Non-Pharmacological Pain Management during Painful Nursing Intervention

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Nurses must respect the patients' preferences and their dignity and comfort during all types of nursing care (Canadian Nursing Association [CNA], 2008). According to Kerr et al., pain management is to adjust the "level of comfort that is acceptable to the patient" (2010, p. 37). Lander and Adams (2010) stated that the pain is subjective in nature; therefore, it is easily misunderstood or underestimated by the nurses. Therefore, nurses' pain management skill includes both science and art. The proposal in this paper will discuss the effective way to manage the pain during the painful nursing intervention by changing the patient's room accommodation. There are many types of non-pharmacological pain management; therefore, this proposal is limited to providing patient comfort by adjusting room accommodation such as providing patient an opportunity to move closer to the window while performing

painful nursing intervention such as dressing change and wound care. In this paper, the research proposal will be discussed with the research problem and its significance in the nursing fields. Two literatures and their gaps will be reviewed. Research design and approach, weakness and strengths, search term and variables, target and assessable population, sampling procedures, followed by feasibility of the study and conclusion, will be discussed, accordingly.

Problem and the Problem Statement

Effective non-pharmacological pain management is very important nursing intervention to reduce the patient's physical discomfort, to promote the quality of their life and to decreases the time of wound healing process. When pain is managed effectively patients are motivated to resume their physical activity which promotes their health and hygiene and reduces the chances of

complication such as infection (Keena & Thompson, 2008). It reduces their personal costs by reducing the socioeconomic burden and health care cost by shortening their hospital stay (Courtenay & Carey, 2008; Warnock, 2009). There are many non-pharmacological pain management strategies that are often expensive and require special skill. This proposal may help hospitals to reduce their patients' pain with little or no cost by changing patient's room accommodation and settings to distract the patient to manage their pain non-pharmacologically.

Significance of the Problem

The problem is significant for the nurses because, according to CNA (2008), nurses must prioritize the comfort for their patients. If the nurses fail to practice these sets standards the outcome may not be desirable. From patient's prospective, ineffective pain management may reduce the patient's ability to carry out activities of daily living such as eating, shopping, taking care of personal hygiene which

increase the length of hospitalization and number of hospital visits. Similarly, many literatures favor the non-pharmacological pain management and suggest that non-pharmacological interventions are very effective to manage the pain for the patients during painful intervention (De Jong, Middlelkoop, Faber & Van Loey, 2007). Thus, this study will find out if we can reduce the pain just by adjusting the room accommodation and providing the patient for an opportunity to see outside the window during the painful nursing intervention.

Search Terms

The terms for the literature search for this proposal include patients, pain management, non-pharmacological pain management and room accommodation during painful intervention.

Literature Review and Summary of the Findings

Two research studies worthwhile to mention in this paper is done by Gatlin & Schulmeister (2007) and Lander & Adam (2010). These authors suggest that there

are numbers of non-pharmacological pain management interventions aimed to reduce the level of pain by increasing the level comfort for the patient. Gatlin & Schulmeister mention that these interventions include massage therapy, thermal therapy, and mind and body therapies such as relaxation, meditation and hypnosis. According to Lander & Adam (2010) pain can be reduced by relaxation and distraction technique. Nurses can distract the patient during the painful intervention such as dressing change, for example, providing video game for the children.

Gaps in the Literature

Both of these two literatures, reviewed in this proposal, suggest non-pharmacological nursing intervention to comfort the patient during painful nursing intervention. Effectiveness depends on type of patient and their situation. Therefore, both of these two literatures suggest separate study for each of the non-pharmacological pain management technique to be used as an

evidenced based practice (Gatlin & Schulmeister, 2007). These literatures do not examine if we can adjust the room settings and accommodation such as room environment, position of bed and structure of the room to minimize the pain. These studies are able to understand the nature, cause and implications of non-pharmacological nursing interventions to patients during the intervention; however, they did not include the possibility of room adjustments to be used as adjunct of other non-pharmacological pain management.

Research Question

Do different types of room accommodations such as an opportunity to see outside the window during painful nursing intervention helps to reduce the patient's pain more effectively?

