

Overview of Nursing Research

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Abstract: Research in nursing is devoted to rigorous scientific inquiry that provides a significant body of knowledge to advance nursing practice and services, shape health policy, and impact the health of people in all countries. Research in nursing has been from time immemorial starting with the mother of scientific nursing, Florence Nightingale and over the years and decades nursing research has gone through different phases of transformation. The purpose of doing research in nursing is to find answers to questions or solution to problems of relevance to the nursing profession. The role of the research nurse is indispensable to successful research studies and this requires the nurse to be equipped with a solid foundation based on years of experience in nursing, leadership and organizational skills, computer-based skills and an in-depth knowledge of research. The research capacity of a nurse can be developed by knowledge development in research, interdisciplinary collaboration and mentoring. Current trends anticipated in nursing research for the 21st century include: continued focus on evidence-based practice, emerging interest in translational research, greater emphasis on systematic reviews, expanded local research in healthcare setting, strengthened interdisciplinary collaboration, expanded dissemination of research findings and increased visibility of nursing research.

Keywords: research, nursing, practice, knowledge, nurses.

INTRODUCTION

Research is a systematic and rigorous enquiry that investigates hypothesis, suggest new meanings and interpretation of data or texts, and poses new question for future research to explore.

Research consists of:

- Asking questions that nobody has ever asked.
- Doing the necessary work to find answers to the questions.
- Communicating and transferring the knowledge you have acquired to a larger audience.

In practice, research methodology varies widely and it depends on the academic disciplines' accepted standards. Research in engineering and sciences usually involves conducting experiments and practicals in the laboratory or in the field; researches in humanities, arts and social sciences may include archival work in the library or on the internet, conducting surveys or in-depth interview. Researches in nursing provide evidence used to support nursing practices in the clinical and educational specialties. Nursing, as an evidence -based area of practice has been evolving since the time of Florence Nightingale to present day where many nurses now work as researchers based in universities as well as in the healthcare settings (Gallagher, 2011).

According to Polit and Beck (2010), nursing research can be defined as a systematic inquiry that uses methods of discipline to answer questions and solve problems in nursing. Nursing research worldwide is devoted to rigorous scientific inquiry that provides a significant body of knowledge to advance nursing practice and services, shape health policy, and impact the health of people in all countries. The vision for research in nursing is driven by the

professions mandate to the society to optimize the health and well-being of populations. Nurseresearchers bring a holistic perspective to studying individuals, families and communities involving a bio- behavioural, interdisciplinary, and translational approach to nursing science.

Nursing research is a systematic approach used to examine phenomena important and peculiar to nursing and nurses. Nursing is a practice profession, as such, it is important that clinical practice be based on scientific knowledge. Evidence generated by nursing research gives the basis for the quality and cost-effectiveness of nursing interventions. Thus recipients of health care and particularly nursing care reap the benefits when nurses attend to research evidence and introduce change based on that evidence into nursing practice which gives the best evidenced practice. Specifically, research validates and refines existing knowledge, generates and develops new knowledge (Burns and Grove, 2007). The results of research process provide a foundation on which practice decisions and behaviours are laid. Results of nursing research create a strong scientific base for nursing practice, especially when deliberately and carefully evaluated for application to specific clinical topics (Melnyk&Fineout-Overholt, 2005).

Nursing research can be carried out in education, administration and clinical specialities. The priorities for nursing reflects commitment of the profession to the promotion of health and healthy lifestyles, the advancement of quality and excellence in health care, and the critical importance of basing professional nursing practice on research. The services provided by nurses must be based on up- to- date knowledge and research that supports the delivery of the highest standards of care possible. Nurses are developing their own professional knowledge base with

strong foundations built on research. Nurses have a responsibility in some way to contribute to the development, growth and practice of the profession's knowledge through research (Fresh & Bishop, 2004).

The major reason for conducting research is to expand the wealth of nursing knowledge to improve patient care and outcomes. It helps to describe and predict care that nurses provide to their clients. There are two major types of research: basic and applied. Basic research is conducted to gain knowledge for the sake of knowing; however, the results of basic research may then be used in applied or clinical research. Finkelman & Kenner (2013) stated that nursing has not linked research with practice as much as it should. The research process is similar to the nursing process in that there is a need to identify a problem using data, determine goals, describe what will be done and how, and then evaluate results.

