看護実践における行為の振り返り尺度の開発－患者の治療決定の支援に焦点をあてて－

I. Background and Aims of Study

Advances in medical technology and the diversification of individual values have made it increasingly important for nurses to support the therapeutic decision-making of patients and their families. This poses new challenges to nurses in terms of the need for adequate knowledge required for providing appropriate support and making right decisions. By reflecting back on their practice, nurses are able to integrate their knowledge with the decisions they have made, attach meaning to their practice, and develop their expertise as nursing specialists. The aims of this study are as follows: to develop a scale for helping nurses to reflect on their practice by focusing on the support they provided for the therapeutic decision-making of patients, to examine the usefulness of this "reflection scale" for the development and self-assessment of the clinical judgments they make, and to understand the factors that affect nurses' self-reflection.

II. Definition of Terms

Reflection: Thinking about one's conduct in relation to its purpose and consequences. Two main types of reflection are "refection on action" and "reflection in action." These two types are interrelated for addressing and questioning one's knowledge and habits of thought, which helps build a broader range of knowledge.

Support for therapeutic decision-making: Supporting the patient's decision-making regarding doctor's suggestions for changing, continuing, or discontinuing therapy.

III. Method

This study was divided into the following phases for surveys and analyses.

Phase 1: Qualitative and inductive analysis for understanding subordinate concepts of the reflection scale's key concept (i.e., reflection focusing on nurses' support for the therapeutic decision-making of patients) and for identifying opportunities for reflection

Phase 2: Development of a reflection scale; assessment of the reliability and adequacy of the reflection scale; statistical analysis of the relationship between the reflection scale and factors affecting reflection

Phase 3: Evaluation of the usefulness of the reflection scale developed in Phase 2

Ethical considerations: The study subjects were given an explanation orally and in writing about the aims and the method of the study. It was also explained to the subjects that they would take part in the study at their own discretion, that their anonymity and personal data would be protected, and that their freedom of withdrawal from the study would be guaranteed. The study subjects are the nurses who agreed to participate. The surveys and analyses in each phase were conducted after approval was obtained from the Research Ethics Committee of the School of Nursing and Services, Health Sciences University of Hokkaido.

IV. Results

1. Results of Phase 1

The subjects of Phase 1 were ten nurses who belonged to hospital departments where they had many opportunities to provide daily support for the therapeutic decision-making of patients who had cancer or progressive intractable disease. Qualitative and inductive analyses identified six subordinate concepts (i.e., categories) of the nurses' self-reflection focusing on nurses' support for the therapeutic decision-making of patients: 1) grasp of the situation regarding the need for therapeutic decision-making, 2) analysis of the patient's situation regarding therapeutic decision-making, 3) gathering of information necessary for the patient to make a therapeutic decision, 4) engagement and communication with professionals providing medical care to the patient, 5) change in the patient's mindset due to the nurse's interaction with the patient and 6) change in the nurse's mindset due to the nurse's interaction with the patient. Additionally, 16 types of opportunities for reflection were identified. These opportunities include assistance by human resources such as the people who provide encouragement and support to nurses in providing care to patients, a learning environment that facilitates exchanges of views and information search, and the securing of time for nurses to study by themselves and to provide good care to patients.

2. Results of Phase 2

1) Preparation of the questionnaire: A questionnaire was developed with the intention of providing the subjects of Phase 2 with an opportunity to have retrospective reflection-on-action so that they would be able to evaluate the judgments they made for supporting the therapeutic decision-making of patients. The subjects were asked to fill in the questionnaire by answering questions as if they were engaging in reflection-in-action. First, from the results of the qualitative and inductive analysis conducted in Phase 1, 53 question items were chosen for the questionnaire. Then, a meeting attended by one clinical nurse specialist and two researchers on nursing practice was held, in order to examine the content of the questionnaire. At the meeting, 13 items were modified and 19 items were added, to propose a questionnaire consisting of 72 question items.

A preliminary study was conducted by asking 32 nurses with nursing experience to fill in the proposed questionnaire. The results of the preliminary study were used for modifying 30 items and eliminating 22 items. Finally, 50 question items were used for a tentative questionnaire.

2) Preliminary survey: The tentative questionnaire was distributed to 620 nurses. Of the 206 questionnaires collected, 190 were valid (The rate of no response to any item was 5% or less, and the valid collection rate was 30.7%). After analyzing the question items, 8 items were removed and the remaining 42 items were used for factor analysis by utilizing the principal factor method, factors with an eigenvalue of 1 or larger, and a promax rotation. After adopting only the question items having a factor loading of 0.40 or

greater, 21 items were removed from the questionnaire. Consequently, 5 factors and 21 question items were extracted. These 21 items were used for finalizing the questionnaire.

