CHAPTER 4

FINDINGS AND DISCUSSION

This descriptive comparative study was undertaken to describe the needs and received responses among parents of hospitalized children and to compare the needs among parents whose hospitalized children had different age and different types of illness. A sample of 108 was drawn from parents whose children admitted to the three teaching hospitals of SUMS. Data were collected during November 1997 to January 1998. The findings are presented in three parts with tables and description. Part I is the description of subjects. Part II is the presentation of findings, and Part III is the discussion.

Part I Description of subjects

1. Description of parents

The quota sample was comprised of 108 parents of hospitalized children. Their characteristics are presented in Table 2.

Table 2 Frequency and Percentage of Demographic Characteristics of Parents(N=108)

21 87 5 41 32 30 31 11 32 37 13 12	Percentage (%) 19.4 80.6 4.6 38.0 29.6 27.8 2.8 10.2 29.6 34.3 12.0 11.1
87 41 32 30 3 11 32 37 13	4.6 38.0 29.6 27.8 2.8 10.2 29.6 34.3 12.0
87 41 32 30 3 11 32 37 13	4.6 38.0 29.6 27.8 2.8 10.2 29.6 34.3 12.0
5 41 32 30 3 11 32 37 13	4.6 38.0 29.6 27.8 2.8 10.2 29.6 34.3 12.0
41 32 30 3 11 32 37 13	38.0 29.6 27.8 2.8 10.2 29.6 34.3 12.0
41 32 30 3 11 32 37 13	38.0 29.6 27.8 2.8 10.2 29.6 34.3 12.0
32 30 3 11 32 37 13	29.6 27.8 2.8 10.2 29.6 34.3 12.0
30 3 11 32 37 13	27.8 2.8 10.2 29.6 34.3 12.0
3 11 32 37 13	2.8 10.2 29.6 34.3 12.0
11 32 37 13	10.2 29.6 34.3 12.0
11 32 37 13	10.2 29.6 34.3 12.0
11 32 37 13	10.2 29.6 34.3 12.0
32 37 13	29.6 34.3 12.0
37 13	34.3 12.0
13	12.0
1 77	15.7
	15.7 13.9
	32.4
	1.9
	1.9
20	18.5
	44.5
	39.8
17	15.7
42	38.9
64	59.3
2	1.8
95	88.0
13	12.0
	64 2 95

As shown in Table 2, most of the parents(80.6%) were female, while 19.4% of them were male. The age of parents ranged from 21 to 49 years and the means was 32.83(SD=5.80). The age range of 25 to 29 was the largest age group of the subjects(38.0%). The majority of parents had high school education(34.3%) and 32.4% of them were government staff. The family income ranged from 300 to 20000 Yuan per month and the mean was 2441.67(SD=2702.37). Forty-four point five percent of these families had income less than 1500 Yuan per month. Most of the families were extended family(59.3%) and most parents room-in with their children.

2. Description of children

Table 3 Frequency and Percentage of Demographic Characteristics of Children (N=108)

Characteristics	Frequency o	Percentage(%)
Sex		•
Boy	66	<i>♀</i> 61.1
Girl	42	38.9
Age (years)		00.5
<1	23	21.3
> 1-3	25	23.1
> 3-6	22	20.4
> 6-12	21	19.4
> 12-14	17	15.8
Educational level		
No schooling and kindergarten	76	70.3
Primary school	26	24.1
Secondary school	. 6	5.6
Previous admission(times)		
0	28	25.9
	33	30.6
2	28	25.9
3	10	9.3
4	3	2.8
5	4	3.7
_ 6	2	1.8
Type of illness		
Acute illness	52	48.1
Pneumonia	12	11.1
Acute glomerulonephritis	8	7.4
Acute upper respiratory infect	tion 7	6.5
Acute bronchitis	7	6.5
Diarrhea	7	6.5
Acute gastritis	6	5.6
Acute hepatitis	4	3.6
Viral encephalitis	1	0.9

Table 3 Frequency and Percentage of Demographic Characteristics of Children (N=108) (continue)

