV testing, and alcohol and drug screening. SANE programs were unable to provide data regarding survivor follow-up and legal outcomes, which is essential to evaluate the programs' effectiveness and to improve performance. The need for better outcome data should be addressed to define success or failure of SANE programs
Dandino-Abbott (1999)	United States	SART	Describe the establishment and evaluation of one-year outcomes of the The Lucas County Sexual Assault Response Team (SART).	The Lucas County SART represents a unique collaboration among the Prosecutor's Office, the Sheriff's Department, the Toledo Police Department, St Vincent Mercy Medical Center, The Toledo Hospital, and the Toledo YWCA Rape Crisis Center. One-year outcomes demonstrate that the SART provided quality care sexual assault victims including shorter time-to-care; decreased length of stay; improved documentation quality, and more effective coordination of interagency services.

Houmes, Fagan, & Quintana (2003)	United States	SANE - A	Describe the unique requirements, objectives, and resources needed to develop a SANE program based in the Emergency Department (ED)	Sexual assault remain are the most rapidly growing violent crime in the US. SANE programs have shown that treatment of assault victims through coordination of medical, psychological, and forensic care can benefit community health and result in thorough, cost-efficient treatment in the ED.
Hutson (2002)	United States	SANE - A	Describe the development of SANE programs in the tri-state area of southern Ohio and northern Kentucky	Since the introduction of these SANE programs, evidence is collected more efficiently and consistently, enabling more effective prosecution. Using a multidisciplinary approach, including SANEs, physicians, police, and prosecutors, nurses can combine their expertise to improve the healthcare of victims and the safety of the communities in which they live and practice.
Logan, Cole, & Capillo (2006)	United States	SANE - A	Examine one SANE program's development and operation and describe demographic, incident, and exam characteristics for sexual assault survivors examined by a SANE between 2001 and 2005.	Most programs surveyed provided service 24 hours a day, 7 days per week (82.7%) from hospital emergency or other hospital departments (60.1%); the remaining SANE programs were housed in rape crisis centers (15.2%), free standing clinics (8.2%), criminal justice system agencies (e.g., police department, prosecutor's office, or victims assistance program; 9.6%). Eighty percent of SANE programs reported having excellent working relationships with their local rape crisis centers. Respondents also endorsed excellent working relationships with law enforcement agencies (53%), domestic violence agencies (63.3%), the prosecutor's office (52.6%), and hospital administrators and hospital staff (51.5%). Perceived benefits of SANE programs for survivors included client-centered care, high quality of evidence collection, and follow-up referrals to support services. Challenges to the development and maintenance of SANE programs include staffing, funding, and conflicts / lack of communication with various stakeholders.
Marchetti, Fantasia, & Molchan (2012)	United States	SANEs – A/Ped	Describe the attitudes of SANEs regarding the possibility of cross-training to care for patients <12 years old.	The majority of SANEs in this study endorsed the option of pediatric cross-training, a smaller portion of participants opposed the proposal citing the emotional toll of caring for children who have been sexually assaulted and the need for adequate educating, training, and support.
Stermac & Stirpe (2002)	Canada	SANE - A	Describe a SANE program at a hospital-based sexual assault care center in Ontario, Canada and compare the care provided by SANEs and physician examiners.	Average assessment times were shorter for victims seen by SANEs than for victims seen by physicians ($3^1/_4$ hours vs. 4 hours). Physicians had more interruptions (25.1%) than did SANEs (20.0%). Client characteristics and presentation were similar regardless of care provider. The results support the utility of the SANE model.

Table 3 Forensic Psychiatric Nursing

Author(s)/ Pub date	Country	Purpose	Findings / Recommendations
Rask & Brunt (2006)	Sweden	Investigate patients' and nurses' perceptions of the frequency and importance of verbal and social nursing interactions in forensic psychiatric nursing care.	Patients perceived that interactions with nurses occurred less frequently than did the nurses. They further perceived 'supportive/ encouraging' and 'reality orientation' interactions as occurring most frequently and 'supportive/ encouraging' and 'social skills training' to be the most important interactions. The nurses perceived the 'supportive/encouraging' and the 'practical skills training' as the most frequent and the 'supportive/ encouraging', 'interpretative', and the 'practical skills training' as the most important interactions.
Martin, Donley, Parkes, & Wilkins (2007)	Australia	Examine the adequacy of the Graduate Nurse Program at the Thomas Embling Hospital.	Participants reported that the environment was safe and supportive and that processes such as orientation, preceptorship and academic study were appreciated. They felt confident and prepared as psychiatric nurses and although limitations of undertaking a graduate nurse program in a forensic setting were identified, the participants from past program who had gone on to work in other services did not report that their nursing careers had been disadvantaged.
Cashin, Newman, Eason, Thorpe, & O'Discoll (2010)	Australia	Explore the nursing culture in an Australian prison hospital and the migration of the culture over a 12-month period.	Nursing culture was one of hope, although there was not a clearly articulated vision of nurse-hood or patient-hood and model within which to practice nursing. The authors conclude that the ability to articulate practice is central to the development of mental health nursing in any context.
Tenkanen, Tiihonen, Repo-Tiihonen, & Kinnunen (2011)	Finland	Assessed the importance of core interventions (CIs) and the mastery of the core competencies (CCs) of registered nurses (RNs) and practical mental nurses PMNs) and appraised how RNs and PMNs mastered that knowledge and those skills	There were statistical between group differences ($p \leq 0.05$) in the importance of and ability to master the following CCs: (1) pharmacotherapy; (2) knowledge in forensic psychiatry and violent behavior; (3) treatment of violent patients; (4) processing patient's and own emotion; and (5) need adapted treatment of the patient. The authors conclude that RNs, rather than PMNs, should be recruited for work in forensic psychiatric nursing settings. All nurses working in this area need to receive further education in forensic psychiatry and in forensic psychiatric nursing