3) Main survey: The finalized questionnaire was distributed to 452 nurses. Of the 190 questionnaires collected, 181 were valid. The rate of no response to any item was 5% or less, and the valid collection rate was 40.1%. The respondents were 34.7 ± 8.23 years of age, had nursing practice experience of 12.1 ± 7.73 years, and were at a clinical ladder level of 2.64 ± 0.89. No items were eliminated after item analysis, and all 21 items were used for factor analysis by utilizing the maximum-likelihood method, factors with an eigenvalue of 1 or larger, and a promax rotation. Question items were adopted on the condition that they had a factor loading of 0.35 or greater in relation to only one variable. Consequently, 5 factors and 20 question items were extracted. The 5 factors extracted in the preliminary survey and the main survey consisted of the same items. These 5 factors are as follows. Factor I: Analysis of the wishes of the patients and their family members. Factor II: Recognition of nursesô roles. Factor III: Comprehension of the circumstances of the patients and their family members. Factor IV: Comprehension of the circumstances of the medical team involved. Factor V: Comprehension of the therapeutic situation.

In terms of the consistency, Cronbachôs alpha coefficient was 0.893 (n=181) regarding all the question items and was 0.820 ~ 0.668 for all the factors. The results of confirmatory factor analysis showed the model fitting as follows: X^2=306.541, df=87, p=0.000, GFI=0.858, AGFI=0.814, CFI=0.885, and RMSEA=0.071. In order to look at the criterion-related validity, Spearmanôs rank-correlation coefficient (ρ) was calculated for the correlation between the social critical thinking orientation scale and the total score of the reflection scale. The calculated value of ρ was 0.425.

4) Correlation between the reflection scale and the factors affecting reflection: Spearmanôs rank-correlation coefficient (ρ) was also calculated with regard to the correlation between the total score of the reflection scale and years of nursing practice experience (ρ=0.263), clinical ladder level (ρ=0.207), and the total score of the 16 types of opportunities for reflection (ρ=0.234).

3. Results of Phase 3

The subjects of Phase 3 were 6 nurses who were working at the same hospital and took part in Phase 2 of the study. These nurses were interviewed regarding the reflection scale consisting of the 5 factors and 20 items that were determined in the main survey in Phase 2. In the interviews, the subjects were asked to evaluate the content of the reflection scale in terms of its adequacy, usability, and effectiveness, and in the light of the opportunities and patients that the reflection scale would be useful for as well as the factors affecting reflection. The interview results indicated that the reflection scale was effectively used by practicing nurses irrespective of their years of nursing practice experience, and that the reflection scale facilitated self-evaluation of nursing practice and identification of problems that needed to be

addressed. The reflection scale was judged to be a tool that can be used for helping to develop clinical judgment.

V. Discussion

In this study, a reflection scale was developed that addresses nurses' support for the therapeutic decision-making of patients. The reflection scale provides absolute evaluation of nursing practice, and nurses can refer to the absolute evaluation in order to better understand their practice and to develop themselves. The reflection scale was developed also for the purpose of improving the judgments that nurses make, in the hope that retrospective reflection-on-action becomes routine practice and leads to reflection-in-action. In the future, guidelines on the reflection scale need to be formulated for defining its intended use, proper usage, applicable users/patients, and appropriate timing of use. No scale of this kind was available in the past for reflecting on the support that nurses provide for the therapeutic decision-making of patients, and the reflection scale developed in this study was confirmed to be adequate and reliable. Thus, clinical nurses can use this reflection scale as a tool for evaluating the clinical judgments that they make in providing support for the therapeutic decision-making of patients. However, the reflection scale was developed based on the findings and knowledge of nurses at a limited number of medical institutions. Accordingly, it is possible that the majority of valid responses to the questionnaire were given by nurses who were particularly interested in support for the therapeutic decision-making of patients, or that the focus of such support was on patients with specific diseases. Because it is not certain whether the reflection scale is of help to all nurses regardless of the diseases that their patients have, the reflection scale needs to be further examined and generalized with the cooperation of a broader range of nurses.

Although no correlation was found between the reflection scale and the factors that ware assumed to affect reflection, it is likely that reflection is affected by other factors, such as the attributes and characteristics of the study subjects and the hospital departments to which these subjects belong. Additionally, because the opportunities for reflection were extracted on the basis of the factors affecting retrospective reflection-on-action, factors and the way they affect reflection-in-action should be elucidated in the future.