

## **CHAPTER 3**

### **METHODOLOGY**

#### **Design of the study**

A descriptive comparative design was used to describe the needs and received responses among parents of hospitalized children, and compare the needs among parents whose hospitalized children had different age and different types of illness.

#### **Population and sample**

The target population of this study were parents of hospitalized children in the three Teaching Hospitals of SUMS, GuangZhou, China.

A quota sampling was used to select parents whose children were admitted to the three Teaching Hospitals of SUMS during November, 1997 to January, 1998 and met the eligibility criteria. The strata were determined based on the child's age and types of illness. According to Gay (cited in Dempsey & Dempsey, 1992), a sample of 10 percent of the population is considered a minimum for descriptive studies. There are at average 1000 children admitted to the three

Teaching Hospitals of SUMS during 3 months(4000 children per year), therefore, the sample size was 108 in this study.

Criteria for inclusion of the subjects are as follows:

1. Parents whose children were admitted to general pediatric wards at least 2 days.
2. The child did not have a critical or terminal condition and did not need an operation or use life-saving equipment.
3. Parents who visited their children at least 2 times or roomed in with the children. If both mother and father of a child were available in the wards, only one parent who took the major role in taking care of the child in the hospital was chosen to be interviewed.
4. Parents who could understand Chinese.

### **Instrumentation**

The instrument was developed by the researcher according to the literature review including three parts:

1. Demographic Data (Appendix B): Demographic data of parents(age, sex, education level, occupation, family income, family type) and of children(age, sex, educational level, diagnosis, type of illness, the duration of illness, duration of hospitalization, numbers of previous admission).

2. Inventory of needs and received responses of parents of hospitalized children(Appendix C), which consists of 54 dichotomous questions relating to needs of parents of hospitalized children which are categorized into 6 groups, which are: (1)information need including 19 items and possible score is 0 to 19; (2) need for the best medical and nursing care for the child including 8 items and possible score is 0 to 8; (3) need for parental role including 7 items and possible score is 0 to 7; (4)need for emotional support including 10 items and possible score is 0 to 10; (5) physical need including 6 items and possible score is 0 to 6; and (6) need for financial support including 4 items and possible score is 0 to 4. Total scores for both needs and received responses ranged from 0 to 54.

After completion, the scores of the total parental needs and received responses and each subgroup were divided into three levels in Table 1. (1) low amount, below 33.33 percent of the possible score; (2) moderate amount, between 33.33 percent and 66.67 percent of the possible score and (3) high amount, above 66.67 percent of the possible score.

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Table 1 level of parental needs and received responses

	Low	Moderate	High
	(0-33.33%)	(33.34-66.66%)	(66.67-100%)
Information needs	0-6.33	6.34-12.66	12.67-19.00
Need for the best care	0-2.66	2.67-5.33	5.34-8.00
Need for parental role	0-2.33	2.34-4.66	4.67-7.00
Need for emotional support	0-3.33	3.34-6.66	6.67-10.0
Physical need	0-2.00	2.01-4.00	4.01-6.00
Need for financial support	0-1.33	1.34-2.66	2.67-4.00
Total	0-18	18.01-36.00	36.01-54

Additionally, the reasons why the subjects answered yes or no to any item were asked if available.

3. An open-ended question that asks subjects whether they have experienced needs as a parent of a hospitalized child other than those in the instrument.

#### Test for validity and reliability

The English version of this instrument was checked by an English native speaker for correction of English. The content validity of the instrument was evaluated using Content Validity Index (CVI) by six experts in Pediatric

Nursing Department in Chiang Mai University. They were asked to review the questionnaire and to determine whether content reflect potential parental needs, whether additional questions should be asked, and whether there were any inappropriate questions. Their suggestions were incorporated into the instrument. The Content Validity Index score was 0.79. After the instrument was translated into Chinese by the researcher, the translation was validated by a linguistic expert of the English Department of SUMS. Then, it was translated back to English by a pediatric nursing professor in SUMS who was very good at English. The researcher reviewed whether there was any discrepancies in wording and intended meanings and resolved the discrepancies. Reliability of the instrument was tested among 20 subjects with heterogeneous demographic characteristics who were similar to the sample. Kuder-Richardson formula 20 (KR-20) was calculated to determine the internal consistency. The score was 0.91 for parents' needs and 0.92 for received responses.

#### **Data collection procedure**

Data was collected by the researcher at the three Teaching Hospitals of SUMS. These Hospitals provide the similar services to the client. A structured interview technique was used to collect data. The following procedure

was performed to collect data:

1. Requested the permission from the directors of the nursing departments of the three Teaching Hospital of SUMS. Informed the objective of the study to the head nurses of pediatric wards.

2. Data was collected during the 2 to 5 days after the child's admission to let the parents perceive their needs and receive responses at almost the same time.

3. Introduced and explained the purposes and benefits of the study to the subjects, and asked the subjects to sign a consent form(Appendix A).

4. Explained the purposes of the interview to the subjects according to instrument. Read each statement to the subjects and recorded each answers. Thirty to fifty minutes were used to complete each interview.

### Analysis of data

Statistic Package for Social Science (SPSS) on the computer was used in data analysis. Range, frequency and percentage were used for demographic data description. Frequency, percentage, mean and SD were used to describe the needs and received responses among parents of hospitalized children. Analysis of variance (ANOVA) was used to compare the needs among parents of hospitalized children with different age. The t-test was used to compare the needs among parents of hospitalized children with different types of illness. The answers from the open-ended question were grouped. The level of significance set for the study was 0.05.