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Implementing a Forensic Educational Package for Registered Nurses in Two Emergency Departments in Western Australia

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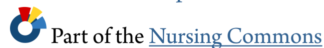
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CHAPTER 2

LITERATURE REVIEW

Thomas had just started his new job with all of the excitement and enthusiasm of a young child beginning their first day of school. It was a new beginning, an exciting new adventure, so familiar and comfortable and yet so unpredictable. It was early in the morning and patients were already backing up at triage waiting to be seen while others were steadily arriving through the side doors on ambulance trolleys.

Introduction

Violence is recognised as a global public health problem (World Health Organisation, 2002). As a result, the nursing profession is faced with new educational needs which involve the specialty field of forensics (McGillivray, 2004). Often, forensic patients encounter healthcare professionals in Australian emergency departments prior to any contact with the police or other legal professionals (O'Brien, 2006). Consequently, many ED nurses are unknowingly caring for forensic patients on a daily basis.

Providing competent and effective care to forensic patients requires a Registered Nurse to have special skills and unique knowledge (Glittenberg, Lynch, and Sievers, 2007). A nurse must have a clear understanding of their professional scope of practice, State and Federal laws as well as understand forensic science principles (Hammer, Moynihan, and Pagliaro, 2006; Glittenberg, Lynch, and Sievers). These special skills and unique knowledge allow ED nurses to meet the demands of the diverse forensic patient needs (Benak, 2001). In this study, a "forensic patient" refers to any individual who seeks treatment for complaints that interface with or have the potential to interact with the law (Pasqualone, 1998). Therefore, in order for nurses to provide holistic and competent nursing care to forensic patients, nurses need to be provided with current and regular forensic education.

However, the nursing specialty of clinical forensic nursing is unknown to the majority of Australia's nursing arenas (Saunders, 2000; Evans and Wells, 1999). According to Lynch (2006), forensic nursing involves merging the forensic aspects of healthcare with the bio/psycho/social/spiritual aspects of patient care. Although most nurses regularly provide care to a variety of forensic patients, forensic nursing

concepts are especially relevant within the ED environment (Benak, 2001; Glittenberg, Lynch, and Sievers, 2007). According to Pasqualone (G. Pasqualone, personal communication, June 22, 2003), ED nurses regularly provide treatment to 27 different types of forensic patients. By definition, forensic nursing incorporates law and healthcare practices; as a result, forensic cases, on average, are not usually simplistic in nature (Butterworths, 2003). In view of such facts, logic suggests that effective forensic educational material must incorporate ideas from multiple sources and disciplines.

The incorporation of such a comprehensive approach was adopted to provide the researcher the best opportunity to develop a forensic educational package that would significantly impact on the nursing practice within the ED setting. According to Hammer, Moynthan, and Pagliaro (2006), theoretical models serve as a guideline and are an essential foundation in which nursing education and practice should be based. Unfortunately, the researcher could not find a single theory that could satisfactorily support the entire research project. Consequently, the researcher had to draw upon several theoretical perspectives to guide different aspects of this research study.

To address the complex nature of forensic nursing education, the researcher reviewed literature which described the International and Australian perspectives of forensic nursing. Following that discussion, details of the three theoretical models and teaching strategies which provided the guidance and support for the forensic educational package will be explained.

Context of Forensic Nursing

In its original meaning, the term “forensic” relates to public debates (Delbridge et al., 1991). However, a more modern usage of the term “forensic” relates to a connection with the legal system or some type of formal public debate in a courtroom (Bell, 2004). Today, the field of forensics has become sophisticated and complex. Forensic principles have become entwined with many other professions including that of healthcare. Therefore, when the term forensics is used as an adjective in conjunction with nursing, forensic nursing could be defined as the application of nursing to a

legal context. To completely explore the field of forensic nursing, the international and Australian perspective were examined.

International perspective

In 1975, in Alberta Canada, the chief medical examiner, Dr. John Butt, recognised that nurses could be a valuable resource in the field of death investigation. This resulted in the first extension of the traditional mental health and correctional forensic nurse role, that of a nurse death investigator. Expanding the roles within forensic nursing continued in 1976 with the development of Sexual Assault Nurse Examiners (SANE) programs in the United States of America (USA).

The stimulus to develop a SANE program began with the focus to better meet the needs of rape victims. Literature found that victims of sexual assault experienced long waits in EDs (Ledray, 1999; Littel, 2001). Therefore, to address the needs of this specific patient population, three US hospitals initiated SANE programs. The first three programs started in Memphis, Tennessee in 1976 (Speck and Aiken, 1995), in Minneapolis, Minnesota in 1977 (Ledray and Chaignot, 2001) and in Amarillo, Texas in 1979 (Antognoli-Toland, 1985).

Nurses along with other medical professionals, counsellors and advocates working in hospitals, clinics and other settings recognised that services for sexual assault victims were inadequate. When rape victims presented to EDs for care, they often waited four to 12 hours because their injuries were often seen as non-life threatening (Ledray, 1999; Littel, 2001). In addition, many emergency physicians were reluctant to complete the necessary exam (Littel). This was due to many factors that included lack of experience and training in forensic evidence collection (Bell, 1995; Lynch, 1997; Ledray, 1999; Littel), the time consuming nature of an evidentiary exam (Frank, 1996), and the potential of legal involvement in the future. The combination of such circumstances often led to evidence that was rushed, inadequate or incomplete (Frank; 1996; Lynch, 1996).

