Evidence based practice in nursing: A review

Shivani

Abstract

Evidence based practice in nursing is an approach to making quality decisions and providing nursing care based upon personal clinical expertise in combination with the most current, relevant research. This article provides a review of various definitions and research studies related to evidence based practice in nursing. Nursing practitioners and students need to know about the evidence based practice in order to provide effective nursing care and to improve the patient outcomes. Various research studies have been shown that knowledge and practice related to evidence based practice among the nurses can be helpful in current nursing practice to improve the quality of nursing care.

Keywords: nursing, Evidence based practice

Introduction

In today’s world the standard and practices of nursing has been changed. Now the evidence based practice has been incorporated in nursing field. It has become the best problem solving technique in the clinical settings in order to provide the quality care to the patient. Evidence based practice is now recognized as the key to improve healthcare quality and patient outcomes. It is the integration of patient values and use of clinical researches into the decision making for effective patient care.

Health care that is evidence based leads to best patient’s outcomes. Nursing education strives to develop knowledge and practice among the nursing students related to evidence based practice so that they can take ownership of their practices and can provide best care to the patients in clinical settings.

Although the purposes of nursing research (conducting research to generate new knowledge) and evidence-based nursing practice (utilizing best evidence as basis of nursing practice) seem quite different, an increasing number of research studies have been conducted with the goal of translating evidence effectively into practice. Clearly, evidence from research (effective innovation) must be accompanied by effective implementation, and an enabling context to achieve significant outcomes [1].

Evidence based practice has three components that is best evidence which is usually found in clinically relevant research that has been conducted using sound methodology, clinical expertise refers to the clinician's cumulated education, experience and clinical skills, patient values which are the unique preferences, concerns and expectations each patient brings to a clinical encounter. It is the integration of these three components that defines a clinical decision evidence-based [2].

History of evidenced based practice

Florence Nightingale was credited with improving patient care in the 1800s when she noted that unsanitary conditions and restricted ventilation could adversely affect the health of patients. She went on to record medical statistics using patient demographics to ascertain the number of deaths in hospitals and the mortality rate connected to different illnesses and injuries.

Archie Cochrane introduced the concept of applying randomized controlled trials (RTC) and other types of research to the nursing practice in 1972. Before Cochrane's contribution to healthcare, medical care centered on unfounded assumptions without consideration for the individual patient. Cochrane proposed that healthcare systems have limited resources so they should only use treatments that are proven to be effective. He believed that RTCs were the most verified form of evidence and his assertion created the foundation for the EBP movement.
In 1996 David Sackett introduced the term evidence-based medicine along with a definition that is still widely used today. Unlike Cochrane, Sackett felt that EBP should not only focus on research but should merge evidence, clinical experience and patient values. As other healthcare professions began adopting Sackett's concept for patient care, it was renamed evidenced-based practice. EBP is an essential component of safe, quality patient care. Nurses must be aware of current practices in order to provide care to patients with complicated and debilitating conditions.

Nursing students in an RN to BSN program learn the role of research in the nursing practice. These programs cover the design, methodologies, process and ethical principles of research. In addition, nursing students use critical thinking skills to evaluate and critique research studies in order to apply the findings to their nursing practice [1].

**Definition**

During the 1980s, the term “evidence-based medicine” emerged to describe the approach that used scientific evidence to determine the best practice. Later, the term shifted to become “evidence-based practice” as clinicians other than physicians recognized the importance of scientific evidence in clinical decision-making. Various definitions of evidence-based practice (EBP) have emerged in the literature, but the most commonly used definition is, “the conscientious, explicit, and judicious use of the current best evidence in making decisions about the care of individual patients” (Sackett, Rosenberg, Gray, Hayes, & Richardson, 1996) [4].

**Evidence based practice implications for nurses**

Nurses serve instrumental roles in ensuring and providing evidence-based practice. They must continually ask the questions, “What is the evidence for this intervention?” or “How do we provide best practice?” and “Are these the highest achievable outcomes for patient, family, and nurse?” Nurses are also well positioned to work with other members of the healthcare team to identify clinical problems and use existing evidence to improve practice.

Numerous opportunities exist for nurses to question current nursing practices and use evidence to make care more effective. For example, a recently published evidence-based project describes the potential benefits of discontinuing the routine practice of listening to the bowel sounds of patients who have undergone elective abdominal surgery. The authors reviewed the literature and conducted an assessment of current practice, and they subsequently developed and evaluated a new practice guideline. These authors reported that clinical parameters such as the return of flatus and first postoperative bowel movement were more helpful than bowel sounds in determining the return of gastrointestinal mobility after abdominal surgery. The authors found that this evidence-based project resulted in saving nursing time without having negative patient outcomes.

Nurses throughout the country also have been involved in multidisciplinary efforts to reduce the number and severity of falls and pressure ulcers/injuries. Such projects can help save money and improve care processes and outcomes. By implementing existing evidence-based guidelines related to falls and pressure ulcers/injuries, care has improved, and the number and severity of negative outcomes have decreased. Other examples of evidence-based healthcare efforts include projects to increase compliance with requirements for screenings for cancer and improving glucose control [4].