Nursing research provides the scientific basis and foundation for the nursing profession. Nursing research uses multiple philosophical and theory – based approaches as well as diverse methodologies to focus on the understanding and easing of the symptoms of acute and chronic illness; prevention of delayed onset of disease or disability, or slowing the progression thereof; finding effective approaches to achieve and sustain optimal health; and improvement of the clinical setting in which care is provided (National Institute of Nursing Research, 2003).

Nursing research can be categorised largely into two areas:

- Quantitative research which focuses on outcome for clients that are measurable generally using statistics. It is based upon the criterion of logical positivism.
- Qualitative research which is based on the criteria of phenomenology, ethnography. It focuses on the experience of those receiving or delivering the nursing care. The research methods most commonly used are in-depth interviews, case studies, focused group and ethnography.

Nursing research has enormous influence on current and future professional nursing practice, thus rendering it an important component of the educational process. Nursing research is vital to the nursing profession and is essential for continuing advancements that promote optimal nursing care. Nursing research generates knowledge to build the scientific foundation for clinical practice; prevent disease and disability; manage and eliminate symptoms caused by illness and restore health; enhance end of life and palliative care.

Throughout the 21st century, the role of nurses has progressed significantly. Nurses work in diverse settings including the hospital, the classroom, the community health department, business sector, administrative settings, ministries and government parastatals, school health care, home health care and the laboratory. Although each role carries different responsibilities, the primary goal of a professional nurse remains the same: to be the client's advocate and provide optimal and holistic care and alleviate patient's suffering on the basis of evidence obtained through research. The International Journal of Nursing Studies

(2009) stated that nursing research has evolved strongly and quickly during the last few decades. And that the number of scientific nursing journals has increased and many of these have increased their annual number of issues, which depicts a major increase in submitted papers from which to choose. In addition, nurse researchers publish more frequently in other specialised and health related journals. A critical look at the contents of an issue suggests that nursing research is developing rapidly in many countries.

Nursing research encompasses a wide range of scientific inquiry including clinical research, health systems and outcomes research, and nursing education research. Clinical research, focused on biological, behavioural, and other types of investigations, provides the scientific basis for the care of individuals across life span and occurs in any setting where nursing care is rendered. Health systems and outcomes research examine the availability, quality, and costs of health care services as well as ways and methods to improve the effectiveness, efficiency and appropriateness of clinical practice. Nursing education research explores how students learn the professional practice and discipline of nursing as well as how to improve educational strategies to prepare clinicians and scientists in the nursing profession (Mantzoukas, 2008).

EVOLUTION OF NURSING RESEARCH

Florence Nightingale is often seen and addressed as the very first nurse researcher. Her research activities in the 1850s focused on soldiers' morbidity and mortality during the Crimean war. Nightingale discovered 'research' questions in practice and took a systematic collection of data to try to find solution to the problems. Her 'research' eventually brought about to changes in the environment for sick people including cleanliness, ventilation, clean water, adequate diet. After Florence Nightingale's work, nursing research followed patterns that were closely related to the problems confronting nurses. For example, nursing education was the target of most research studies between 1900 and 1940. As more nurses received their education in research settings, studies regarding students' features and satisfaction were conducted. Staffing patterns in hospitals changed as more nurses pursued a college education, because students were not as readily available as when more students were enrolled in hospital- affiliated diploma programs (Kirby, 2004). Teaching, administration and curriculum were studies of focus for nursing research until the 1970s. By the 1970s more doctorally prepared nurses were conducting research studies, and there was a shift of focus to studies that concentrated on the improvement of patient care. Researchers from other disciplines especially the social sciences carried out much of the early nursing research in the 1950s, 1960s, and early 1970s, including sociology, psychology, social and welfare policy and history (Hey & Moule, 2006).

In the 1980s nursing research was brought to a new phase of evolution. There were many more qualified nurse researchers than before, availability of computers for collection and analysis of data, and a realization that research is an integral part of professional nursing. Nurse researchers started conducting studies based on the naturalistic criterion. During this period, the studies were

qualitative rather than quantitative. Also, instead of conducting many small, unrelated research studies, teams of researchers, often of different disciplines, started conducting programs of research to build bodies of knowledge related to specific topics, such as urinary incontinence, decubitus ulcers, pain, and quality of life (Reeder, 2006).