In 1992, 74 nurses came together and formed the International Association of Forensic Nursing (IAFN). The vision of this organisation was to bring together nurses who cared for patients who had healthcare and legal needs. Today, the current

roles recognised within the international field of forensic nursing include (Hammer, Moynthan, and Pagliaro, 2006):

1. Sexual Assault Nurse Examiner (SANE)
2. Forensic Nurse Photographer
3. Nurse Coroner
4. Forensic Nurse Death Investigator
5. Legal Nurse Consultant
6. Clinical Forensic ED nurse
7. Forensic Correctional Nurse
8. Forensic Gerontology Nurse
9. Forensic Paediatric Nurse
10. Forensic Mental Health Nurse
11. Forensic Nurse Educator/Researcher

Further international recognition for forensic nursing came with the publication of Pasqualone's Masters Thesis in 1998. The aim of her study was to identify the need for ED nurses to be forensically educated. Pasqualone believed that improved forensic nursing education required initiating a conscientious system founded upon the categorisation of forensic issues. Such a system was believed to assist ED nurses recognise, assess, collect, document, and report forensic cases. Pasqualone (1998) believed that forensic awareness assisted patients, local police and the entire legal community. Furthermore, Pasqualone thought that a direct and orderly process would allow and facilitate direct communication between all aspects of the medico-legal system and improve the management of any patient with potential forensic implications.

Forensic Nursing was recognised as a formal specialty by the American Nurses Association Congress of Nursing Practice in 1995, and standards of practice were approved in 1997 (International Association, 2003). After 10 years, the IAFN has approximately 200 international members. The expanded model and concepts of forensic nursing continue to develop and have been embraced by over 20 different countries including: Great Britain, United States, Canada, South Africa, Hong Kong, Zimbabwe, Scotland, Japan, Wales, Honduras, El Salvador, Costa Rica, Singapore, Germany, India, Turkey, Ireland, Sweden, Netherlands, and Cuba (B. Barsa, personal communication, November 17, 2007).

In North America and Canada there is a strong national recognition for the forensic nursing speciality. The forensic nursing speciality is recognised by the American Nurses Association [ANA], Emergency Nursing Association [ENA] as well by the American College of Forensic Examiners [ACFE] and the Federal Bureau of Investigation [FBI] (International Association, 2003). There are journals that focus on forensic nursing issues (Forensic Nurse Magazine, On The Edge, Journal of Emergency Nursing, Journal of Forensic Nursing) and several universities offer undergraduate and postgraduate forensic nursing degrees (Fitchburg State College in the USA, Beth-El College of Nursing in the USA, University of Texas at Austin in the USA, and the Mount Royal College of Calgary).

The Joint Commission on Accreditation for Healthcare Organisations (JCAHO) is an independent, not-for-profit organization in the United States that evaluates and accredits nearly 15,000 health care organizations and programs. Since 1951, JCAHO has been the predominant USA organisation responsible for standards-setting and accrediting health care facilities. JCAHO's services include; accreditation, performance measurement, patient safety, information dissemination, and public policy initiatives. For a hospital to receive full JCAHO accreditation, the facility must provide guidelines for forensic patient care requirements. JCAHO further stipulates that a forensic patient must be provided care by a person who is trained to recognize and evaluate the forensic patient's needs (Joint Commission, 2003).

In May 2002, a forensic nurse (Debbie Holbrook) was called to provide expert testimony at a hearing in Washington DC. The hearing was called to address widespread problems with DNA evidence collection. Ms. Holbrook provided testimony on her role as a forensic nurse and the importance of qualified forensic nursing care to sexual assault patients (Bell, 2002). The inclusion of Debbie Holbrook's testimony as a forensic nurse provided greater exposure about the expertise forensic nurses possess and highlighted how this nursing specialty provides forensic patients with high quality care.

In June 2003, the IAFN was awarded a grant of $50,000 from the Office of Violence Against Women, Department of Justice, USA. The grant was initiated so that national educational standards for health care and law enforcement in the care of

sexual assault victims could be established. The IAFN, with the help of a multidisciplinary panel of judges, prosecutors, law enforcement officers, physicians, nurses and advocates set out to determine the standards that outline who could train, who should be trained and how much training was needed for healthcare professionals who care for sexual assault victims (Arndt, 2003).

Fuelled by an increasing demand for information on forensic nursing science, the IAFN launched a peer-reviewed scientific journal (Journal of Forensic Nursing) in Spring 2005. In addition, as part of a national effort in the USA to better respond to sexual assault, the United States Department of Justice Office on Violence Against Women (OVW) has awarded the IAFN a $500,000 technical assistance grant. The IAFN became involved with the project as politicians and other government agencies recognised the benefit of the unique and extensive forensic nursing knowledge and experience held by IAFN members (D'Alesandro, 2005).

Australian perspective

Australia's history of receiving transported British criminals initiated this country's need for developing forensic healthcare services. Mental health services in Australia began in 1805 when a member of the first fleet, Charles Bishop, was declared a "lunatic". In 1811, the first asylum in Australia opened at Castle Hill, New South Wales. Since these early times, trends in Australian mental health have mimicked those in the British system (Neil cited in Meadows and Singh, 2001).

Forensic nursing services in Australia have developed in a similar fashion to that of the mental health services – ad hoc across the various states and territories. Therefore, there is little documented history of the true beginnings of forensic nursing in the published literature. Today, forensic nursing across Australia primarily focuses on work with patients who require mental health services or, are in some way, connected to the criminal justice system. Usually that refers to individuals who have been accused or convicted of a criminal offence. Mason (2002) believes that 'forensic' is generally accepted within nursing literature to denote those who work with mentally disordered offenders in secure psychiatric services of some description.

There are various State organisations throughout Australia that provide support for forensic nurses. These include; Australasian Association of Forensic Nurses Incorporated, Australian College of Mental Health Nurses Inc., Australian Sexual Health Nurses Association [ASHNA], and Psychogeriatric Nurses Association. All of these associations, except the first one mentioned, are designed for nurses who deal with a single forensic patient category. Furthermore, there is little national recognition, organisation or collaboration for the forensic nursing speciality. This is in extreme contrast to the North American and Canadian forensic nursing movement.

The obvious question that arises is why, since proven so successful, is the international forensic nursing model not being utilised in Australia? This is a complicated question that is worthy of discussion and investigation. At first glance the answer seems to be the lack of forensic educational opportunities. The expanded roles of the forensic nurse originated in Canada and soon followed in the USA (Lynch, 2006). Currently, there are strong educational, legal and professional opportunities for nurses interested in expanding their level of forensic knowledge and scope of practice in these countries (International Association, 2005). Without exposure to the idea of role expansion and corresponding educational opportunities, Australian nurses cannot move forward towards any of the nine speciality forensic nursing roles (Lynch, 2006).