Characteristics	Frequency	Percentage(%)
Chronic illness	56	51.9
Leukemia	14	13.0
Nephrotic syndrome	13	12.0
Anemia	12	11.1
Congenital heart disease	8	7.4
Chronic glomerulonephritis	2	1.9
Asthma	5	4.9
Viral myocarditis	2	1.9

Table 3 shows that 61.1% of children were boys and 38.9% of them were girls. The age of children ranged from 9 months to 13.5 years and the mean was 4.82(SD=4.27). Seventy point three percent of them had not entered schools yet. Most of these children(30.6%) admitted one time prior to this admission. The children were diagnosed with various diseases and 48.1 % of them were acutely ill and 51.9% of them were chronically ill. Among the acute illnesses 11.1% was pneumonia and 13.0% of chronic illness was leukemia.

Part II Presentation of the findings

1. The amount of needs and received responses among parents of hospitalized children

Table 4 Mean, Standard Deviation and Level of Needs and Received Responses of Parents of Hospitalized Children (N=108)

Variables	~ (O	Needs			ا المعددات	
variables	Mean	SD	Level	Mear		Responses Level
	46/					
				3		
Information need	16.49	3.37	High	14.31	4.74	High
Need for the best	7.03	1.22	High	6.37	1.68	High
madical care and						J
nursing care for	•					
the child						
Need for parental role	5.67	1.83	High	5.38	1.91	High
Need for emotional	6.92	3.06	High	6.13		Moderate
support			-			
Physical need	4.77	1.40	High	3.52	2.0	Moderate
Need for financial	1.94	1.86	Moderat	e 1.32		Low
support	Ω	Y				
Total	42.81	9.29	High	37.04	10.44	High

As shown in Table 4, the total mean score of needs was 42.81(SD=9.29), indicating a high level of needs among parents; the total mean score of received responses was 37.04 (SD=10.44), indicating a high level of received responses for these needs. The high level of needs also shown in all dimensions of parents' needs except the need for financial support which was moderate. The high level of received responses shown in the first three subscales but responses

for the need for emotional support and physical needs were at moderate level, and responses for the need for financial support was low.

Table 5 Frequency and Percentage of the Amount of Parental Needs (N=108)

Amount of parental ne	eed Number of parents	s Percentage
Low (0-18)	3	2.8
Moderate (18.01-36)	22	20.4
High (36.01-54)	83	76.9

Table 5 shows that 76.9 percent of parents reported a high level of needs, 20.4 percent of them reported a moderate level of needs and only 2.8 percent of them reported a low level of needs.

Table 6 Frequency and Percentage of the Amount of Received Responses for Parental Needs (N=108)

Amount of	Number	of	parents	Percentage
received responses		>		
Low (0-18)		3		2.8
Moderate (18.01-36)		47		43.5
High (36.01-54)		58		53.7

Table 6 shows that 53.7% parents reported a high level of the responses received, 43.5% of them received moderate level of responses and only 2.8% of them reported a low level of received responses.

Table 7 Frequency and Percentage of Information Needs and Received Responses of Parents of Hospitalized Children

