**Research Question; Data-to-wisdom continuum Analysis**

 The purpose of this paper is developing and discussing a research question in an aim of incorporating the data-to wisdom continuum inti the practice of professional nurse. In 2014, the American Nursing Association argued that the specialty of nursing informatics is responsible for the integration of nursing science with several analytical and informational sciences.

*“The integration is aimed at managing, defining, identifying, and communicating data, information, knowledge, and wisdom, in the nursing practice (American Nurses Association, 2014, p. 1).” … “nurses use the data, information, knowledge, and wisdom continuum on a daily basis to provide quality care to patients and also make sound clinical decisions and judgments (American Nurses Association, 2014, p. 1).”*

**Problem statement**

The nursing practice is aimed at improving and maintaining the quality of life of patients with a terminal prognosis through pain management. It is a requirement that in every visit, the patient’s pain should be assessed by nurses. Nurses who assess pain for dementia patients a face a lot of difficulties. Patient’s pain can be assessed through the use of several observation assessment tools. The aim of the research is to determine the best tool that should be used to assess pain for patients with dementia.

**The Research Question**

The research will be answering the following question; Which is the best tool that should be used by nurses to effectively assess pain for patients with dementia? The answer to this question will be obtaining by strictly following the data-to-wisdom continuum framework as discussed below.

Data was defined by the American Nurses Association in 2015 as the single pieces of information that can be obtained from various sources. The examples of data given by American Nurses Association in 2015 include but not limited to a patient’s diagnosis, age, and weight. (American Nurses Association, 2015, p. 3). For the purpose of this research paper, the data collected is for patient’s pain, pain assessment tools, and dementia.

Information is defined as data with a meaning (Malhotra, 2014). Previous studies which are either peer reviewed journals or scholarly articles are the main sources of information for this paper. The most important information for this paper is obtained from articles with research studies focusing on observational pain assessments for dementia patients.

Knowledge is generated by navigating through the available information (Frické, 2018). Through knowledge, the when, what, how, and why questions regarding to the research problem are answered. For the purpose of this paper, the gathered information is aimed at determining the best pain assessment tool for dementia patients and why is should be used.

Practical application of the knowledge gained is what is referred to as wisdom (McGonigle & Mastrian, 2012; Jifa, 2013). In this paper, the research findings from articled with research on pain assessment for dementia patients are used to determine the best pain assessment tool that should be used by nurses when assessing pain to dementia patients.

**Databases and Search Words**

There are several databases with higher level of evidence-based practice. The databases used to collect data for this paper are the ACP Journal Club, CMR, CCTR, NHSEED, CMR, Cochrane DSR, and the CINAHL plus. The purpose of narrowing down the research, several search words were used. These words are, patient’s pain, patient’s pain assessment tools, exp dementia, demential.mp., exp Alzheimer disease, pain measurement, pain tools, and dementia. These words were used interchangeably to ensure that relevant data is collected.

**Useable Knowledge**

Information from different articles was reviewed to gain useable knowledge. The review found that the older population is at the highest risk of receiving improper pain management. The rationale behind this is that nurses are unable to identify pain symptoms from this population. In most cases, patients are unable to verbally explain to the nurses the pain they are having. They, therefore, display the pain in ways that the nurses do not easily understand. For dementia patients, pain leads to agitation and aggression.  “There are six behavioral domains that must be included in comprehensive observational pain assessments which are changes in mental status, changes in interpersonal interactions, verbalizations, body movements, and changes in routines or activity patterns (Hadjistavropoulos, Fitzgerald, & Marchildon, 2010).”

Pain for patients with dementia and are unable to communicate can be assessed using several observational pain assessments (Juyoung Park, Castellanos-Brown, & Belcher, 2009). The best observational tool that encompasses the six behavioral measures is the Pain Assessment in Advanced Dementia (PAINAD) scale (Warden, Hurley, & Volicer, 2003; Lin, Lin, Lotus Shyu, & Hua, 2010; Buyukturan, Naharci, Buyukturan, Kirdi, & Yetis, 2018).

**Knowledge to Wisdom**

Nurses must practically apply the knowledge gained from the review. Through investigation and assessment is inevitable whenever pain is believed to the main factor during assessment of dementia patients. In this case, nurses must use the Pain Assessment in Advanced Dementia Scale (PAINAD). The assessment will enable the nurses to apply the six behavioral domains as recommended. The patient’s physical status and pain history can help in determining the patient’s pain.

**Conclusion**

The data-to wisdom continuum can be incorporated into the practice of professional nurse in several ways. This can be done by working through the four steps of the data-to-wisdom continuum. Integration of the nursing science with several analytical and informational sciences can help in managing, defining, identifying, and communicating data, information, knowledge, and wisdom, in the nursing practice. Nurses should use the data, information, knowledge, and wisdom continuum on a daily basis to provide quality care to patients and also make sound clinical judgments. Nurses who assess pain for dementia patients face a lot of difficulties. The use of the Pain Assessment in Advanced Dementia Scale (PAINAD) is the best way that can help them to deal with these difficulties.

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