

## CHAPTER 5

### CONCLUSION AND RECOMMENDATIONS

#### Summary of the Study Results

This descriptive study aimed to explore the sleep quality of the elderly during hospitalization and described the factors perceived by hospitalized elderly as sleep interference. Data collection was conducted during January to March 2003 using purposive sampling of 100 elderly medical patients from two hospitals in Medan. The researcher interviewed the subjects using questionnaires to assess personal data, health information, sleep history, sleep quality, and factors interfering with sleep.

The majority of subjects had a total sleep time of less than 5 hours, sleep latency more than 60 minutes, and frequent awakenings at least three times or more at night. Most of the subjects perceived that their sleep was very shallow, not feeling refresh in the morning awakening and not at all satisfied with their sleep. Nearly 50 percent of the subjects had problems with daytime-sleepiness.

The results of this study clearly showed that the overall sleep of the subjects was poorer during hospitalization. Moreover, 77 percent of the subjects considered themselves as poor sleeper. In addition, paired t-test analysis revealed that the sleep of the subjects during hospitalization was significantly poorer than their quality at home. This result was quite similar to that of previous studies which found that sleep quality of patients in medical ward was worse than sleep at home (Yinnon, Ilan, Tadmor, Altaresco, & Hershko, 1992; Laempet, 2001).

Factors interfering with sleep included physiological, nursing interventions, environmental, and psychological factors. The most prevalent and highest level sleep interference in physiological were caused by pain, dyspnea, and cough. This was consistent with the symptoms of respiratory, digestive, and cardiovascular diseases of the subjects which were reported as the major health problems. These diseases are common health problems among elderly in Indonesia (Boedhi-Darmojo & Martono, 1999).

In spite of the fact that routine nursing interventions during the night; checking vital signs, giving treatments, and nurses attending to other patients interfered with their sleep, it was only at low level degree of sleep interference. Likewise, environmental factors including noise from all sources, hot room temperature, and bright light were commonly reported as sleep interference at the low and moderate level. In psychological factors, 24 percent of the subjects experienced anxiety, 43 percent of the subjects reported depression during hospitalization.

## **Implications and Recommendations**

### **1. Nursing practice**

There were several factors perceived by the subjects as sleep interference at the moderate and very much level, especially symptoms of illness, and hospital environment. Pain, cough, and dyspnea were reported as interfering with their sleep at a high level. Thus, nurses should pay more attention to the patients having these symptoms and also promptly give interventions to relieve symptoms.

Noise from all sources, and bright lights were perceived by the subjects as the most common sleep interference at the moderate and very much level. Nurses should help the patients to have good sleep quality by minimizing sleep interference factors by

control of noise and light during the night. Twenty four percent of the subjects experienced anxiety and 43 percent reported depression. So, nurses should be aware that the patients have many possible sources of anxiety and depression which can cause poor sleep quality during hospitalization.

## **2. Nursing education**

The results from this study provide baseline information regarding sleep quality and factors interfering with sleep in hospitalized elderly medical patients. This information enhances nursing students and nurse practitioners' knowledge to understand and be aware of the sleep quality and sleep interference factors of hospitalized elderly.

## **3. Nursing administration**

Nursing administrators play a very important role in reducing sleep interference factors by (1) modifying nursing activities to allow the longest possible intervals for sleep at night (2) checking regularly noise from all sources to reduce these factors (3) rearranging hospital wards to control noise from the outside rooms (4) collaborating with the hospital administrator to control the hospital environment to eliminate hot room temperature, poor ventilation, and mosquito.

## **4. Nursing research**

This study described the sleep of the elderly during hospitalization and factors perceived as sleep interference. The study finding brought up other research questions to be investigated (1) does sleep quality at home influence sleep quality during hospitalization? (2) what are the predictors of sleep quality among hospitalized elderly medical patients? (3) what are the most effective ways to promote sleep quality in hospitalized elderly patients?