

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

This chapter reports the conclusions of the study and presents the implications and recommendations to nursing service, nursing education, and nursing research. A comparative study was conducted to examine the differences between caring practices in reducing pre-operative anxiety as perceived by surgical nurses and patients in Banyumas, Central Java, Indonesia. Seventy surgical nurses in this study were recruited by stratified random sampling in the surgical ward from the three hospitals. Seventy pre-operative patients were also recruited by using a systematic randomized sampling in the same wards from the three hospitals. Data were collected from mid June 2004 to July 2004. Collected data were analyzed by using descriptive statistics and inferential statistics, particularly independent t-test. From this analysis, the findings revealed non-significant differences between caring practices in reducing pre-operative anxiety as perceived by surgical nurses and patients.

#### 1. Conclusions of the study findings

Subjects of this study were surgical nurses and pre-operative patients at the three hospitals in Banyumas, Central Java, Indonesia. The majority of the surgical nurses graduated from Diploma III of Nursing and did not take continuing education of anxiety management. The majority of patients at the three hospitals did not have surgical experience and encountered pre-operative anxiety at moderate level.

The majority of caring practices in reducing pre-operative anxiety as perceived by surgical nurses and patients were at moderate level, 62.8% and 64.3%,

respectively. Mean scores of caring practices in reducing pre-operative anxiety as perceived by surgical nurses were noticeably higher than those as perceived by patients, but the differences between the two groups were statistically not significant.

The findings of this study indicate that caring practices in reducing pre-operative anxiety as perceived by surgical nurses and patients were not significantly different ( $t=1.31$ ,  $p>.05$ ). Most subscales of caring practices in reducing pre-operative anxiety as perceived by surgical nurses and patients were also not significantly different, except for two subscales in interpersonal teaching-learning and supportive-protective-corrective environment ( $t=2.09$ ,  $p<.05$  and  $t=3.17$ ,  $p<.01$ , respectively). Despite discrepancies revealed in some caring actions, surgical nurses and patients showed agreement of certain caring actions in reducing pre-operative anxiety.

## **2. Strengths and limitations**

The strengths of this study lie in number of subjects and sampling method. Seventy surgical nurses were recruited by using stratified random sampling in each hospital, around 75% of the Diploma III of Nursing and above in Banyumas, Central Java. The pre-operative patients were recruited by using systematic random sampling, selecting three of five pre-operative patients to complete seventy subjects. Although the number of the subjects was different from each hospital, caring practices in reducing pre-operative anxiety were largely the same.

One limitation of this study was that the findings might still be influenced by subjects' response bias, because of the self-report type of questionnaire. Surgical nurses and patients might not give the precise views of their perceptions of the actual caring practices.

### **3. Implications and recommendations**

#### **Nursing practice**

The findings of this study show that caring practices in reducing pre-operative anxiety as perceived by surgical nurses and patients were at moderate level and not significantly different. Implications of this study included guidelines regarding assessment-evaluation and intervention in reducing pre-operative anxiety, appropriate to both surgical nurses' perception and patients' perception of those caring actions. Guidelines for assessment-evaluation of pre-operative anxiety include (1) observing signs of pre-operative anxiety, (2) encouraging patients to tell why they feel anxious, (3) encouraging patients to talk about how they feel anxious, asking about patient factors that make more severe anxiety, (4) asking about patient factors that reduce severity of their anxiety, (5) asking about coping methods or alternative therapies that they usually use to reduce anxiety, (6) giving patients full attention when they feel anxiety, and (7) responding quickly when they encounter anxiety.

Guidelines for intervention in reducing pre-operative anxiety include (1) treating patients with respect and as an individual, (2) encouraging patients to be self-confident, (3) encouraging patients to release their anxiety, (4) encouraging patients to do what they can relieve anxiety, (5) visiting patients to give psychological support, (6) explaining early ambulation and deep breathing, (7) using touch therapy to provide comfort when they feel anxiety, (8) explaining pre-medication, (9) providing alternative therapies or activities to reduce anxiety, and (10) administering anxiety medications when alternative therapies do not work to reduce anxiety.

Furthermore, mean scores of caring practices in reducing pre-operative anxiety as perceived by surgical nurses were higher than those as perceived by

patients. Certain caring practices as performed by surgical nurses were not always perceived by pre-operative patients. These caring actions need further improvements in assessment-evaluation and intervention in reducing pre-operative anxiety. Improvements of caring actions in assessment-evaluation include (1) checking pre-operative anxiety with a Visual Analog Scale, (2) asking patients to determine the level of their anxiety, and (3) explaining relevant alternative therapies to alleviate anxiety. Further enhancements of caring actions in intervention of pre-operative anxiety include (1) being willing to care for patients encountering anxiety, (2) being sensitive to patients' feelings of anxiety, (3) explaining to patients about relevant alternative therapies for alleviating anxiety, (4) explaining to patients about surgical procedures and possible sensory effects that they may experience, (5) explaining how to evaluate and to report anxiety to nurses, (6) considering patients' spiritual need, (7) offering magazine or newspaper to make patients more comfortable, and (8) managing a calm and safe environment to reduce pre-operative anxiety.

### **Nursing education**

The findings of this study show that most nurses had not attended anxiety management courses and the three hospitals did not conduct workshops of pre-operative anxiety management. Implications and recommendations for nursing education cover in-service training of pre-operative anxiety management regarding anxiety assessment-evaluation and intervention of pre-operative anxiety. The hospitals should provide in-service training of pre-operative anxiety management in order to improve the quality of caring practices in reducing pre-operative anxiety. Knowledge helps nurses to improve their skills and ability to enhance caring practices in reducing pre-operative anxiety. The findings of this study provide references for

them in order to understand holistic caring practices in reducing patients' pre-operative anxiety. Surgical nurses, clinical supervisors, and nursing students should be trained for assessment-evaluation and intervention of pre-operative anxiety. Nursing education in assessment-evaluation of anxiety should be provided, particularly in checking pre-operative anxiety with a Visual Analog Scale, and asking patients to determine the level of their anxiety. Nursing education in intervention of pre-operative anxiety focuses on willingness to care for patients encountering anxiety, explaining to patients about relevant alternative therapies for alleviating anxiety, considering patients' spiritual need, and managing a calm and safe environment to reduce pre-operative anxiety.

### **Nursing research**

Implications and recommendations for nursing research are focused on providing a baseline for future studies relate to surgical anxiety. There have been few nursing studies reporting caring practices in pre-operative anxiety in Indonesia; therefore, this study can act as a baseline for future studies regarding caring practices in reducing pre-operative anxiety. The findings of this study suggest that further research should place an emphasis on pre-operative teaching activities (early ambulation, deep breathing, exercise, surgical procedures, possible sensory changes that patients may experience, operating room, relevant alternative therapies, pre-medication, and evaluating the level of anxiety) and how much has to be delivered to patients. Consideration of spiritual need and provision of alternative therapies have to be attempted for caring practices in reducing pre-operative anxiety. Managing a calm and safe environment and providing magazine of newspaper need to be applied in surgical wards for reduction of pre-operative anxiety.

This study focused on assessment of nursing staff and pre-operative patients. Other staff including physicians and anesthetists should be assessed for their caring practices, because they might have different views of caring practices in reducing pre-operative anxiety.

The level of anxiety could change overtime, so that caring practices in reducing patients' anxiety as perceived by surgical nurses and patients should be examined for future research in order to enhance the quality of caring practices throughout hospitalization period.