Item No.		Needs (n=108)				
	F	%	res.	ponses %		
		-	<u>-</u>	v		
1. Information need						
1.1 To know the cause of the dis	sease 106	98.1	88	81.5		
1.2 To know the facts of the	105	97.2	96	88.9		
child's condition						
1.3 To know the treatment the	106	98.1	95	88.0		
child received 1.4 To know the reason for the	99	91.7	0.17	00 6		
treatment	99	91.7	87	80.6		
1.5 To know the reason for the	98	90.7	87	80.6		
investigations	7	7	0,	00.0		
1.6 To know the results of the	106	98.1	89	82.4		
investigations		•				
1.7 To know the prognosis of the	100	92.6	81	75.0		
disease						
1.8 To know how the disease effe		92.6	84	77.8		
the child's growth and devel						
1.9 To know what you can do for	84	77.8	71	65.7		
the child in the hospital	7					
1.10 To know how to care for the		96.3	93	86.1		
child in a medically accept 1.11 To understand the child's	able way 84	77.8	F7 -1	65 0		
reaction to hospitalization		//.0	71	65.7		
1.12 To know how to support the	86	79.6	75	69.4		
child to minimize reaction		,,,,	, ,	05.4		
hospitalization						
1.13 To know the cost of the	91	84.3	75	69.4		
child's hospitalization						
1.14 To know the hospital rules	82	75.9	75	69.4		
related to admission						
1.15 To receive an introduction	about 78	72.2	70	64.8		
the staff in the ward		_				
1.16 To receive an introduction the environment of the ward		63.9	61	56.5		
the hospital	ı and					
1.17 To have the staff answer th	100	92.6	0.0	01 5		
questions honestly	re 100	24.0	88	81.5		
1.18 To know how to take care of	the 84	77.8	66	61.1		
child at home after dischar		77.0	00	01.1		
1.19 To get written information		91.7	85	78.7		
how to care for the child	= =	— · ·		, 5 . /		

Table 7 shows the needs and received responses identified by parents of hospitalized children. In the information needs, need to know the cause of the disease, need to know the treatment the child received and need to know the results of the investigations were the most frequently identified by parents of hospitalized children (98.1%); need to know the facts of the child's condition got the highest response (88.9%). Need to receive an introduction about the environment of the ward and the hospital was the least frequently identified by parents (63.9%) and received the lowest response (56.5%). Eleven items (57.9%) out of 19 items of information need have more than 90% parents identified.

Table 8 Frequency and Percentage of Need for the Best Medical
Care and Nursing Care for the Child and Received Responses of
Parents of Hospitalized Children

	·					
Ite	m No.		Ne	eds	Rec	eived
			(n=	:108)	Res	onses
			F	%	F	%
Nood for	the best m	medical care				
		or the child				
		get immediate	99	01 7	0.4	77 0
		/she shows any		91.7	84	77.8
•		on or symptoms				
_		received the	94	87.0	0.7	75.0
	reatment	received cile	94	67.0	81	75.0
		take care of	106	98.1	101	93.5
	ild frequen		100	90.1	TOT	23.5
		nurse take	108	100	99	91.7
	f the child			200	77	21.1
2.5 To have	e the staff	talk to and	86	79.6	81	75.0
comfor	t the child	before, during	ਤ ਤ		~ -	73.0
		ng procedures	_			
		prevent any	93	86.1	89	82.4
		urring to the				00.1
	in the hosp	<u> </u>				
2.7 To have	e the staff	prevent	100	92.6	92	85.2
any in:	fection from	m being				
transm	itted to the	e child				
2.8 To have	e the staff	provide	73	67.6	61	56.5
recreat	tion to the	child during				
the hos	spitalizatio	on				

Among need for the best medical care and nursing care for the child, need for a primary nurse take care of the child was the most frequently identified by parents of hospitalized children (100%); need the nurse take care of the child frequently got the highest response (93.5%). Need the staff provide recreation to the child was the least frequently identified by parents (67.6%) and received the lowest response (56.5%).

Table 9 Frequency and Percentage of Need for Parental Role and Received Responses of Parents of Hospitalized Children

Item No.	Needs (n=108)		Received		
	√n=. F	%	Kesp F	onses %	
3. Need for parental role					
3.1 To feel that you are needed by the child	86	79.6	83	76.9	
.2 To do daily care to the child	87	80.6	85	78.7	
.3 To stay with the child 24 hours	90	83.3	87	80.6	
.4 To stay with the child during procedures	97	89.8	90	83.3	
.5 To visit the child at any time you want	87	80.6	80	74.1	
.6 To participate in making decisions about the child's care and treatment	74	68.5	69	63.9	
.7 To comfort the child when he/she is crying	89	82.4	87	80.6	

Need to stay with the child during procedures was the most frequently identified by parents of hospitalized children(89.8%) and got the highest response(83.3%) in need for parental role, and need to participate in making decisions about the child's care and treatment was the least frequently identified by parents(68.5%) and received the lowest response(63.9%).