The 1990s brought about increasing concern about health reforms, and now in the twenty-first century, nursing research focus is on important health delivery issues, such as cost effectiveness, appropriateness and efficiency, quality, and access. Research was undertaken from a discipline and professional perspective and nurse researchers at that time learnt about a wide variety of research approaches and methods. Nurse researcher built up their research skills from social scientists and health researchers who included them on research team. This position has changed in the last three decades or so, with many nurses now leading and undertaking their own research as well as being team members in multidisciplinary research. Growth in nursing research became particularly obvious in the 1980s and 1990s. Obviously, the overall growth of research in nursing has been slow; it has been more rapid in developed European countries. A number of factors have been found to affect this growth, some of which are: lack of resources and funding to support research, slow development of research training, and capacity building, and the low status of nurses relative to other health professions, particularly medicine. Moule and Goodman (2008) identified four elements to support the growth of nursing research: 'bottom-up' initiatives by progressive individuals; 'top-down' initiatives through government support; growth of research infrastructure as seen through universities; and a strategic approach rather than ad-hoc initiatives.

In the 1970s, there was a serious consideration of nursing research in the United Kingdom which brought about the publication of the Briggs report (DOHSS, 1972) that recommended nursing should become a research-based profession. This was seen as something that was seriously needed for the professional status of nursing and also seen as the turning point in the historical context of nursing research. However, in the decades following the publication of the Briggs report, many suggested that nursing had not become 'research-based', nor had research made an impact on the daily practice of nurses. The arguments were that nurses did not read or have a good understanding of research, nurses did not know how to utilize and translate research into practice, nurses did not believe research, nurses were not able to use research to transform practice, and nurse researchers did not communicate the results of their findings well or at all and how it relates to practice. It is good to think about the current position in the following manner: Do nurses read about research? Do they understand research? Is research making impact on practice? (Moule & Goodman, 2008). Research studies conducted in the past unveiled reports that did not suggest that all nurses should be conducting research, rather it recommended that all nurses should become research educated, which is an essential skill for knowledge-led nursing practice. As years went by, it became more obvious that all nurses needed to become equipped with the skills and knowledge of research process, and ability to retrieve and critically assess research

findings, and increasing capacity, with only a few numbers of nurses needing to be prepared to undertake research, increasing capacity (Kirby, 2004).

Change in research preparation and training has been noticed at all levels of nursing education. Research is now fully integrated into the curriculum of all nursing institutions. The move of nursing into higher education has supported ongoing academic development at Masters and Doctoral levels and we hope for more when nursing becomes a full-fledged university based program with many more universities involved in the training. With this, our impact will be felt more both in practice and in academia.

THE PURPOSES OF NURSING RESEARCH

The general purpose of nursing research is to find answers to question or solution to problems of relevance to the nursing profession. The specific purposes of nursing research include identification, description, exploration, explanation, prediction and control and others are those based on evidence-based practice. Within each purpose, various types of question are being managed by nurse researchers; certain questions are more adaptable to qualitative than to quantitative inquiry and vice versa (Polit et al, 2004).

Identification and description:

Qualitative researchers sometimes study phenomena about which not much is known about. In some cases, so little is understood that the phenomena are so vague and yet to be clearly identified or named or conceptualized. The in-depth, interrogatory nature of qualitative research is well suited to the task of answering such question as, "what is this phenomenon?" and what is its name? In quantitative research, identification typically precedes the investigation (Donaldson, 2000; Goode, 2000).

Description of phenomena is another significant purpose of research. In a descriptive study, researchers notice, enumerate, define, and categorize. Nurse researchers have described a range of phenomena. Examples include patients' stress and coping, pain management in the elderly, adaptation processes, health beliefs, and rehabilitation success. Description can be a major intent for both quantitative and qualitative researchers. Quantitative description of research centres on the prevalence, incidence, magnitude and measurable features of phenomena. Qualitative researchers on the other hand, use in-depth methods to describe the measurements, differences, and importance of phenomena (Bohachick et al, 2002).

Exploration:

Exploratory research starts with a phenomenon of interest like the descriptive research; but rather than simply observing and defining it, exploratory research examines the full nature of the phenomenon, the manner in which it is expressed and manifested, and the other factors to it relates to. Qualitative methods are especially useful for exploring the full nature of a little-understood phenomenon. Exploratory qualitative research is designed to shed light on the various ways in which a phenomenon is expressed and the underlying processes involved (Donaldson, 2000).

