Free essay on evidence-based practice

Law, Evidence



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Evidence-based Practice

Evidence-Based practice (EBP) is a problem solving approach to the provision of healthcare to patients and families (Bennett, 2009). The history of EBP as a concept can be traced back to the 1970s and 1980s to the works of epidemiologists at McMaster University, Canada. EBP developed partially as a response to the scathing critic of the practice of medicine by Archibald Cochrane (Cohen, Stavri, and Hersch, 2003). Cochrane accused medical practice at the time of not being evidence-based. He argued that the treatments, tests, procedures, and interventions used at the time had no evidence on their effectiveness (Cohen, Stavri, and Hersch, 2003). EBP has been advanced as the solution to the uncertainty commonly experienced by healthcare professionals and patients in the contemporary complex healthcare system. This paper will distinguish EBP from research process and critique two journal articles.

EBP and Research Process

Sackett's et al. (2000 as cited in Stevens, 2013) definition of EBP is the most commonly used. He defined EBP as the conscientious, judicious, and explicit use of the best currently available evidence combined with clinical expertise and patient values/preferences in health care decision-making. Based on this definition, two sources of evidence are relied upon in EBP. These sources are research evidence and experiential evidence (Titler, 2008). Experiential evidence consists of the clinical expertise of healthcare professionals and patient values/preferences. Evidence derived from empirical research comprises best evidence. The latter type of evidence encompasses evidence from well designed randomized controlled trials as well as evidence from garnered through other scientific methods like descriptive and qualitative studies. It also embodies knowledge from scientific principles, case reports, and expert opinion. Whenever adequate research evidence is available, clinical practice should be guided by the research evidence coupled with clinical expertise and patient values/preferences. In some situations, however, an adequate research base is not available. Healthcare decision making in such instances is guided by nonresearch evidence sources like scientific principles and expert opinion. Therefore, the research process creates knowledge for EBP (Titler, 2008).

Research is systemic inquiry that includes the processes of development, testing, and evaluation. Research builds the empirical body of knowledge of a discipline. It validates and refines the existing discipline knowledge or develops new knowledge (Newhouse, 2007). With regards to EBP, findings from research, when deliberately and carefully appraised, provide strong

grounding for nursing practice (Cannon & Boswell, n. d.). Evidence from research is divided into levels and a grade assigned to the evidence (Titler, 2008). The levels of evidence are assigned depending on the research design of a study. Research design is, on the other hand, influenced by the research question. Research questions fall into three clusters: treatment, diagnosis, prognosis, and economic/decision analysis (Burns, Rohrich, and Chung, 2011). For treatment studies, well designed randomized controlled trials are construed to constitute the highest level of evidence. Expert opinion/case reports, on the other hand, are considered the lowest level of evidence. For prognostic studies, cohort studies are considered to provide the highest level of evidence. The quality of data and the nature of research question are the elements considered in the allocation of levels of evidence. Randomized controlled trials for therapeutic studies are graded higher because they have lesser chances of systematic errors (Burns, Rohrich, and Chung, 2011). Notably, different bodies, organizations, and professional associations have adopted different classification systems. The evidence derived from research is used to make specific recommendations for practice. In addition to being assigned a level of evidence, recommendations for practice based on research findings are graded. For instance, strong recommendations are made for level I evidence as well as consistent level II-IV evidence (Burns, Rohrich, and Chung, 2011).

The practice of medicine has a protracted history of depending on anecdotal experiences. Reliance on anecdotal experiences is prone to the danger of promoting ineffective practices and producing suboptimal patient practices (Ryckett-Malone et al., 2004). EBP provides a means of standardizing care to

best scientific evidence and enhancing the quality of care provided to patients. It has been proposed as the solution to what the Institute of Medicine (IOM) termed as the "quality chasm". In a 2001 report, the IOM noted that there was a large gap between the quality of care provided to patients and the quality of care that can be provided to patients (Stevens, 2013). It also argued that inconsistencies in practice were contributing to poor patient outcomes. Experts then recommended EBP as the bridge to the closing of the quality chasm. It is intended to standardize healthcare practices to best evidence and science. In so doing, it is hoped that it will eliminate illogical variations in care that produce unpredictable health outcomes. Findings from research suggest that 30% of patients managed using EBP experience favorable outcomes (Bennett, 2009). EBP standardizes care by evaluating practices, ideas, and previous happenings and applying the learnt knowledge to future practice.