Another obstacle in Australia may be attributed to "turf" conflict from and among other clinicians, physicians, and public (Swansburg, 1996; Pollard, 2004). Conflict among nurses is not a new phenomenon and is becoming a significant issue (McKenna, Smith, Poole and Coverdale, 2003; Lambert, Lambert, and Ito, 2004; Almost, 2006). According to Davis (2007), multi-generational conflict is the terminology currently being used in place of the better known concept of "nurses eat their young". This problem, Davis believes, stems from generational differences which create a very diverse work environment that is sometimes difficult, or even impossible for some, to practice in.

In addition to conflict between nurses, some healthcare physicians believe that the substitution of tasks away from medical practitioners to other health staff, including nurses, could compromise patient care leading to a reduction in quality and safety

outcomes (Australian Medical Association cited in Pollard, 2004; Australian Doctors' Fund, 2005). Furthermore, some discord between nurses and the public has been reported in the literature regarding the difficulty nurses have fulfilling public expectations. Some literature discovered that the public often had a different view regarding what the role of nurses should be. For example, Revill (2005) interviewed 15 nurses in the United Kingdom (UK) and found that nurses did believe that the public had feelings of unease about advance nursing roles. However, the feelings of unease were reported to focus on the fact that the public viewed the traditional caring and compassionate role of nursing, which involves hands-on care, as being replaced by a more technical, efficient kind of care. The nurses that Revill interviewed believed that such feelings stemmed from all of the changes the profession had undergone in recent years and the fact that the public had not been kept fully informed. Throughout the nursing literature there is evidence that some conflict and negative attitudes about advance nursing roles exist within the community and among healthcare colleagues (Revill). However, there is an abundance of literature that also supports the premise that nurses working in advanced practitioner roles are able to provide quality care with similar health outcomes when compared with care provided to patients by a doctor (Horrocks, Anderson, and Salisbury, 2002; Shum, et al., 2000; Kinnersley, et al., 2000; Organ, 2005; Campbell, Patterson, and Lichty, 2005).

In the past, nursing education across Australia closely followed the British tradition of the apprenticeship style of nurse education. However, from the mid 1970s to the early 1990s, Australian nursing education was replaced by university based education. This break with past tradition in which nurses were often seen as handmaidens of doctors, dutiful employees, and a caretaker at a patient's bedside, has provided an opportunity for Australian nurses to develop the discipline of nursing towards an advanced and scientific discipline (Stein-Parbury, 2000).

The issue of effective multidisciplinary cooperation between and amongst healthcare and legal professionals has been identified as a crucial issue that can contribute to the lack of forward movement and advancement within forensic nursing roles (Meserve, 1992, p.120; Wiese, Armitage, Delaforce, and Welch, 2005; Gilson, 2000). According to Goll-McGee (1999, p. 17), "teams working together will enhance the

result of service to people as they move through a system embodied by clinical service, legal order, and forensic protocol". Central to forensic nursing practice is the idea that a patient's medico-legal needs have to be recognised and incorporated into their plan of care. Therefore, there is an ongoing need to educate, clarify roles, develop clear practice standards, and form cohesive systems between health and justice system stakeholders (Saunders, 2000; Sekula, 2005).

A further stumbling block may be how the courts and the Australian legal profession view nurses in relation to their evidence collection skills and ability to act as an expert witness. According to Waight and Williams (2002), there are two essential preconditions that a person must fulfil to qualify as an expert witness; (1) the subject matter of the witness's evidence must be an area that requires a course of previous habit or expert study in order to attain knowledge about the subject matter and (2) the witness must be skilled through study and/or experience in that area. Ultimately, however, the decision to accept or reject a nurse's evidence and his/her testimony as one of an expert standard (as it pertains to forensic nursing) has yet to be determined in Australia (Staunton and Chiarella, 2003).

Overall, however, the main topic of concern appears to be lack of knowledge and absence of available educational opportunities for nurses within the forensic arena (Saunders, 2000). Knowledge creates awareness. The more knowledge healthcare stakeholders have about the effectiveness of different national and international systems, the greater the likelihood that changes may occur. Within the USA, Canada, and UK, literature suggests that having specially trained forensic nurses is beneficial to patients, the healthcare professional and is advantageous during legal proceedings (Kent-Wilkinson, 1997; Chizek, 2003, Mason, 2002**;** Campbell, Patterson, and Lichty, 2005; Pryke, 2005). The advanced forensic nursing roles predominantly discussed in such literature include; Nurse Death Investigators, Sexual Assault Nurse Examiners (SANE), Legal Nurse Consultants and Mental Health Nurses.

In recent years, there has been some supportive Australian literature regarding the emerging role of the mental health liaison nurses who work closely with ED staff (Evans and Wells, 1999). Such literature suggests that the effectiveness of these advanced forensic nurse practitioners results from special training, ability to follow

policies and protocols, as well as advanced legal and practical knowledge surrounding standards of care. Such a wide breadth of knowledge and expertise has led to increased patient satisfaction and legal effectiveness during prosecution (Crandall and Helitser, 2003; Chizek, 2003; Sievers, Murphy, and Miller, 2003; Ciacone, Wilson, Collette, and Gerson, 2000).

The recognition and development of the Nurse Practitioner role across Australia fosters hope for the realisation and need for further role advancement within the nursing profession. Across Australia, forensic nursing, as a diverse speciality, is in its infancy. However, Australia has begun to recognise the need to expand the availability and necessity of forensic education as well as the advanced practicing forensic nurse (Aston, 2006).

Australia needs to consider the broader aspect of forensic nursing. Currently, there is no regular forensic education provided to ED nurses on a continuing basis. Furthermore, international experiences have indicated that forensic nursing education can be effective and beneficial for improving forensic patient care (Kent-Wilkinson, 1997; Benak, 2001; Moore, 2001; Campbell, Patterson, and Lichty, 2005). Lastly, there has been no published literature that describes and evaluates clinical forensic educational programmes for ED nurses. Therefore, to meet and improve the education, services and care provided to all categories of forensic patients, a new approach is required. Mason (2002) mentions that nurses have the largest contact time with patients and that this provides the greatest opportunity for nurses to engage in therapeutic activity. Mason further advocates that there is a need to focus on the application of nursing interventions in a diverse area where crime interfaces with human suffering.