Explanation:

Polit and Beck (2004) stated that the goals of explanatory research are to comprehend the basis of specific natural phenomena, and to explain systematic relationships among phenomena. Explanatory research is often connected to theories, which represent a method of deducing, organizing and incorporating ideas about the manner in which phenomena are interrelated. Descriptive research provides hopeful insights; explanatory research offers understanding of the fundamental causes or full nature of a phenomenon.

Prediction and control:

Many phenomena resist explanations yet, it is usually possible to make predictions and to control phenomena based on research findings, even in the absence of complete understanding. For example, research has shown that the incidence of Down syndrome in infants increases with maternal age. The outcome can be partially controlled by educating women about the risk and offering amniocentesis to women older than 35 years of age. In many of the examples of the nursing and health-related studies typically, quantitative ones- prediction and control are essential objectives. Studies designed to test the efficacy of a nursing intervention are ultimately interested in controlling patient outcomes and the cost of care (Polit et al, 2004). Lindeke et al (2002) used derived from a neonatal study to predict academic performance and need for special services among school- aged children who had been in a level three (3) neonatal intensive care unit.

McDonald et al (2001) conducted a study to examine the effectiveness of a preoperative pain management intervention for relieving pain among elders undergoing surgery. McDonald and her colleagues created a preoperative intervention that was used to teach pain management and pain communication skills. The content was specifically harnessed for older adults undergoing surgery. Forty elders, all older than age 65 years, were enrolled to participate in the study. Half of these elders were allotted, at random, to participate in the special intervention; the remaining half got the usual preoperative care. Postoperative pain was measured for both groups on the evening of the surgery, on postoperative day 1, and on postoperative day 2. The result confirmed the researchers' predictions that a) pain in both groups would subside overtime; and b) those receiving the special intervention would experience greater reduction in pain over time.

The researchers pointed that further study is needed to determine whether the intervention's effect ensued from instruction in pain management or in pain communication skills. They also discovered that the study was based on elders undergoing particular types of surgery at a single site, acknowledging that the findings need confirmation in other settings and contexts. Notwithstanding, this study provides evidence that pain responses of elderly surgical patients can be reduced through a nursing intervention. Finally, the findings are more convincing because the team of researchers who conducted the study have developed a solid program of research on pain, and their research has contributed immensely to understanding pain responses and appropriated nursing interventions.

RESEARCH PURPOSES LINKED TO EBP

Some research studies cannot easily be classified using the above stated purpose categorization system. In both nursing and medicine, several books have been written to expedite evidence-based practice, and these books categorize studies in terms of the types of information needed by clinicians (Guyatt et al., 2008; Melnyk et al., 2011). These writers centralise on several types of clinical concerns; treatment, therapy, or intervention; diagnosis and assessment; prognosis; prevention of harm; aetiology; and meaning. Not all nursing studies fulfil these purposes, but many of them do.

Treatment, Therapy, or Intervention: Nurse Researchers undertake studies structured to help nurses make evidence-based treatment decision about how to prevent a health problem or how to address an existing problem. Such studies range from examinations of highly specific treatments or therapies (e.g., comparing two types of cooling blankets for febrile patients) to complex multisession interventions planned to effect major behavioural changes (e.g., nurse-led smoking cessation interventions). Such intervention research plays a vital role in EBP. Example of such study is that of Liao et al. (2010). They tested the effectiveness of a supportive care program on the anxiety levels of women with suspected breast cancer.

Diagnosis and Assessment: An increasing number of nursing studies concern the rigorous development and evaluation of formal instruments to screen, diagnose, and assess patients and to measure important clinical outcomes. High quality instruments with documented accuracy are critical both for clinical practice and for further research. Example of a study aimed at diagnosis/ assessment is that of Power et al. (2010) which developed and explored the accuracy of an instrument designed to assess the impact and symptoms of hyperemesis gravidarum.

Prognosis: Studies in this category assess outcomes associated with a disease or health problem, estimate the probability they will occur, and indicate when the outcomes are most likely. These studies aid the development of long-term care plan for patients. They make valuable information for guiding patients to make lifestyle choices or to be vigilant for main symptoms and also play a role in resource allocation decisions. Example of prognostic studies is that of Li et al. (2010) which studied the prognosis of children with cancer in terms of the impact of the disease on the children's physical, emotional, and psychosocial wellbeing.

