

CHAPTER 3

METHODOLOGY

The purpose of this study was to identify the level of self-care practices among Chinese school-age children with NS. The research design, subjects, instrumentation, data collection procedures, and data analysis are presented in this chapter.

Design of the study

The descriptive design was used to identify the level of self-care practices of Chinese school-age children with NS.

Population and sample

The population of this study was school-age children with primary NS aged between 6 to 12 years and attending Out-patient Department of three hospitals in Guangzhou City, Guangdong Province, China during December 1997 to February

1998. These hospitals included the First, Second, and Third Affiliated Hospitals of Sun Yat-sen University of Medical Sciences (SUMS).

A purposive sampling method was used to select the study sample that met the following criteria: Chinese school-age children with primary NS attending Out-patient Department of the three hospitals and were hospitalized at least once. The sample size was 66.

Instrumentation

Three instruments: Medical Record Form, Demographic Data Interview Form, and School-age Children with Nephrotic Syndrome Self-care Practice Interview Guide (SCNSSPIG) were used to collect the data of this study.

Medical record form

Medical Record Form was used to record the medical information of the subjects, including weight, height, duration of illness, number of hospitalization, cause of all rehospitalization, and medical treatment.

Demographic data interview form

Demographic Data Interview Form was utilized to obtain the demographic characteristics of the subjects, including birth date, gender, school grade, number of children in the family, sequence of the child in the family, parents' educational levels, parents' occupations, and family income.

School-age children with nephrotic syndrome self-care practices interview guide

School-age Children with Nephrotic Syndrome Self-care Practices Interview Guide (SCNSSPIG) based on Orem's Self-care Theory was developed by the investigator and used to assess self-care practices of Chinese school-age children with NS. The SCNSSPIG consisted of three dimensions of self-care practices: universal, developmental, and health deviation. It was a Likert Scale with 3 levels consisting of 50 items, 38 positive and 12 negative items. The scoring of the positive items was 0 as never, 1 as sometimes, and 2 as everytime; and those of the negative items were on the contrary. The range of the total scores was 0 to 100. The scores were divided into low, moderate, and high levels using a proportional method. The difference between each level was 33. Therefore, the scores of low level were between 0 and 33, the moderate level were between 34 and 66, and of high level

were between 67 and 100. Among the 50 items, 24, 10, and 16 were universal, developmental, and health deviation self-care practices items, respectively. Using the proportional method, for the universal dimension, the scores of low level were between 0 and 16, moderate level were between 17 and 32, and of high level were between 33 and 48. In the developmental dimension, the scores of low, moderate and high level were between 0 and 6, 7 and 13, 14 and 20, respectively. In the health deviation dimension, the scores of low, moderate and high levels were between 0 and 10, 11 and 21, 22 and 32, respectively.

To compare self-care practices scores of the three dimensions, the sum scores of each dimension was converted in order to control influences of unequal numbers of the items in the three dimension. Dividing the sum score of each dimension by the numbers of its items, the converted scores of each dimension were 0-2 and the total converted scores were 0-6.

Test for validity and reliability of SCNSSPIG

The content validity of SCNSSPIG was assessed by five nursing faculty members in Chiang Mai University, Thailand, who were experts in the areas of Orem's self-care theory and pediatric nursing.

The SCNSSPIG was translated into Chinese using back translation technique. The investigator translated the English version into Chinese. The Chinese version was translated into English by an instructor of Faculty of Nursing, SUMS who was good both in Chinese and English. The discrepancy between the two English versions were clarified by the investigator and translator. Also, the Chinese version was reviewed for its face validity by three Chinese nurses who were experts in pediatric nursing.

The SCNSSPIG was assessed for its internal consistency with 15 school-age children with primary NS attending Out-patient Department of Guangzhou Children's Hospital, Guangzhou City using Cronbach's method. The alpha coefficient was .75.

Data collection procedures

1. Asked for the permission for data collection from the hospital administrators, physicians, and nurses in charge of the Pediatric Departments and Out-patient Departments of the three hospitals in Guangzhou.

2. Reviewed the medical information of the children who met the inclusion criteria of the study using the Medical Record Form.

3. Explained the purpose of the study and the procedures of data collection to the children who were the study sample and their parents.

4. Obtained verbal informed consent from the parents of the subjects before collecting the data.

5. Interviewed the parents of the subjects using the Demographic Data Interview Form.

6. Interviewed the subjects using the SCNSSPIG.

7. Processed the data to be ready for data analysis.

Protection of human right

Permissions from the Hospital Administrative Committee and the subjects' parents were assured. The subjects were identified by code numbers to ensure their privacy. The code numbers were marked for matching the SCNSSPIG, the Medical Record Form, and the Demographic Data Interview Form. In addition, the children participated this study voluntarily and they were free to withdraw at any time.

Analysis of data

Statistical Package for Social Sciences (SPSS) was used to perform the data analysis. Descriptive statistics in terms of frequency, percentage, mean, and standard deviation were used to analyze the data.