The direction of forensic nursing throughout Australia has started to develop. In the year 2000, the first world forensic nursing conference in the Southern Hemisphere was held in South Australia. The conference paralleled the theme that surrounds that of the IAFN. Also in 2000, a graduate program in the field of forensic nursing was initiated at Flinders University in Adelaide as well as a distance education graduate diploma in Correction Health and Forensic Nursing at the University of Western Sydney (Evans and Wells, 1999). Finally, in March 2006, Monash University began

a graduate certificate in forensic nursing and commencing, February 2007, Notre Dame University in Western Australia is now providing a graduate diploma course in clinical forensic nursing.

With all of these exciting advancements, nurses in undergraduate programs, communities and hospitals need support and exposure to forensic nursing education. Forensic education is vital for nurses working with patients and their families. Such knowledge is even more important to those nurses working in EDs across Australia. Most nurses would come into contact with at least one patient from the list of 27 categories of forensic patients each working day. However, on an average day, it is the ED nurse who would treat far greater numbers of patients who fall into one of the forensic categories (Pasqualone, 1998).

Today, forensic education for nursing staff needs to expand and move towards the international model so forensic nursing issues in Australia are confronted and standards of practice reviewed. According to Evans and Wells (1999), a forensic nursing pilot project in Victoria clearly demonstrated that there were benefits of developing advanced roles for forensic nurses. Their study demonstrated numerous benefits for the presence of advanced educated forensic nurses. These benefits included better response times, improved continuity of care and cost effectiveness (Evans and Wells).

The recognition of forensic patients and the collection of evidence could mean the difference between justice or its miscarriage. This means that nurses in EDs throughout Western Australia must be educated in the proper recognition, interpretation, collection, documentation and photodocumentation of not only the ramification of violence, but also the forensic evidence associated with it (Pasqualone, 1998).

Virginia Lynch (1997) founder and past president of the IAFN writes:

> The focus of forensic nursing is clearly identified as a vital intervention by healthcare in advocacy and ministration to victims of violent crime – the survivors, the deceased and the families of both. The wide range of components defining this focus may appear confusing to those without knowledge of the forensic sciences. Yet it

> is the body of knowledge in its entirety that provides its strength. The identified problems in our society are great and multifaceted and require education and expertise that is equally diversified. In truth, the combined efforts of forensic science, medicine, law, nursing, and public health are required to deal with the complex problems of violence. (p. 3)

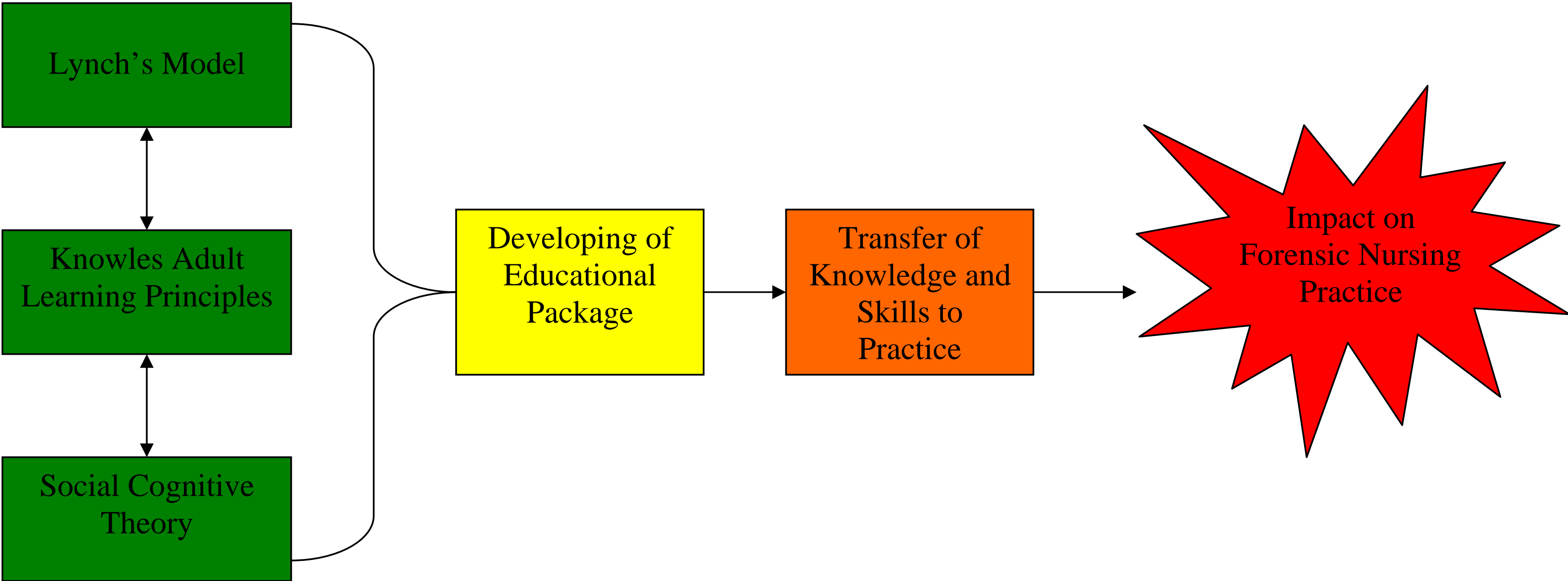
Conceptual Framework

To address the study objectives and maximise the outcomes, three theoretical perspectives were chosen to incorporate into this study (see Figure 1). The theoretical framework for this study blended concepts from three theories in order to best manage the complexity involved in the development of the forensic educational package. The theoretical models included: (1) a collaborative approach to nursing practice known as Lynch's Forensic Nursing Integrated Practice Model (Lynch, 2006), (2) an educational model known as Knowles adult learning principles (Knowles, 1980), and (3) a multifaceted behavioural theory developed by Bandura (1977) known as the Social Cognitive Theory (previously known as Social Learning Theory).