Prevention of harm: Nurses frequently come in contact with patients, who face potentially harmful exposures- some as a result of healthcare factors, others because of environmental agents, and still others because of personal behaviours or features. Providing adequate information to patients about such harms and how best to avoid them, and taking appropriate prophylactic measures with patients in care, depends on the availability of accurate evidence. Example of study aimed at identifying and preventing harm is that of Williams et al. (2010) which tested the effect of introducing a discharge plan on the occurrence of preventable adverse events within 72 hours of intensive care unit discharges.

Aetiology or causation: It could be difficult or sometimes even impossible to prevent harms or treat problems if we do not know what their causes are. For example, there would be no smoking cessation programs if research had not given firm evidence that smoking cigarettes causes or contributes to a wide range of health problems. Thus, identifying factors that affect or cause illness, mortality or morbidity is a vital purpose of many nursing studies. Example of such studies is that of Liaw *et al.* (2010) which studied nurses' behaviours during the bathing of preterm infants. Behaviours that were discovered as potentially contributing to infant stress or reducing infant stress were identified.

Meaning and processes: Research that provides evidence about the interpretation of health and illness to clients, the barriers they face to positive health practices, and the processes they experience in a transition through healthcare crisis are important to evidence-based nursing practice. Example of such research is that of Forsner *et al.* (2009) which conducted a study to illuminate the meaning of children's being afraid when in contact with medical care.

THE ROLE OF THE RESEARCH NURSE

Research is a vital aspect of the health service and essential to the provision of effective and safe health and social care (Royal College of Nursing, 2009; Department of Health, 2005). Coming into the world of clinical research from hands-on care provision involved an abrupt learning curve for the nurses. A solid foundation based on years of experience in nursing is vital to the role, but it requires a range of additional skills and knowledge. The research nurse's job is intricate, varied and interesting. Leadership and organisational skills and a flexible and adaptable approach are vital. Poston and Buescher (2010) explain that research nurses are at the pivot of clinical trials and that they do not only need a comprehensive understanding of the specialty in which they are working, but also a broad knowledge of the research process and research-related legislation. In addition, they a variety of computer-based skills, especially in the use of word processing, spreadsheets, database and presentation of software, and the ability to undertake internet searches are needed.

The nurse researcher has diverse duties which include preparing trial protocols and other trial-related documentation, submitting study proposals for regulatory approval, and coordinating the initiation, management and completion of the research. Ensuring patients give fully informed consent before entering trials is an essential part of the role. This involves screening for potential participants, ensuring patients are provided with all the information they need and that they have a full understanding of the purpose of the study, any potential risks and benefits and what will happen to them if they agree to participate. The nurse researcher must also make it clear to patients that they do not have to participate and are free to withdraw at any time without it affecting their treatment or care. For these duties to be discharged effectively, nurses need an ability to give clear explanations, along with good communication and interpersonal skills (Pick *et al.*, 2011). When patients are enrolled to a trial, the nurse researcher may be responsible for randomization, and for collecting and documenting data.

Quality and reproducibility of data are the two essential principles of ethically sound research. All data must be precise and complete for the results of the study to be valid, and research nurses often have responsibility for this aspect whether it is to enter data or to check that all records are correct and up to date. This requires the researcher to pay attention to details, use a conscientious approach and a high level of probity.

CREATING A CULTURE AND WORKFORCE FOR NURSING RESEARCH

A nursing research culture includes an organization designing an environment that enables and supports creative work to develop new knowledge that provides researchers with opportunities to interact and grow (Wilkes *et al.*, 2013a). An enabling research culture is important to building research capacity and ability to plan and conduct research in nursing. This research culture has the characteristic of research productivity, positive collegial relationships, inclusiveness, noncompetitiveness, and effective research processes and training (Wilkes *et al.*, 2013b). Nurses need to build their research capacity that is their power to perform or strength level to undertake research projects (Wilkes *et al.*, 2013b; Bishop *et al.*, 2003). The fundamental motivation for this capacity building is to enhance research performance with high-quality outcomes in academic and clinical arenas of nursing (Borbasi *et al.*, 2005; Jackson, 2008; Bishop *et al.*, 2003). An empowering research culture has, at its focus positive collegial partnership and relationships with common aims and objectives which is for a group to determine their research priorities and research direction for health services and groups (Baldwin *et al.*, 2000; Wilson *et al.*, 2010). This may enhance the development of cross-organizational and professional collaboration and ultimately encourage the establishment of research culture (Back-Petterson *et al.*, 2008). Further, setting research priorities allows nurses to examine important issues in an era when the research currency is shrinking and enables a direct connection between nursing research and the development of healthcare practice and nursing education.

