

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

A descriptive correlation was designed to examine the relationships among pain intensity, pain acceptance, and pain behaviors. This study was conducted at three referral hospitals in Medan, Indonesia. Subjects were purposively recruited from three hospitals including medical, surgical, and gynecological wards. 58 patients with chronic cancer pain were participated in this study. Data were collected from November 2006 to March 2007. Subjects were asked to respond to the instrument which included demographic characteristics and disease-related data, pain intensity, and pain acceptance questionnaires. After completing the instrument, the subjects were asked to perform 10-minutes activities and during these activities, the pain behaviors were observed. Three experts tested the content validity of the instrument and achieved with the values of CVI of .94, then the instruments were translated into Indonesian language. The translated instrument were tested on similar subjects and the reliability of the CPAQ was .77. For

the observation instrument (PBOP), the inter-rater reliability was considered adequate (93% of agreement). The gathered data were processed by using statistical analysis program.

Summary of the Study Findings

Subjects involved in this study were 58 patients with chronic cancer pain. The age of the subjects ranged from 25 to 76 years. More than half of the subjects were female and had no monthly income.

Subjects reported their pain at a low level and most of them had a low level of pain acceptance. On pain acceptance subscales, activity engagement scores was low and pain willingness was moderate. Approximately half of the subjects expressed low pain behaviors. Among pain behaviors parameters, grimacing and sighing were the most frequently expressed behaviors by the subjects.

Pain intensity, pain acceptance, and pain behavior were all significantly correlated. Pain intensity was correlated with pain acceptance. This finding suggests that subjects who have higher pain acceptance, reports lower level of pain. Pain intensity was moderately correlated with pain

behaviors. Subjects who have a high level of pain expressed more frequent pain behaviors.

Guarding and grimacing were moderately correlated with pain intensity, pain acceptance and the subscales; activity engagement and pain willingness.

Strengths and Limitation

The strengths of this study include:

1. It was conducted in patients with chronic cancer pain who were to a single ethnic group in Medan.
2. The researcher assisted by one trained research assistant. The research assistant was trained comprehensively through five steps including discussing, providing, exemplifying, applying, and involving in the study.
3. The instrument was translated by using back translation method with cultural sensitivity to enhance subjects understanding to adjust to the instruments.

The limitations of this study include:

1. Sample size of this study did not meet the desired number required for the study.

Therefore, the findings may not be fully representative of the patients with chronic cancer pain. The finding also may not be generalized to other ethnic groups and other types of disease.

2. Subjects needed more time to understand the questionnaire. Some subjects complained that they did not understand the meaning of some items. To overcome this situation, the researcher and/or research assistant helped the subject by explaining or giving examples. This situation may have had an effect on the subjects' responses to the questionnaire.

Implication and Recommendation

The finding of this study provides strong supporting evidence that pain is a multidimensional phenomenon in which one dimension can be influenced by other dimensions such as sensory, cognitive and behavioral dimensions. The recommendations are as follows:

Nursing practice:

1. The findings of the study provide evidence to support the use of comprehensive pain behaviors observation with pain intensity assessment, especially for those patients who are not able to provide a self-report.
2. The findings of this study provide valuable information for nurses in clinical practice to gain better understanding related to pain phenomena. The nurses should not only focus on pain intensity, but also be concerned with patients' pain acceptance and pain behaviors, so that the nurses can manage patients' pain better.
3. The relationships among pain intensity, pain acceptance, and pain behaviors inform nurses to be able to identify nursing interventions that may change one of these variables. For example, changing patients' pain acceptance might contribute to a reduction in pain intensity and a lowering of the patients' pain behaviors.

Nursing education

1. The findings of this study provide a better understanding for the nurse education regarding the pain intensity, pain acceptance, and pain behaviors.

2. The findings also provide evidence for supporting the usefulness of comprehensive pain behaviors observation with pain assessment. Therefore, the nurse educator can teach and train their students to observe the behaviors when the patients experience a certain level of pain intensity.

Nursing research

This study contributes to better understanding of pain intensity, pain acceptance, and pain behavior. However, due to limitations of the study, further research is recommended.

1. Replicating the study is needed to extend to other ethnic groups.
2. A large scope of study is needed across populations to examine the similarities and differences in pain intensity, pain acceptance, and pain behaviors.
3. Intervention study is suggested to investigate the effectiveness of the cognitive-behavioral therapy in changing cancer patients' cognitive processes.