EBP can be viewed from the perspectives of researchers and end users of evidence-based knowledge. For researchers, the process of conducting research consists of the knowledge creation and distillation phase of EBP (Titler, 2008). For this knowledge to be implemented in care delivery, it must be disseminated to end users. Dissemination of research evidence entails establishing partnerships with professional healthcare organizations and opinion leaders. Researchers are linked to end users like healthcare professionals and care delivery organizations through such partnerships. The institutions that act as intermediaries between researchers and potential users of research evidence, therefore, act as knowledge brokers (Titler, 2008). These intermediaries include professional organizations like the

American Academy of Orthopedic Surgeons or multidisciplinary teams specializing in this function. This model of dissemination of research evidence provides an authoritative seal of approval for novel knowledge. It also helps in the identification of powerful and influential groups capable of creating demand for utilization of evidence in practice (Titler, 2008). Target audiences are reached through mass communication and targeted diffusion. To be effective, dissemination strategies employed must employ multifaceted dissemination strategies. In so doing, they must emphasize on the media and channels most effective for their target audiences. The adoption, implementation, and institutionalization of research evidence is the final step of EBP from the researcher perspective (Titler, 2008). This step entails getting individuals, teams, and organizations to adopt and consistently apply evidence-based empirical findings and innovations in their day-today practice. Implementation and maintenance of EBP in healthcare settings is a complex task. It is influenced by individual characteristics and organizational social system attributes (Titler, 2008).

EBP when viewed from the lens of end users is the process of garnering EBP knowledge from research studies (Titler, 2008). End users can be clinicians in healthcare settings. EBP in this case entails systematically finding and appraising relevant research findings. The process begins with the selection of an area requiring improvement and prioritization of the issue for the organization. An EBP team comprising of key stakeholders is then identified. The EBP team then finds, critiques, and synthesizes research evidence setting forth recommendations for practice. It can also come up with an EBP standard for the particular organization. The EBP team also pilots and

implements the change in practice and conducts both summative and formative evaluations of the change (Bennett, 2009; Titler, 2008).

Implementation of EBP from the perspective of end users is facilitated by efforts of professional nursing organizations and the Agency for Health Research and Quality. These organizations distill and package findings from research into useful tools and products for use by end users (Titler, 2008). A number of barriers to the implementation of EBP have been identified. These barriers are associated with increased and demanding patient loads and a high volume of research articles on various aspects of clinical practice. The barriers include lack of knowledge on EBP strategies, inadequate time and resources for searching for and appraising evidence, and peer pressure to continue with traditional practices. Other barriers include organizational constraints like lack of administrative support and skepticism or uncertainty that EBP leads to better patient outcomes as compared to traditional care (Bennett, 2009).

Critique of the Qualitative Article

The qualitative article to be critiqued is authored by Iliffe, Wilcock and Haworth (2006). It is entitled "Obstacles to shared care for patients with dementia: A qualitative study". This article is a primary research article. The title of the article is clear, concise, and congruent with the information contained in the article. It communicates in a nutshell the purpose, nature of the data collected, and type of research design used. The type of research design employed, qualitative design, was appropriate for the study. This is because the study sought to study a phenomenon about which little is known in its natural settings. In this case, the study sought to investigate a

relatively grey area that is, the perceptions of generalists and specialists regarding the potential for shared care for people with dementia. The goal of the qualitative study was thus congruent with the uses of qualitative study designs. These designs seek to establish the elements of a phenomenon such as the dimensions, identity, and variations of a phenomenon in its natural settings (Polit and Beck, 2004). It is clear that the participants identified for the study, general practitioners and mental health specialists drawn from two rural areas and three inner city contexts, experience the phenomenon of interest.

The sampling methods selected for the study, purposive and convenience sampling, were congruent with the qualitative nature of the study. These sampling strategies are clearly described. They allowed the authors to select an informationally representative sample. This is because they were able to select a sample that helped them investigate the phenomenon of interest, shared care for people with dementia, in an in-depth manner. Sampling for the study was two-tiered. In the initial stage, purposive sampling was used to identify urban and rural areas for the study that reflect the varying populations of urban, suburban, inner city, and rural areas. After identification of suitable study areas, convenience sampling was used to recruit participants for the study. In convenience sampling, a researcher selects all participants he or she comes into contact with at the time for inclusion in the study. In this case, the researchers sent letters inviting all general practitioners and specialists in the selected areas for interviews. Of the 114 general practitioners and 53 specialists approached by the researchers, 39 and 30 general practitioners and specialists agreed to be