When setting research priorities, nurses take an interest in future research and their commitment to initiate knowledge development within clinical practice will increase (Back-Petterson *et al.*, 2008) and hopefully gear an enabling research culture among clinicians. Another important element for developing a research culture and producing research outputs is building the capacity of the nurses who need to conduct the research (Finch, 2003; Moreno-Casbas, 2005). This capacity building can be initiated by the nurses becoming informed and educated and likewise the keen consumers of research. Nurses' research capacity should be directed and transformed by nurse specialists to improve patient care, so that the gap between knowledge generation and utilization can be bridged (McCormack, 2003). This aspect of building research capacity will help nurses to implement their research findings.

Developing research capacity can be achieved in a number of ways including formal education through postgraduate degrees in nursing, in-house informal research education programs, in-service training on research and involvement

with successful research teams (Jackson, 2005; Adamson et al, 2003; Murray, 2001). Mentoring is considered to be another important aspect of building the research capacity of nurses in every field in the profession. This mentoring entails a senior professional experienced in research process working with less advanced nurses to aid them in developing research skills and knowledge. For the mentoring to be successful, it must be sustained and the group motivated. Byrne and Keefe (2002) conducted a literature review of Medline and CINAL databases between 1990 and 2001, and they discovered that a mentor working with a group of nurses to set research priorities and goals for a given nursing setting was an optimal method to produce scholarly research.

IMPORTANCE OF RESEARCH IN NURSING

Research is needed in nursing for the following reasons:

- Research is an important tool for the continual growth and development of a relevant body of knowledge in nursing. Research equips nurses with the knowledge and analytical skills they need to make informed decisions and contribute effectively to new developments.
- Nursing research generates information and knowledge from nursing investigations which further defines the unique role of nursing as a profession.
- Professional accountability of nurses to their clients is demonstrated when nurses integrate research evidence into their clinical decisions.
- Research allows for the evaluation of the efficacy of nurses' practice which may articulate their role and responsibilities in the delivery of health services.
- Research allows nurses to make more informed decisions as research is needed for the clarification of each phase of the nursing process.
- Research enables nurses to have an understanding of a particular nursing situation about which little is known.
- Research enables nurses to assess the need for an intervention and to identify factors necessary for the planning of nursing care.
- Fully resourced nursing research in priority areas of practice enhances the quality of care given to patients and also improves public confidence in health and social care services especially those rendered by nurses.
- Nursing research can make health and social care more cost-effective and prevent trial and error in practice. This can be done by encouraging on-going improvements to practice and exploring new approaches it can improve the productivity and efficiency of health care system.
- Nursing research and evidence implementation are key parts of education and training of the present and future nursing workforce.
- Nursing research enables nurses to predict the likely outcomes of particular nursing decisions and to control the occurrence of undesired outcomes (Glick, 2005).

RECOMMENDATIONS TO IMPROVE INTEREST AND PARTICIPATION IN NURSING RESEARCH

To promote nursing research, a continuous positive attitude must be displayed by all research team participants. Promoting the need to read, critique, and apply research to improve each nurse's clinical practice. Some activities that can be promoted with fellow nurses include:

- Participation in a research journal committee or club in a practice setting that involves meeting, reading and critiquing research articles. This may be part of a specific unit and can discuss future research possibilities that the nursing staff has been questioning (Polit et al, 2004).
- Institutions of nursing education must emphasize the importance of evidence-based nursing practice to nurses and even nursing students. Nursing academics must teach the new era of nurses the importance of research and how it has impact on the profession.
- Attendance of research presentations at professional conferences and seminars. A lot of lessons are being learnt from such presentations about research in nursing.
- Assist in the collection of research information. Becoming a co-investigator to a research project will not only expand one's own knowledge base of the research process, but will increase one's professional growth and development.
- Advocate for continuing education offerings and funding on the nursing research process. It is always helpful to review the process of conducting research and to feel more comfortable in implementing the process (Tingen et al, 2009).
- Reviewing a proposed research plan with respect to its feasibility in a clinical setting and offering clinical expertise to improve the plan.
- Participating in an institutional committee that reviews and scrutinizes the ethical aspects of proposed research before it is approved to be undertaken.
- Evaluating complete research for its possible use in practice, and making use of it when appropriate.