Virginia Lynch is known to be the pioneer of forensic nursing throughout the USA. She first proposed the development of a forensic nursing specialty in 1986 with her graduate research project (Hammer, Moynihan, and Pagliaro, 2006). Her graduate research titled, "Clinical Forensic Nursing: A Descriptive Study in Role Development" advocated for a multidisciplinary team approach to the identification of forensic trauma and evidence preservation (Lynch, 1990). Lynch's resultant integrated practice model was the first and remains the only current nursing practice model that defines and applies forensic concepts to nursing practice. As a result, its inclusion into this study was deemed essential and significant as there is no other model that speaks directly to both nursing and forensic concepts. Therefore, Lynch's Forensic Nursing Integrated Practice Model provided the framework that guided the structure and contents of the forensic educational package.

Malcolm Knowles was one of the world's leading authorities on adult learning principles (Knowles, Holton, and Swanson, 1998). Knowles's work describes the unique aspects of adult learning and provided the researcher with great insight about the type of teaching strategies that benefit the adult population. Therefore, the

Figure 1: Conceptual Framework for Forensic Educational Package



researcher believed that the adult participants in this study would benefit greatly if Knowles specific concepts of adult learning were incorporated into the delivery of this study's forensic educational package.

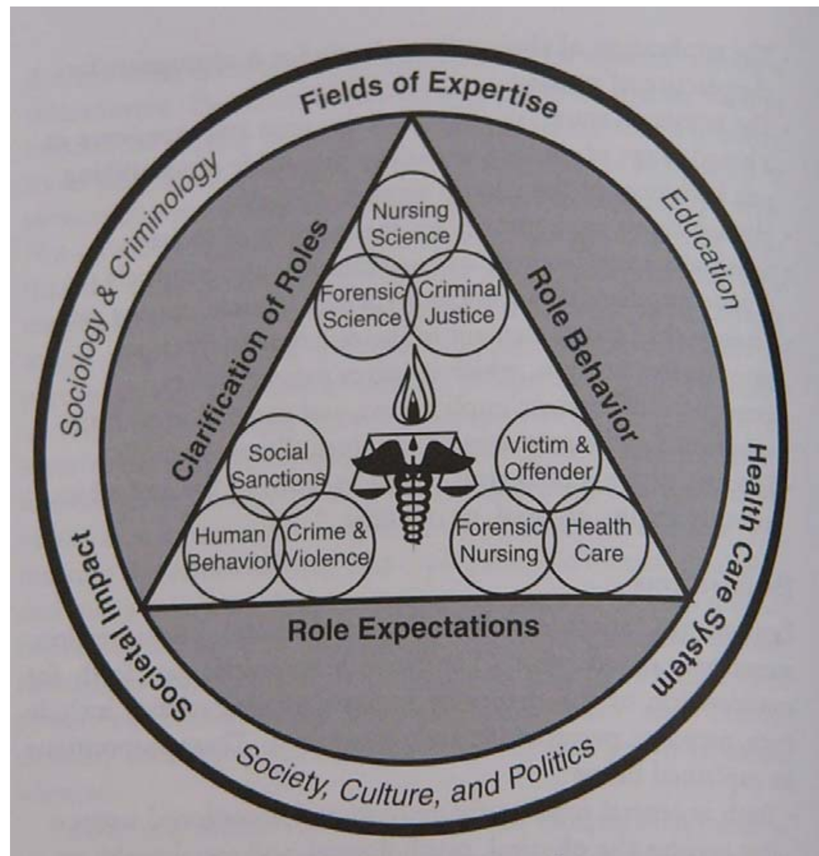
Lastly, the inclusion of the Social Cognitive Theory was important because it described how and why learning and behavioural change occurs. Since maximum outcomes could only be achieved in this study if participants altered their nursing practice behaviours, the researcher required input from a behavioural model that addressed such issues. Therefore, the objective of the following discussion will be to outline each of the models and how aspects from each of the three theoretical models guided and supported the development of the forensic educational package.

Lynch's forensic nursing integrated practice model

In 1990, Virginia A. Lynch proposed a theoretical framework for forensic nursing (see Figure 2). Since then her integrated practice model has provided the concepts and structure that guided many international forensic nursing programs and their policies and procedures (Ledray & Chaignot, 2001; International Association, 2003; Arndt, 2003; Rooms, 2004). Lynch's model (see Figure 2) recognises that forensic nursing draws upon knowledge from Nursing Science, Forensic Science and Criminal Justice. Such a model proposes a complementary approach to that of the nursing profession in respect to its multidisciplinary approach to patient care (Lynch, 2006; Hammer, Moynthan, and Pagliaro, 2006).

Lynch's (2006) model emphasizes the importance and necessity of providing traditional nursing interventions with speciality forensic knowledge and skills. The multidisciplinary approach serves to assist with crisis care and the interactions between healthcare professionals and traumatized victims, offenders and family members. A central assumption to the forensic nursing theory is that integrating disciplines of social science, nursing science, and the legal sciences provide mutual benefits to the patient, healthcare institution, society, law and human behaviour (Lynch, 2006).

Figure 2: Lynch's Forensic Nursing Integrated Practice Model



Reprinted with Permission (Lynch, 2007)

The outer circles seen in Figure 2 represent the interacting environments of society and education. The three main constructs are located at the triangle tips (field of expertise, health care system, and societal impact). At the top of the triangle under the field of expertise construct are three interlocking circles. These circles depict the areas from which forensic nursing draws knowledge. The interlocking circles pictorially represent the essential multidisciplinary coordination, communication, and cooperation that must exist amongst the various disciplines. The bottom left three circles represent the dynamics that dictate the role behaviour of the forensic nurse whilst the bottom right three circles represent the emerging disciplines and relationships of forensic nursing, with healthcare facilities as they relate to victims and significant others (Rooms, 2004; Lynch, 2006).