interviewed. The sample size for the study was representative as 34% and 57% of the general practitioners and specialists who had been invited to participate in the study agreed to be interviewed. The sample size also seems to have been adequate because the researchers assert that they stopped recruitment efforts and interviews once they reached theoretical saturation. The sample size is also in keeping with qualitative studies as they tend to use small sample sizes (Cotrell and Mckenzie, 2010, p. 141). The method of data collection and materials used, semi-structured interviews and semi-structured interview schedules respectively, are clearly specified. The two reflect and are appropriate for the purpose and nature of the study. This is because they permitted the gathering of qualitative data on the phenomenon of interest from the worldviews of the participants. They allowed the interviewers to get rich data on the attitudes of general practitioners and specialists towards shared care for dementia. The schedule used to conduct the semi-structured interviews was developed from a review of current literature. The authors justify the use of the schedule for data collection. They contend that it covered themes designed to elicit the views and experiences both general practitioners and specialists on shared care for dementia. The interview schedule was piloted amongst general practitioners prior to the study and amended for the main study. The interviews were tape-recorded. Tape-recording of participants responses allows complete and verbatim recording of informant responses. Recorded responses can be checked for validity. In addition, they eliminate the selectivity and preinterpretation of data associated with hand-written notes (Sim and Wright, 2000, p. 42). In a nutshell, therefore, the data collection methods were

systematic and appropriate for the study.

Collected qualitative data was analysed through thematic analysis. The taperecorded interviews were first transcribed. The transcripts were then analysed thematically. The data was coded and annotated, emergent regularities were then identified and grouped into themes. Individual case analysis was then followed by cross-case analysis. Thematic analysis was appropriate for the collected data as it allowed exploration of the patterns, meanings and themes that emerged from the text. The themes and categories that emerged from the data are adequately interpreted. The researchers categorised the regularities derived from the data collected into four themes. These themes included therapeutic nihilism, concerns about competency, risk reduction or avoidance, and lastly, resources and roles. They illustrate how they arrived at these broad four categories. Further, they provide excerpts of participant interviews to support the manner in which they categorized the emergent themes. In so doing, the researchers create a clear distinction between the collected data and interpretations of this data. To ensure that the themes identified had emerged naturally from the data collected, the authors read the original transcripts and agreed amongst themselves on the issue of the emergent themes.

Quantitative Article Critique

The quantitative article to be critiqued is authored by Burtson and Stichler (2010). It is entitled "Nursing work environment and nurse caring: relationship among motivational factors". The title to the article is clear and succinct. It captures in a few words the gist of the study as information on the study variables and research design can be garnered from it. The study

employed a correlational design. Correlational designs are one of the four types of quantitative designs. This quantitative design was appropriate for this study because the phenomenon of interest had been studied previously using qualitative, experimental, and correlational study designs. The phenomenon of interest in the study is factors that influence nurse caring. Unlike qualitative research, quantitative research focuses on pre-identified phenomenon. It seeks to establish aspects such as the attributes and frequency of occurrence of a phenomenon. Notably, nurse caring is a qualitative variable. It can, however, be studied using a quantitative research design by being assigned qualitative values that describe it such as strongly agree or disagree. In this case, it was treated as an ordinal variable which permitting it to be quantified through rank ordering (Healey, 2010). An alternative study design would not have been more appropriate as the study sought to investigate the relationship between independent variables like compassion fatigue and the dependent variable nurse caring. The limitations of the study design used included it failed to account for the influence of some confounding variables such as organizational changes. Further, interpretation of the findings of the study is difficult on account of its correlational design. This is because correlational designs only show an association between variables. They are, however, not clear with regards to how the variables influence each other as the variables are not manipulated like in experimental designs (Ray, 2011, p. 289). For instance, does an increase in A cause an increase in B or is the observed association due to a spurious third variable. Overall though, the correlational design was appropriate to nature of the research question being studied.

The methodology used for data collection was appropriate. Data on the 6 research variables was collected using 4 validated and reliable research instruments. These instruments were the Mueller McCloskey Satisfaction Scale (MMSS), Professional quality of life Scale (ProQOL), Stress in General Scale (SIG), and lastly, the Caring Behaviours Inventory (CIB-24). MMSS is based on Abraham Maslow's theory and is a nurse-specific scale that uses a Likert scale with five points. Three of MMSS subscales operationalized the independent variable, nurse job satisfaction. ProQOL operationalized the independent variable compassion satisfaction. It has 3 subscales and uses a 6-point Likert scale that respondent's use to rate the frequency of experiences. The SIG is a 15-item instrument. It was reduced to 6 items that were operationalized to measure the independent variable stress. The dependent variable in the study, nurse caring, was measured using CBI-24. This instrument uses a 6-point Likert scale to measure the frequency of nurse caring behaviours using four dimensions of nurse caring. The use of these instruments to collect data for the study was appropriate as they permitted operationalization of the dependent and independent variables. The authors justify their selection of these four instruments. The findings of the study may have, however, been contaminated by social desirability bias because the study used self-assessment measures. Overall, data collection and record keeping was systematic as the questionnaires were kept in designated places and collected from these places once they had been completed by willing participants.