In all these activities, nurses with research skills are in a better position than those without them and are able to make a contribution to nursing knowledge. An understanding of nursing research can improve the in-depth and breadth of every nurse's professional practice.

CURRENT TRENDS IN NURSING RESEARCH

Nursing research continues to develop at an increasing rate and it will flourish in the 21st century. The purpose for future nursing research will be to promote excellence in nursing science. At this, nurse researchers and practicing nurses will intensify their research skills, and use those skills to address emerging issues of importance to the profession and its clientele. According to Polit and Beck (2012), the following are the trends anticipated for the earliest 21st century:

- **Continued focus on evidence-based practice (EBP):** Continuous involvement of nurses in evidence-based patient care will be encouraged. This will in turn bring about the need for improvements both in the quality of the studies and in nurses' skills in discovering,

understanding, critiquing, and using relevant study results.

- **Emerging interest in translational research:** In relation to the continued focus on EBP, there will be an emerging interest in translational research. Translational research is a step beyond EBP and it refers to translating research into practice, i.e., ensuring that new treatments measures and research knowledge actually get to the patients or populations for whom they are intended and are implemented correctly. For many nursing professionals, translational research pushes their attention to unveiling new investigations. Once research and analysis have been accomplished with required scientific rigor, an added professional prestige and honour is achieved when this new knowledge “translates” into evidence-based practice that improves patient experience and/ or outcomes (Wolf, 2008). An example of translational research is in the study of Bergstrom and Braden (1988) to devise a tool to predict pressure-ulcer risk. Their work brought about The Braden Scale for predicting pressure sore risk. The impact of their research has been significant. The Braden Scale is currently the “gold standard” for pressure ulcer risk assessment in skilled nursing facilities and hospitals around the globe. Bergstrom’s research is the foundation for the 2005 Wound, Ostomy and Continence Nurses Society (WOCN) Clinical Practice Guidelines for Prevention and Management of Pressure Ulcer. Recently updated in 2011 (Northern California Nursing Pathways, 2014).
- **Development of stronger evidence base through multiple and confirmatory strategies:** Strong research designs are vital, and confirmation is usually needed through the replication of studies with different clients, in different clinical locations and at different times to ensure that the findings are robust and evident.
- **Increased emphasis on systematic reviews:** Systematic reviews are a foundation of EBP and will take on continuous importance in all health disciplines. The purpose of a systematic review is to accumulate and incorporate comprehensive research information on a topic, to draw conclusions about the state of evidence.
- **Expanded local research in healthcare settings:**In the current evidence- based environment, there is likely to be an expansion of small, localized research designed to find solution to immediate problems. Media will need to be created to ensure that evidence from the small projects becomes available to others facing similar problems, such as communication within and between provincial nursing research alliances.
- **Strengthened interdisciplinary collaboration:** Partnership of nurses with researchers in related fields as well as interdisciplinary collaboration among nurse researchers (team research) is likely to expand in the 21st century as researchers address basic problems at the bio-behavioural and psychobiologic interface. Such partnership could lead to nurse researchers playing a more prominent part in national and international healthcare policies.

- **Expanded dissemination of research findings:**The internet and other electronic communication system have a great impact on disseminating research information, which in turn helps to promote EBP.
- **Increased visibility of nursing research:**The 21st century is likely to witness efforts to increase the evidence of nursing research. Most people are not aware that nurses are scholars and researchers. Nurse researchers must market and advertise themselves and their research to professional organizations, consumer organizations, governments and parastatals and the corporate world to increase support for their research.
- **Shared decision making:** This is an emerging trend in healthcare which is a move toward putting patients at the focal point in their decision making about healthcare (Barratt, 2008). The major challenge that may pose in the years ahead will involve appropriating both research evidence and patient preferences into clinical decisions, and structuring research to study the process and the outcomes.
- **Increased focus on cultural issues and health disparities:** The issue of health disparities has emerged as a major concern in nursing and other health disciplines, and this has in turn raised awareness about the ecological sensitivity of health interventions, and the cultural dexterity of healthcare workers. There is a growing enlightenment that research must take into cognisance the health beliefs, behaviours, and values of culturally and linguistically diverse population.

Research in nursing is a vital component to the healthcare field. Nursing research helps implement new changes in the life-long care of individuals and is used to develop treatment that provides the most optimum level of care. For nursing to continue to uphold its professional status in the health sector, research is needful.

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