Table 10 Frequency and Percentage of Need for Emotional Support and Received Responses of Parents of Hospitalized Children

Item No.	Need (n=10 F	, , ,	\mathcal{I}	ceived sponses %
4. Need for emotional support		07		
4.1 To express the feelings with	68	63.0	66	61.1
staff privately				
4.2 To have staff recognize the feelings	79	73.1	73	67.6
4.3 To talk to your spouse about the feelings	86	79.6	84	77.8
4.4 To talk to the friends or relatives about the feelings	65	60.2	64	59.3
4.5 To talk to other parents with similar experience about the feelings	75	69.4	71	65.7
4.6 To have the staff arrange a parental meeting or parental group	71	65.7	56	51.9
4.7 To spend time with your spouse to maintain marital relationship	68	63.0	64	59.3
4.8 To make yourself and/or your spouse to stay with the child	67	62.0	54	50.0
4.9 To have other family members to be able to visit the child with you	74	68.5	69	63.9
4.10 To have access to a nearby telephone	92	85.2	61	56.5

Among need for emotional support, need to have access to a nearby telephone was the most frequently identified by parents of hospitalized children(85.2%) and 56.5% parents received responses. Need to talk to the friends or relatives about the feelings was the least frequently identified by parents(60.2%).

Table 11 Frequency and Percentage of Physical Needs and Received Responses of Parents of Hospitalized Children

Item No.	Nee	ds	Received		
	(n=108)		Responses		
	F	% જ	△F	ૄ	
	<u> </u>				
5. Physical need					
5.1 To have good food and drink	85	78.7	62	57.4	
available to buy in the hospital					
5.2 To have time to rest and sleep	93	86.1	71	65.7	
5.3 To have a place to rest and	79	73.1	56	51.9	
sleep in the ward					
5.4 To have a clean bathroom	105	97.2	66	61.1	
nearby to use					
5.5 To have the hospital staff	96	7 88.9	72	66.7	
to take care of your own health					
5.6 To have a place to wash and	55	50.9	53	49.1	
hang up clothes in the ward					

Among physical need, need a clean bathroom nearby to use was the most frequently identified by parents of hospitalized children(97.2%) and 61.1% of them received responses; need a place to wash and hang up clothes in the ward was the least frequently identified by parents(50.9%) and received the lowest response(49.1%).

Table 12 Frequency and Percentage of Need for Financial Support and Received Responses of Parents of Hospitalized Children

)		
Item No.		ds	Received		
	(n=108)			Re	sponses
		F	%	F	્રે ક
6. Need for financial support	rt				
6.1 To get financial support	t for	60	55.6	44	40.7
the hospital fee					
6.2 To get financial suppor	t for	40	37.0	30	27.8
transportation					
6.3 To get financial suppor	t for	46	42.6	36	33.3
living expenses					
6.4 To have someone inform	you	53	49.1	33	30.6
about the resource for	-				
financial assistance					

Among need for financial support, need financial support for the hospital fee was the most frequently identified by parents of hospitalized children(55.6%) and need financial support for transportation was the least frequently identified by parents(37.0%).

Additionally, in order to see the congruency of needs and received responses, the specific agreement on both needs and received responses of the subjects were calculated (Koran, 1975). The average value is 68.6% for all subjects. It indicated that most needs were needed by parents and both of them received responses. The congruency of needs and received responses was high.

Other needs identified by parents included: Need the nurse had high quality of nursing skill, especially the invasive skill(4.6%); need the better cooperation among hospital staff(1.9%); and need for enough hot water for drinking and washing(0.9%). These needs can be included in "need for the best medical care and nursing care for the child" and "physical needs". Except these needs, parents agreed the instrument including all of their needs when the child was hospitalized.

2. Comparison of needs among parents whose children belong to different age groups

The parents' needs were calculated by means and standard deviation, then one-way ANOVA was use to see if there was any significant difference among parents whose children belong to different age groups.