**Nursing Research Studies**

**Bhattacharya Chau et al.** conducted a study to assess the knowledge of nurses on evidence based practice among staff nurses and faculty in selected setting. A descriptive survey design was used for this study. Random sampling technique was used to select the subject and the total population was 175. Tool used to collect the data was baseline Performa and structured knowledge questionnaire. The analyzed data showed 50.3% of nurses have average knowledge on EBP, 42.9% of nurses have good knowledge on EBP and 6.8% nurses have poor knowledge on EBP [5].

**Ibrahim Saleh Al-Busaidi et al.** conducted a multi institutional cross sectional study on Nurses’ Knowledge, Attitudes, and Implementation of Evidence-based Practice. The aim of the study was to explore knowledge, practice, and attitudes towards EBP among nurses working in Oman. A random sample of 262 nurses working in three different health care setting in Al Dakhliyah governorate, Oman (local hospitals, primary health centers and polyclinics, and schools) was included in the study. The study findings showed that a total of 202 nurses (response rate: 77.1%) completed the questionnaire. The mean age was 32±4.47 years. Most respondents were females (95.0%), Omans (79.1%), and holders of a diploma in nursing (73.5%) with a mean clinical experience of 10.9±4.2 years. Attitudes towards EBP showed the highest mean score of 5.5±1.2 followed by knowledge (4.9±0.8) and practice (4.7±1.2). Significant positive correlations were identified between the total years of nursing experience and knowledge ($r_s = 0.145$, $n = 198, p = 0.041$), practice ($r_s = 0.172, n = 198, p = 0.015$), and attitudes ($r_s = 0.158, n = 197, p = 0.026$) mean scores. No significant difference in EBP scores was found among the three clinical settings [6].

**Iradukunda M. Mayers** conducted a study on Rwandan nursing students’ knowledge, attitudes and application of evidence-based practice the aim of this study was to determine the knowledge, attitudes and application of EBP by nursing students at a school of nursing in Rwanda. A total of 82 third- and fourth-year nursing students completed the survey. Univariate statistical analyses were performed to explore the distribution of data. Chi-square tests were utilized to examine the relation between knowledge, attitude and application of EBP with the year of study. Results: Most students reported being knowledgeable of the steps of EBP, with a range of 84%-92%. However, 50% reported negative attitudes and only 12% reported daily searches for evidence. The main reported barriers to the application of EBP were lack of knowledge, lack of time and lack of examples or role models [7].

**Felor Javadi Bashar** conducted a study for Assessing Attitudes towards Knowledge and use of Evidence-Based Practice among Nurses Working in a Teaching Hospital in Kuala Lumpur. This study aimed to assess nurses’ attitudes towards knowledge and use of EBP in a teaching hospital in Kuala Lumpur. This study used descriptive cross-sectional survey among 265 nurses (out of 851), working in the different adult medical-surgical wards, who were selected through the quota sampling. Participants in this study,
reported positive attitudes towards EBP, good knowledge of EBP, but poor utilization of evidence in their practice. Results of this study affirmed the findings of previous researches, showed despite having positive attitude and perception of good knowledge/skill regarding EBP; nurses did not incorporate evidence into practice. Application of EBP in clinical setting increases the quality of patient care, clients’ outcome and nurses’ job satisfaction and retention.6

Desirée Mena-Tudela conducted a study on Effectiveness of an Evidence-Based Practice educational intervention with second-year nursing students. The aim of the study was to evaluate the effectiveness of an educational intervention on the knowledge, skills and attitudes of evidence-based practice among second-year nursing students. A quasi-experimental before-and-after study. The study population consisted of 120 students enrolled in the Nursing Care in Healthcare Processes course. The mean scores of the Evidence-Based Practice Competence Questionnaire were 79.83 (CI 95% 78.63-81.03) for the basal measurement, 84.53 (CI 95% 83.23-85.83) for the intermediate measurement, and 84.91 (CI 95% 83.26-86.55) for the final measurement, with a statistically significant difference among the three paired measurements (p<0.001). There were statistically significant differences in Attitudes (p = 0.034) and Knowledge (p<0.001) but not in Skills (p = 0.137). This educational intervention based on theoretical and practical classes about the evidence-based practice process and the use of the critical incident technique during the clinical clerkship enhances evidence-based practice competence among second-year nursing degree students.6

Conclusion
Evidence based practice in nursing is a vital part of nursing practice. Every nursing personnel need to learn about the evidence based practice. When the nursing care is provided based on evidenced based practice, we can achieve good patient outcomes. Evidenced based practice improves the decision making of nursing personnel in order to provide quality care based on current techniques and researches. Nursing care based on the evidence based practice not only the reduces the cost of the treatment but also reduces the errors in nursing practice.

References

~ 3 ~