Lastly, the symbol located in the centre triangle is that of forensic science and the scales of justice intertwined with the Medical Caduceus. The eternal flame is

positioned in the centre of the triangle and represents enlightenment in a new field of nursing practice. Overall, Lynch's integrated practice model depicts a complex but effective combination of law, science, forensic medicine and the biopsychosocialspiritual being of Nursing.

Clinical forensic nursing is a relatively new science to the Australian healthcare community. Outside the USA and Canada, there is a limited awareness about this speciality by Australian healthcare and legal professionals, law enforcement agencies, forensic science practitioners and the general public (Saunders, 2000). Professional awareness will continue to be restricted and development slow whilst there remains a limited amount of published clinical forensic nursing research. Therefore, in order for the concepts of forensic nursing, as outlined in Lynch's model, to filter into the patient care arena, three issues must be addressed. Firstly, current educational material must be provided to Western Australia nurses on a regular basis, secondly, nurses must increase their awareness regarding what forensic nursing involves, and thirdly, the collaboration between healthcare and legal domains must increase.

To enable such change in the current Western Australia mindset, nurses will need to be provided with educational opportunities. Nursing education and the rights of all individuals to be treated holistically and humanely must take priority (Lynch, 2006). Initially, forensically based education would have to focus on introducing the parameters of such practice along with aspects of basic forensic science. For example, nurses must be educated about who it is that can be classed as a forensic patient before any decision regarding the type of care that is implemented. Such educational issues could be addressed in a comprehensive forensic education package targeting ED nurses.

Lynch's interactive model assisted with all aspects of the general design and content of the forensic educational package. Three of the essential components that were considered during the educational package development are captured at the apexes of the triangle in the outer circle (societal impact, healthcare system, and field of experts). These three components corresponded to the main issues the researcher considered when the initial framework of the educational package was being

planned. The researcher believed that in order for the educational package to be successful and effective, contributions from both medical and legal stakeholders were essential. Without the cooperation and assistance from medical and legal professionals, the collaborative approach upon which the package was based, could not be sustained. In other words, if one or more of the key stakeholders decided not to participate, then the collaborative process between agencies would weaken and become less efficient.

Lynch's forensic nursing model incorporates the dominant constructs of nursing that were taken into account during the development of the forensic educational package. Such constructs included that of; person (victim, suspect, offender, human behaviour), health (healthcare institutions, nursing science, individuals, and groups), nursing (nursing science, forensic nursing), and environment (experience, societal impact, and healthcare systems). In addition, internal issues (role clarification, expectation, and behaviour) and external components (sociology and criminology; social, cultural, and political factors; and education) outlined in Lynch's model were also considered. Overall, Lynch's model provided guidance about the importance of flexibility and a dynamic interconnection among components.

Therefore, the effectiveness of the forensic educational package was dependent, in part, on the ability to effectively coordinate all aspects of patient care including any interactions among scientific, medical, social work professionals, victims, suspects, perpetrators, families, and the community. According to Lynch (2006, p. 23), the model "embraces integration … and its cyclic illustration speaks to the models emphasis on continuance, perpetuation, and balance". Lynch further states, "balance is achieved when justice is served – to those who have been victimized, to those accused of crimes not committed, to offenders, and to society as a whole". Therefore, the design and contents of the forensic educational package was heavily guided by Lynch's interactive model.

Aside from the forensic contents of the package, the researcher was concerned about how the educational package content could best be disseminated. To increase the chances of participants absorbing the material, the researcher utilised Knowles adult learning principles. The adult learning principles provided guidelines about how the

material could be taught to maximise outcomes. The following discussion will review Knowles adult learning principles and its application in this research.

Adult learning principles

All of the participants involved in this study could be defined as adult learners (over 18 years old). Therefore, to maximise learning opportunities, the researcher wanted to consider the types of learning needs adult learners required and how best to address such needs (Spouse, 2001; Caudron, 2000; Young and Diekelmann, 2002; Shannon, 2003). Therefore, the researcher utilised Knowles (1980) adult learning principles to guide the implementation of the three forensic workshops. The utilisation of such principles has been shown to improve the uptake of knowledge (Kaufman, 2003; DeWitt, 2003). According to Knowles (1980), traditional, behaviourist and cognitive theories of learning explain only how to instruct and did not facilitate lifelong learning.

The principles and theories of adult learning are well supported in the literature (Knowles, 1980; Lowry, 1993; Kaufman, 2003; Puliyel and Puliyel, 1999). Knowles' principles are based on the psychological definition of what it means to be an adult; that is, the idea that individuals become adults when they become responsible for their own lives and become self-directed (Knowles, 1975). Therefore, to maximise the learning experience for the adult participants in this study and enhance outcomes, Knowles adult learning principles served as a guide for this study's proposed methodology and teaching strategies employed during the forensic workshops.

The theoretical formulation of the art and science of helping adults learn was first described as "andragogy" in Europe in the early 1960s (Kaufman, 2003). Knowles later introduced the term "andragogy" to North America and included five basic assumptions. According to Kaufman, most theorists regard andragogy as not really a theory of adult learning but rather guidelines on how to teach adult learners who tend to be self-directed and independent. According to Knowles (1980) adult learners will learn most effectively if five key principles are considered. The five key principles advocated by Knowles will be discussed below.

Firstly, Knowles (1980) believed that adults are independent and self directing. To encourage and develop such traits in learners, Knowles felt that opportunities must exist for the learner to develop and practice skills, ask questions when needed, identify their own knowledge and skills gaps, and reflect critically on their learning outcomes (Kaufman, 2003). Therefore, the challenge for the researcher was to discover how to serve as a facilitator and resource person whilst encouraging self-directed learners.

Secondly, Knowles (1980) believed that adult learners must know why they need to learn something before they undertake it. This principle highlighted the idea that the researcher had to inform participants what they and their patients would gain from implementing forensic nursing concepts and also any consequences for not utilising such information. Therefore, in this study the researcher presented short case scenarios so that the participants could discover the gap between where they were at the beginning of the workshops and where they wanted to be after the conclusion of the study. Such activities were implemented to encourage participants to become more conscious of the new knowledge and skills presented during the forensic workshops.