Table 13 Mean, SD and Test of Significance of Total Parents' Needs Score and Scores by Child's Age Group Subgroup

Variables	<1 Vear	ar	>1-3vrs	מ	>3-6Vrs	rs	>6-12vrs	VYS	>12-14 vrs	V73		
	n=23	0.0	n=25	ΟI	n=22	ñ	n=21	ïΫ́	n=17	7	屮	טי
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD		value
Information need	16.96 2	2.90	17.64	2.48	17.05	3.02	16.52	3.67	13.41	3.66	5.27	0.0007*
Need for the best care	6.96 1	1.19	7.32	1.11	6.72	1.55	7.48	0.75	6.53	1.23	2.23	0.07
Need for parental role	6.00 1	1.65	6.08	1.04	5.59	1.59	5.71	2.10	4.65	2.57	1.91	0.12
Need for 7 emotional support	.04	2.75	7.68	2.84	6.45	3.76	6.81	3.14	6.35	3.60	0.67	0.62
Physical need	5.26 0	0.86	5.00	1.26	4.36	1.71	4.71	1,42	4.35	1.62	1.76	0.14
Need for 2 financial support	.39	2.11	2.28	1.79	141	1.71	2.00	1.82	1.41	1.73	1.37	0.25
Total	44.61 8	8.28	46.00 7.27		41.59	9.95	43.24	9.79	36.71	9.56	3.12	0.018*
* . 0~0 05						0	1/ 1/					

^{* :} P<0.05

Table 14 Multiple Comparison Test For Significance of Total Parental Needs Score by Child's Age Group

Group	<1yr	>1-3 yrs	>3-6 yrs	>6-12 yrs	>12-14 yrs
(mean)	(44.61)	(46.00)	(41.59)	(43.24)	(36.71)
			9		
<1yr					P< .05
> 1-3 y	rs				P< .05
> 3-6 y	rs				
> 6-12	yrs				P< .05
> 12-14	yrs				P< .05

Table 15 Multiple Comparison Test For Significance of Parental Information Need Score by Child's Age Group

Group	<1yr	>1-3 yrs >	-3-6 yrs	>6-12 yrs	>12-14 yrs
(mean)	(16.96)	(17.64)	(17.05)	(16.52)	(13.41)
<1yr					P< .05
> 1-3 y	rs				P< .05
> 3-6 y	rs				P< .05
> 6-12	yrs				P< .05
> 12-14	yrs				P< .05

Table 15 shows that the means of total score among different age groups were found to be significantly different (F=3.12, P=0.018). The parents of toddlers had the highest score on the overall need score(mean=46.00 SD=7.27), followed by parents of infants (mean=44.61, SD=8.28), school age children (mean=43.24, SD=9.79), pre-school age children (mean=41.59, SD=9.95) and adolescents (mean=36.71, SD=9.56). Further analysis using the Scheffe's test, the pair of means that had a significant difference was identified. Needs of parents of adolescents was significantly lower than that of parents of infants, toddlers and school age children (Table 14). Whereas the difference between other pair of groups was

not significant.

In the subgroup of information need, the means among six groups were found to be significantly different (F=5.27, P=0.0007). Parents of toddlers had the highest score of needs (mean=17.64, SD=2.48), followed by parents of preschool age children(mean=17.05, SD=3.02), infants (mean=16.96, SD=2.90), school age children (mean=16.52, SD=3.67) and adolescents (mean=13.41, SD=3.66). Further analysis using the Scheffe's test, the pair of means that had a significant difference was identified. Needs of parents of adolescents was significantly lower than that of parents of infants, toddlers, preschool age children and school age children (Table 15). Whereas the difference between other pair of groups was not significant.

In the subgroup of need for the best care for the child, parents of school age children had the highest score of needs(mean=7.47, SD=0.75). Parents of toddlers had the highest score of parental role needs(mean=6.08, SD=1.04) and need for emotional support (mean=7.68, SD=2.84). Parents of infants had the highest score of physical need(mean=5.26, SD=0.86) and need for financial support(mean=2.39, SD=2.11). However, there was no significant difference in the five groups of these five subscales.