The sample for the study consisted of 126 nurses. This sample was appropriate for the nature of the study as the participants were likely to be

experiencing the phenomenon of interest to the study. The sample was, however, not representative of the whole population of nurses as it consisted predominantly of medical-surgical nurses. The unrepresentativeness of the sample can be attributed to the method of sampling used, convenience sampling. In this method of sampling, the researcher selects all units accessible at the given time for inclusion in the sample. Statistical analysis conducted by the researchers showed that the sample size (n = 126) was adequate for a one-tailed correlational study with 5 variables. The sample size was also appropriate for the estimated medium effect size (0. 30), significance level (0. 05), and power (0. 80). For the study, a minimum sample size of 88 was required to reduce the chances of a type II error. Regarding the findings of the study, the themes, categories, and concepts derived from the data are adequately interpreted. The researchers also make a clear distinction between the data collected and their interpretation. This is achieved through analysis and interpretation of the findings on the association between the independent and dependent variables and demographic and dependent variable. The correlations were calculated using Pearson Product-moment correlations and hierarchical multiple regression analyses. Pearson Product-moment correlations showed statistically significant associations between nurses caring and stress, compassion satisfaction, burnout, and nurse job satisfaction. Hierarchical multiple regression analysis, on the other hand, showed that variation in nurse caring could be explained by compassion satisfaction and nurse satisfaction coupled with work-related social interaction opportunities.

Conclusion

In summary, this paper has examined the relationship between the research process and development of EBP. It has established that the research process is systematic enquiry that leads to the development of knowledge. This knowledge constitutes one of the levels of evidence relied upon by EBP, best evidence. EBP is important for practice because it has the capacity to standardize patient care and to improve patient outcomes. The paper also critiqued a qualitative research article by Iliffe, Wilcock and Haworth (2006) and a quantitative research article by Burtson and Stichler (2010). The two primary research articles have been critiqued with regards to the appropriateness of their study designs, sample and sampling methods, data collection methods, and interpretation of findings.

Bibliography

Bennett, C. (2009). Evidence-based practice. Retrieved from http://nursing. advanceweb. com/Article/Evidence-Based-Practice-6. aspx

Burns, P. B., Rohrich, R. J., and Chung, K. C. (2011). The levels of evidence and their role in evidence-based medicine. Plastic Reconstruction Surgery, 128(1), 305-310.

Burtson, P. L. and Stichler, J. F. (2010). Nursing work environment and nurse caring: Relationship among motivational factors. Journal of Advanced Nursing, 66(8), 1819-1831.

Cannon, C. & Boswell, C. (n. d.). Connection between research and evidencebased practice. New York, NY: Jones and Barlett Publishers.

Cohen, A. M., Stavri, P. Z., and Hersh, W. R. (2003). A categorization and analysis of the criticisms of evidence-based medicine. International Journal of

https://assignbuster.com/free-essay-on-evidence-based-practice/

Medical Informatics, 73, 35-43.

Cotrell, R. and Mckenzie, J. F. (2010). Health promotion and education research methods: Using the five chapter thesis/dissertation model. Sudbury: Jones and Barlett Publishers.

Healey, J. (2010). The essentials of statistics: A tool for social research.

Belmont: Wadsworth Cengage Learning.

Iliffe, S., Wilcock, J. and Haworth, D. (2006). Obstacles to shared care for patients with dementia: A qualitative study. Family Practice, 23: 353-362. Newhouse, R. P. (2007). Diffusing confusion among evidence-based practice, quality improvement, and research. JONA, 37(10), 432-435.

Polit, D. F. and Beck, C. T., 2004. Nursing research: Principles and practice (7th ed.). Philadelphia, PA: Lippincott, Williams, & Wilkins.

Ray, W. (2010). Methods towards a science of behavior and experience.

Belmont: Wadsowrth Cengage Learning.

Rycroft-Malone, J., Seers, K., Titchen, A., Harvey, G., Kitson, A., and McCormack, B. (2004). What counts as evidence-based practice? Journal of Advanced Nursing, 47(1), 81-90.

Sim, J. and Wright, C. (2000). Research in healthcare: Concepts, designs, and methods. Cheltenham: Nelson Thornes Ltd.

Stevens, K. R. (2013). The impact of evidence-based practice in nursing and the next big ideas. The Online Journal of Issues in Nursing, 18(2).

Titler, M. G. (2008). The evidence for evidence-based practice implementation. Retrieved from http://www. ncbi. nlm. nih. gov/books/NBK2659/