Thirdly, Knowles (1980) believed that new learning should be presented in the context of real-life situations. In other words, Knowles felt that adult learners only devote energy to learn something if they perceive the information would help them perform tasks or deal with problems that they confront in their real life environment. For this study, the environment was the ED workplace. Therefore, the workshop information needed to be presented in contexts to what ED nurses would face in their daily routine when caring for forensic patients.

Fourthly, Knowles (1980) believed that adult learners were more motivated to learn if they had internal pressures such as increased job satisfaction, self-esteem and quality of life issues. Knowles also believed that to deal successfully with adult learners, educators must deal with the "mental habits, biases and presuppositions" that cause the adult learners to close their minds to new ideas. This idea suggested that the adult learner must first accept what is being taught before the educational material can be absorbed and deemed useful by participants.

Finally, Knowles (1980) proposed that adult learners typically have a greater amount and a different quality of experiences than younger learners that must be considered when developing teaching styles, needs and goals. Knowles believed that by tapping into the experiences of group participants through group discussions and problem-solving activities, the teacher could reinforce the learners self concept.

To maximise the effectiveness of the educational interventions, all five adult learning principles were utilised and implemented during the three forensic workshops. Knowles principles provided the researcher with guidance about how to reinforce the workshop material. The adult learning principles allowed the researcher to support and maximise the learning opportunities of the adult learner by encouraging, recognising and providing positive reinforcement (Knowles, 1980).

Having addresses two of the theoretical underpinnings, the next challenge the researcher confronted was how to encourage participants to change their behaviour. In order for the researcher to comment on the effectiveness of the educational package, changes in participant behaviour needed to occur. To guide the researcher on the best ways to encourage behavioural changes among participants, aspects of Bandura's Social Cognitive Theory were incorporated into the delivery of workshop material. A complete discussion of how this theory was used in this study will follow next.

Social cognitive theory

Albert Bandura is one of America's well known psychologists whose initial research interests focused on the role of social modelling in human motivation. Initially, Bandura developed the "Social Learning Theory" but changed the name to "Social Cognitive Theory" (SCT) in order to include evolving developments. Today, the SCT focuses on motivational factors and self-regulatory mechanisms that contribute to individual behaviours (Bandura, 1977).

Bandura's SCT theory adopts a cognitive-behavioural approach that addresses the interaction between the way individuals think and act (Sternberg in Bahn, 2001, p. 112). In Bandura's (1977) SCT, behavioural, environmental and personal factors are seen to all interlock and influence an individual's learning ability. Bandura's SCT

was chosen to further assist and support the development of the educational package in this study because of the focus on behaviour modification and motivational factors. The incorporation of certain aspects of this theory into this study helped to enhance program efficiency and effectiveness (Sharma, 2005).

Bandura (1977) views individuals within a social context and suggests that the social nature of people explains learning. In other words, Bandura suggested that one person can strongly influence how others respond. Moreover, Bandura viewed learning as the result of interaction between individuals and their environments. Due to the social nature of nursing and the frequency in which nurses work in teams within the ED, the researcher believed that this principle of the SCT could further improve this study's methodological outcome (Bahn, 2001).

To increase the likelihood that participants would change their nursing practices and utilise the tools contained within the educational package, the researcher believed that positive attitudes about change and tolerance towards new practice ideas needed to exist within the ED environment. Therefore, the researcher encouraged participants to support and help one another when caring for forensic patients. The researcher hoped that cohesiveness among research participants would counteract any negative influences the research participants may encounter. Additionally, the researcher believed that positive attitudes among and between participants could influence how other ED staff responded to the research study thus maximising the likeliness for successful outcomes.

According to Bandura (1977), people learn about behaviour (except for elementary reflexes) from either direct experience or by observation. Furthermore, human behaviour is learned through modelling or observing others to determine how new behaviours should be performed. Bandura argues that practicing new skills is essential because just watching others perform a skill (modelling) is not likely to change behavioural habits on its own. Consequently, Bandura suggests that paying attention to modelling can strengthen or weaken previously learned behaviours. The concept of modelling is a well utilised teaching strategy in connection with healthcare education under the traditional idea of "See one, do one, teach one" (DeWitt, 2003).

Bandura's belief in the importance of observational learning and modelling by others is confirmed by his statement, "most human behaviour is learned observationally through modelling: from observing others, one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action" (Bandura, 1977, p. 22). The forensic educational package developed for this research included three one hour intervention workshops. During the workshops, participants were able to watch the researcher perform evidence collection skills and were then given time to practice the same skills under supervision. The combination of providing structured information coupled with modelling new behaviours was used by the researcher to encourage behavioural changes.

Bahn (2001) advocated that Bandura's social aspects of learning together with a collaborative approach, and the use of peers and expert practitioners as role models was what should be incorporated into nursing education. Therefore, the collaborative aspect of education was central to the development of the forensic educational package. Furthermore, both Lynch (2006) and Hammer, Moynthan, and Pagliaro (2006) agree that the care of forensic patients is best accomplished through cooperation and a multidimensional approach. Woods, Duffy, Morris, and Carnes (2002), found that incorporating Bandura's conceptual framework resulted in learners reducing their fears and defences about potentially anxiety-producing activities and creating favourable attitude and behavioural changes.

To maximise the learning outcomes for participants, the researcher was guided by one of the main constructs outlined in Bandura's (1977) SCT; self-efficacy. Bandura advocated that human behavior and motivation are prime indicators in the beliefs people have about their capabilities. In other words, Bandura believed that how people behave can be predicted by the beliefs they hold about their capabilities (self-efficacy). There are numerous citations in health related literature that advocate for the incorporation of the self-efficacy construct. Such literature illustrates how consistently the self-efficacy construct can be a predictor of behavior and advocates for its application into practice settings (Stajkovic and Luthans, 1998; Pajares, 1996, 2003; Pajares and Valiante, 1997; Joy, 2004; Manojlovich, 2005; Lytle, 2005; Sharma, 2005; Dilorio et al., 2006 ; Evans, Wilson, Buck, Torbett, and Williams, 2006).