3. Comparison of needs between parents whose children had acute or chronic illness.

Table 16 Mean, Standard Deviation and Test of Significance of Total Parental Needs Score and Subgroup Scores by Child's Type of Illness

Variables	Acute	illne	ss Chro	nic il	llness t	P
	n:	=52		n=56	value	value
	Mean	SD	Me	an	SD	
Information need	15.73	3.63	17.20	2.97	-2.29	0.024*
Need for best care	6.85	1.36	7.20	1.05	-1.50	0.136
Need for parental re	ole 5.62	1.93	5.71	1.75	-0.28	0.780
Need for emotional support	6.81	3.13	7.02	3.01	-0.36	0.723
Physical need	4.71	1.50	4.82	1.32	-0.40	0.687
Need for financial support	1.87	1.93	2.00	1.80	-0.38	0.708
Total	41.58	9.75	43.95	8.78-	- 1.33	0.187

^{*:} P<0.05

Table 16 shows that parents of chronically ill children had the higher need score than parents of acutely ill children on the overall score and six subgroup scores. There was significantly different on the information needs between parents of acutely ill children and chronically ill children. However, the differences were not significant in other five subgroup scores and overall score(P>0.05).

Discussion

The discussion of the findings is presented following the objectives of this study.

Findings related to the first research objective

Research Objective One: To describe the needs of parents of hospitalized children.

In total, the level of needs was high among parents of hospitalized children. Seventy-six point nine percent of parents reported a high level of needs. It is not surprised because all of these needs were identified frequently by parents of hospitalized children in previous studies (Kasper & Nyamathi, 1988; Kirschbaum, 1990; Meeropol, 1991; Terry, 1987). Parents faced so many changes caused by the child's hospitalization. They must concern the health of the child as well as the family routines, absence of work and financial problems (Jackson & Vesey; Petrillo & Sanger, 1980). Because of the one family one child policy in China, parents may be more worry about the child's health than in the past and other parents in other countries. According to the data concerning occupations of parents, most parents(81.5%) were employed, the impact of hospitalization may be more severe to these families. Regarding previous hospitalization of the child, most of the children (72.3%) have been hospitalized

less than 2 times. It meant that the parents had not much experiences of having the child in the hospital. They may need more help and support to take care of the child. Also they may have needs related to themselves and their families.

In the subgroups, the score of information need was also high. It was consistent with the findings reported by Meeropol(1991), Terry(1987) and other researchers. Parents are traditionally protectors and provider for their children (Fisher, 1994), and all of these information are related to the child's health. Furthermore, in traditional Chinese culture, the healthy child has special meanings for the parents. Another possibility is that the majority of parents were not health professionals and most of them(76.9%) had not gone to college or university, they had not enough professional knowledge. Lack of information may cause stress and anxiety(Smith et al., 1982). Therefore, seeking information was the coping strategy used by parents(Hymovich, 1984).

The individual items in this subgroup which showed high amount of parental needs(>90%) mostly concerned with the child's illness and treatment. It indicated that parents concerned more about the child's health than other information related to hospital routines. Need to know the cause of the disease, the treatment the child received and

results of the investigations were most frequently the identified by parents of hospitalized children. Fisher (1994), Jacono and colleagues(1990) and Kirschbaum(1990)'s researches supported this finding. One of parents' primary tasks is to seek information about the child's diagnosis, prognosis and treatment (Kirschbaum, 1990). Usually parents do not know what happen to their child and want to know what were being done on their child (Jacono et al., 1990, Smith et al., 1982). When asked about the reason why they need it, most parents in the present study reported that they were not sure of how their child suffered the disease at the beginning, and they wanted know how the physician treated them. During hospitalization, they knew that the result of investigations could explain the diagnosis and effects of treatment, so they wanted to be informed about it. Need to receive introduction about the environment of the ward and the hospital was the least frequently identified by parents (63.9%) in information need, because most parents said it was not important to them. They could be familiar with the environment by themselves and with the help of other parents.

