CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

A descriptive correlational study was conducted to identify the pain levels,

anxiety levels, and coping strategies of cancer patients in dealing with cancer-related pain, and to examine the magnitude of relationships among pain, anxiety, and coping strategies of cancer patients. Ninety three respondents were recruited by using convenience sampling from gynecological, radiology, surgical, and ENT (ear, nose, throat) wards of Dr. Kariadi Hospital in Semarang, Indonesia. They were asked to fill questionnaires that consist of Demographic Data and Diseases-related Form, Pain Numeric Rating Scale, State and Trait Anxiety Inventory (STAI), and Coping Strategy Questionnaires (CSQ). Data were collected from mid July to the third week of August 2004. The data gathered in this study were subsequently analyzed by using descriptive statistics and inferential statistics, Pearson's Product Moment Correlation Coefficients. In this chapter, the topics are presented as follows: summary of the study results, strengths and limitations, and implication and recommendations.

1. Summary of the Study Results

The majority of patients was female Muslim, diagnosed with cervical and breast cancer. Most of them were detected at stage III and received the radiation therapy. For pain relief, ponstan (mefenamic acid), a non-opioid analgesic was the main medication being used by patients during the past 24 hours. More than half of patients had moderate to severe pain at its worst and they experienced the average of

pain at mild to moderate level during the past 24 hours. They also experienced moderate level of both state and trait anxiety and almost all subscales of coping strategies were used moderately by more than half of the subjects, except praying and hoping used at a high level, and catastrophizing used at a low level. Most of the subjects believed that their pain was because of the disease process and it was a "cobaan" (spiritual test) from the God (Allah).

The correlational analysis partial controlling for trait anxiety using Pearson correlation coefficients was used in this study. Generally, this study, as many previous studies had documented, found that pain score was positively correlated with anxiety score and coping strategies. There was a significant relationship between anxiety score and worst pain, while there was no significant relationship with the average pain. There were also no significant relationships between pain (average and worst) and total coping strategies score, or between pain and cognitive coping strategies. However, there were positive relationships between behavioral coping strategies score and both average and worst pain scores. Furthermore, the anxiety scores were significantly correlated with coping strategies. There was a significant negative relationship between state anxiety and cognitive coping strategies, but state anxiety was not significantly correlated with behavioral coping. It might be assumed that patients who have high pain score were experiencing high anxiety level, and when they had more severe pain, they used more coping strategies. In contrast, the patients would use less coping strategies, when they had high anxiety.

2. Strengths and Limitations

The strengths of this study are identified. The study was conducted at the

highest level of case referrals among all public hospitals in Central Java, where Central Java Province is one province of 36 provinces that has a high population density in Indonesia. The findings of this study can be a representative in understanding concepts of pain, anxiety, and pain coping for caring for cancer patients in Indonesia, who mostly have Islamic perspectives. Another strength is the statistical analysis of the correlational coefficients used in this study by controlling for trait anxiety that provides more valid estimation of the correlation coefficients.

However, the present study also has some limitations. The female sample was twice the size of the male sample. The generalization of the findings may be biased toward female cancer patients. Another limitation is that this study used a convenience sampling to recruit the subjects who admitted into Dr. Kariadi Hospital until the desired sample size was reached. It is more likely that the findings may not capture some aspects of the phenomena under this study that may occur in those who where not randomly recruited.

3. Implications and Recommendations

3.1 Nursing Practice

The findings of this study provide strong evidence for a clinical recommendation that pain experience is a multidimensional phenomenon that is influenced by multiple factors, such as pain medications and cultural beliefs. The recommendations are as follows:

1. Most subjects in this study did more praying and hoping and used less catastrophizing as a negative self-statement to deal with their problems, and they believed that their pain was a "cobaan" (spiritual test) from God. Nurses and clinical

practitioners should include the screening of patients' psychological problems, such as patients' anxiety, and sociocultural problems in comprehensive chronic pain assessment, in which Indonesian patients have cultural background with Islamic view that have different strategies to cope with their pain and anxiety.

- 2. Then, to address the problem of inadequate cancer-related pain management, nurses and healthcare professionals should not only inquire about and measure pain intensity, but should also assess factors associated with pain, and assess the specific coping strategies that patients have used to deal with their problems, such as praying and hoping related to Islamic belief. They should facilitate patients to pray effectively by providing the place or preparing the religious expert to help them.
- 3. The findings also show that most of the subjects still had pain at mild to moderate level after receiving pain medications. It could be that the subjects did not receive adequate pain medications. Therefore, careful examination of physicians' practice of prescribing pain medication for cancer pain relief in Indonesia and factors contributing to such practice is highly recommended.

3.2 Nursing Education

Findings of this study show that praying and hoping was positively correlated with pain intensity and negatively correlated with anxiety is of interest. Cancer patients with more severe pain intensity used more coping strategies, especially praying and hoping as the highest strategy used by subjects, and by praying and hoping the subjects were less anxious. As additional information, Moslems comprise the great majority of the population in Indonesia and they believed that their problems were a spiritual test from the God, so that most patients in this study used three subscales of praying and hoping in the highest rank (Appendix A4). The findings can

be used by nurse educators as research evidence in teaching their students about cancer care. This knowledge will be very helpful for students and nurses to understand a multidimensional concept of pain for caring patients, where cancer patients with different cultural background may have differences of pain experience and using coping strategies.

3.3 Nursing Research

This study has contributed to a better understanding of the theoretical links among pain, anxiety, and coping strategies in cancer patients. However, the present study utilized a correlational design that has certain weaknesses, so that it is difficult to determine whether anxiety and coping strategies are a direct cause of increased pain in cancer patients or vice versa. Based on the findings, some recommendations are offered as follows:

- 1. A qualitative study is needed to gain more information in understanding on cancer-related pain as a multidimensional phenomenon, which will be useful information as a baseline data to develop nursing interventions in caring cancer patients with pain.
- 2. An experimental study is also needed on the coping strategies, especially praying in Islamic perspectives, used by cancer patients to deal with their pain and pain-related problems to promote better in caring for Indonesian cancer patients who have Islamic belief, in which they may use coping strategies and manage with pain differently.
- 3. Future research also needs to consider the gender balance, so that the findings can be generalized to all cancer patients. Then, the findings can be used as a guideline in improving nursing care in all cancer patients with pain.