In this study, the researcher needed participants to have a belief and the perception that he or she had the capability to acquire specialty forensic knowledge and perform evidence collection and documentation skills taught proficiently and independently. Therefore, the researcher focused on incorporating teaching techniques that would support study participants in a way that would most likely result in participants following the study protocols and procedures. According to Bandura (1997), people with perceived high self-efficacy are more likely to approach difficult tasks as challenges to be mastered rather than threats to be avoided.

For example, in this study, the researcher incorporated interactive discussions regarding past forensic patient case studies and practical skills sessions as teaching strategies. Such activities were thought to provide participants with time to review and openly explore forensic issues and also practice their clinical forensic skills in a supportive environment. Reynolds, Yaroch, and Franklin (2002) and Kratt, Reynolds, and Shewchuk (2000) discovered that the practice of simple cognitive and behavioral skills was more likely to increase perceived self-efficacy.

Therefore, the researcher was confident that if the three intervention workshops were conducted using teaching methods that focused on building participants self-efficacy, participants could experience increased confidence. Participants who experienced a greater level of self confidence might then translate such confidence into being more confident in regards to using their forensic knowledge and skills in the clinical setting. Such increases in self-efficacy, should theoretically, manifest into an increase in knowledge as well as behavioral practice changes (Bandura, 1977).

With the guidance of Lynch's Forensic Nursing Integrated Practice Model, Knowles adult learning principles, and Bandura's SCT, the educational package consisted of strong contents. However, to support the contents of the educational package, the researcher had to give great thought as to how best to present all of the content to the participants. To confront this last challenge, the researcher needed to explore what type of teaching strategies would best suit this study. A discussion about what teaching strategies were instigated in this study and the reasons behind such decisions will be discussed below.

Teaching strategies

The transfer of knowledge and skills is the ultimate goal of education (Spouse, 2001). The construct of transfer is important in nursing education as it reflects the ability of individuals to access and utilise intellectual resources and apply context into situations where those resources may be relevant (Lauder, Reynolds, and Angus, 1999). The evidence presented by Lauder, Reynolds, and Angus suggested that the development of higher level skill knowledge and constant practice were essential to achieve transfer.

In this study the achievement of transfer was vital. However, the challenge arose when the researcher had to decide how best to achieve this goal along with the other study objectives. From the plethora of published literature on teaching strategies, the approach adopted by the researcher was to incorporate a multi-faceted approach. The use of various teaching methods to break the routine, address the different learning styles of learners, and gain better learning outcomes seemed to be the most successful approach (Davis,1999; Fink, 1999; Spouse, 2001).

Overall, in this study, discussion, didactic lectures, practical skill sessions, case studies, and small group work were the teaching methods utilised. According to Caudron (2000), adults report to learning best through personal experience, group support and mentoring. Caudron argued that mentoring is the primary way that transformational learning occurs. According to Gardiner (1998), involving learners in discussions fosters retention of information and improves the application of knowledge to new situations. Furthermore, Gardiner suggested that discussions were much better than lectures at increasing the development of higher-order thinking skills.

In conjunction with his adult learning principles, Knowles (1980) suggested that there were some situations that required direct didactic instructions, such as when learners were being introduced to new and strange subjects. It was the researcher's belief that some of the topics relating to clinical forensic nursing (such as evidence collection and maintaining chain of custody) fitted such a description. Research by Burr, Storm, and Gross (2006) also found that the use of a didactic approach allowed for the presentation of a more technical content and further demonstrated that a

greater amount of information could be presented over a shorter period of time. Finally, Burr, Storm, and Gross found that interactive approaches offered participants the opportunity to apply newly acquired knowledge and to problem-solve with colleagues.

Overall, this study adopted the use of a comprehensive curriculum separated into three, one hour workshops. The researcher incorporated a variety of interactive teaching methods during each of the workshops sessions. The forensic educational package was further guided by aspects of adult learning principles, social learning theory and Lynch's forensic nursing integrated practice model in order to encourage and facilitate participant learning.

Conclusion

There was not a single theory that could support the different aspects of this research project independently. Instead the researcher chose to utilise aspects from three different models to provide the framework for this study including; Lynch's forensic nursing conceptual model, Bandura's Social Learning theory and Knowles adult learning principles. In addition, a variety of teaching strategies were incorporated into the three intervention workshops. Each framework assisted with different aspects of the project and was necessary to develop a broad based forensic educational package designed for the specialized group of nursing professionals working in the ED. Overall, this study called for an approach that was collective, collaborative, and interactive.

Adult learning is about promoting active learning. According to Knowles, in order to optimise adult learning, the context of the educational material must be grounded in experiences that learners deem relevant and practical (Puliyel and Puliyel, 1999). By applying the principles of adult learning, the researcher believed the participants were more likely to have their learning needs met, be able to maintain the interest and support of the participants, and improve the impact of the educational package in terms of the study's objectives.

The advantages of applying Bandura's social cognitive theory into this study lies in its focus on the social aspects of learning. Because this study took place in a very social environment – the emergency department, it was essential for the researcher to consider the complex interactions that occur between the person and environment.

Finally, the researcher called upon several teaching strategies in order to blend theory with practice. Strategies included lectures, demonstrations, practical exercises, computer aided instruction, flow diagrams, and self evaluation opportunities. All of the introduced teaching strategies and theory applications were designed to improve participant interaction and learning opportunities and thus maximise the effectiveness of the forensic educational package.

To meet and improve the education, services and care provided to all categories of forensic patients, a new approach is required. The new approach must include theory to order to maximise outcomes. To illustrate the relevance of theory, Chapter 3, will provide a detailed description of the study methodology which demonstrates how the above three models were integrated into this study. Moreover, Chapter 3will be divided into four phases to explain the various methodological activities. Chapter 3 will also explore all of the ethical issues which were confronted by the researcher during this study.

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Daniel had been helped from his car and wheeled into the resuscitation room slumped over and semi-conscious. Daniel's family were standing back and watching as Thomas started his assessment. The family could provide little assistance except to say "he has not been well for the past couple of days". Thomas had seen it all before. Young Daniel was not unique. Drug abuse was all too common in the emergency department. Family members usually stood by with fear, confusion, helplessness, anger, and love flowing in their tears.