Research Approach and Design

This research will be based on a quantitative research approach. It will utilize a quasi-experimental method. Pain is subjective feelings, therefore in order to

obtain similar level of complication from each sample as much as possible; this study will utilize purposive or judgmental sampling method. Careful consideration will be taken to select and adjust the sample to minimize the researcher's biasness. In order to increase the reliability of the study, the study will be longitudinal. Each patient will be studied two times in each setting, all together four times during their stay. The study will be conducted in five different acute care units of University of Alberta Hospital. Data will include the level of pain during the painful intervention such as wound care and dressing change. When patient is admitted and ordered for a daily dressing change, in their first and third day, nurses will take the patient to the windowless room to provide nursing care. Then in the second and fourth day same patient will be taken in front of open window where he/she can enjoy outside view during the nursing intervention. Once the intervention is completed the patient will be asked the maximum level of pain they

experienced during the intervention on the scale of 0 to 10, where 0 being no pain at all and 10 being the worst pain the patient ever felt. Data collected during these four nursing interventions for each patient will be analyzed to evaluate the effectiveness of these two different accommodations to reduce the level of the pain.

Strengths and Weakness of the Approach and Design:

Quasi-experimental studies look similar to experimental studies, but the difference is that they lack randomization (Loiselle, Profetto-McGrath, Polit, & Beck, 2011). An advantage of this design is that the experiment is natural and practical and finding is more representational. Since there is no randomization, it also reduces the time and resources for the study. Despite the advantages of this approach, it presents few limitations. One is that the "cause-and- effect inference cannot be made easily as with experiments" (Loiselle, Profetto-McGrath, Polit, & Beck, 2011, p. 153). Other

plausible causes cannot be identified easily. According to the author, the lack of randomization could also lead to biases and threat to internal validity.

Longitudinal study can be terminated or disrupted when desired nursing intervention cannot be continued.

Research Hypothesis:

Patient will report less pain when they are provided painful nursing interventions such as wound care and dressing change in front of the window. Same patient will report more pain when these interventions are provided in a windowless room as they cannot enjoy seeing outside.

Independent and Dependent variables:

The study will investigate the characteristics and relationship between independent and dependent variable. The study will include independent variable of two different room accommodations such as room with window and room without window during the painful nursing intervention. Dependent variables will be the level of the pain in the scale of 0-10

obtained after completing the nursing intervention in these two different room accommodations.

Target and Accessible Population:

The target population for this study is all patients admitted in the University of Alberta Hospital and who are ordered for daily dressing change by the physicians. The accessible population is all patients admitted in the five acute care units and are capable of reporting the pain and discomfort after each painful nursing intervention. All participating patients are between the age of 17 to 70 and physically or mentally able to make their own decision.

Sampling Procedure:

This study will utilize convenience sample procedure until the desired numbers of samples are obtained. In this method available samples can be atypical of the population and can be risk of bias (Loiselle, Profetto-McGrath, Polit, & Beck, 2011). Each patient will be given sufficient information about the study to enable them to make informed decision to

participate in the study. Until the desired numbers of samples are obtained, all accessible patients will have equal option to be a part of the study. At least 20 patients will be selected for the study.

Researchability and Feasibility of the Proposed Study

The research proposal presented in this paper is economically feasible. The cost of the procurements and logistical requirements are lesser than the potential benefits of the finding of this research. Procurements will includes, supplies, form, approval from the management and appropriate consent from the participating patients, including volunteer staffs and their valuable times. Legal requirements such as consent and managerial approval are beyond the control of the researcher. As mentioned by Rogers (1996), a novice researcher may also need a help from experienced research to conduct this study, especially to statically analyze the numeric data collected during the study.

Lessons Learned

This assignment provided a glimpse of the actual research in the nursing field and helped me to understand the required workload, technical challenges and appropriate planning to conduct a research. It helped me to evaluate methods and approaches for the nursing research. During the preparation of this proposal, I have learned the importance of nursing research for an evidence based practice. As mentioned in the course objective, this assignment provided me how research could be done to answer a research problem that we identify (Course Outline, 2011).

Conclusion

In this paper, I briefly discussed the importance and different technique of non-pharmacological pain management. I have included two previous researches for a review. Upon approval of this proposal, the research will be conducted in the University of Alberta Hospital. At least 20 patients will be asked to report their level of pain during painful nursing intervention such as wound care and

dressing change. Out of four nursing interventions for each patient, first and third intervention will be provided in the windowless room. Second and fourth intervention will be provided in front of the open window where patient can enjoy watching outside and can be distracted by the outside view. Then data will be collected to examine whether different

room accommodations during painful nursing intervention have any significant effects on the pain management. Despite few financial challenges, based on the number of sample population, the study is economically feasible and potential benefit outweighs the potential cost.

References

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