The score of need for the best nursing care and medical care for the child was also high. It was consistent with Smitherman's (1979) and other researchers' findings. Parents worried about the child's health but they must seek

help from professionals in the hospital. According Ladebauche (1992), quality of care for the child was important family's ability to cope in influencing a hospitalization. They need to trust that the hospital professionals have give the best care to the child (Kristjansdottir, 1991), therefore they may feel security and satisfy the safety needs of the child and themselves (Maslow, 1970). Furthermore, in Chinese culture, children are the future of the parents, they are so important to parents, especially they are the only child the parents have. Parents want to give the best thing to their child, especially when they are ill.

The highest need in this subgroup was the need for a primary nurse to take care of the child. Primary nursing was initiated in China at the beginning of 1980s' (Do, 1994). Because the primary nursing was implemented in these wards, comparing with previous traditional nursing system, parents realized the benefit of primary nursing. They said that the primary nurse could provide better nursing care to the child, more information support and met them other needs. Primary nursing let less person take responsibility to the patient, it facilitated the communication and promote the parent-nurse, and child-nurse relationship (Do,1994). Therefore, all parents reported they need it. Need the staff provide

recreation to the child was the least frequently identified by parents in this subgroup, although recreation is one of the psychosocial needs identified by McHale(1978, cited in Yura & Walsh, 1983). When asked why they did not need it, the parents said that the hospitalization was major for treatment but not for recreation and they provided recreation for their child themselves. Need the nurse who had high quality of nursing skill, especially the invasive skill and need the better cooperation among hospital staff which were identified by parents other than those in the instrument could be included in this subgroup. It indicated that the quality of nursing skill and the cooperation among the departments needed to be improved.

Similarly, the score of need for parental role was high. Although the major responsibility of caring the child was given to the health professionals, parents may be overprotective and wanted to do everything they could for their child to feel better (Amico & Davidhizar, 1994). Additionally, in Chinese culture, health professional is a sacred occupation respected by people. Parents gratefully acknowledge health professionals for they protect the child's health. Therefore, parents try to do anything they can to share the caring burden in the hospital. Furthermore, parents participation could support the family health and facilitated

the nurse-parent relationship (Gill, 1987). Parents need the health professionals trust them to do so, because it can promote their self-esteem (Kirschbaum, 1990; Kristjansdottir, 1991), which is the important psychosocial needs identified in literature reviewed (Kozier & Erb, 1979; Maslow, 1970). These findings were also reported in earlier studies (Algren, 1985; Kirschbaum, 1990; Terry, 1987).

In this subgroup, need to stay with the child during procedures was the most frequently identified by parents, it is consistent with Kasper and Nyamathi's(1988) study. Children are afraid of medical procedures because of pain and separating from parents(Whaley & Wong, 1991). Parents thought it was the special period they must accompany their child. But it was interesting to find that not many of the parents wanted to participate in making decisions about the child's care and treatment. It may be that the parents had not enough professional knowledge, they thought it was the responsibility of the professionals and trust them.

The need for emotional support was the one the score was also high. The finding was consistent with previous researches (Crout, 1979; Farrell & Frost, 1992; Winkel, 1988). Emotional needs are basic human requirements to maintain human health(Diekelmann et al., 1980), especially when parents faced a stressful condition(Amico & Davidhizar,

1994). When their children were hospitalized, parents seek help from closed people, such as family members, professionals and other sympathetic parents. They wanted to talk with others, expressed their feelings, which could reduce their stress (James & Mott, 1988; Kasper & Nyamathi, 1988). Communication is the psychosocial needs identified in literature reviewed (Kozier & Gas, 1967; McHale, 1978, cited in Yura & Walsh, 1983), it helps to decrease the sense of isolation and guilt often experienced by parents hospitalized children (Ladebauche, 1992). Also, perceived emotional support can enhance person's self-esteem(Jackson & Vessey, 1992). However, in Jacono and colleagues' study (1990), the need to talk about feelings was the least important need identified by parents. It may be that the children in the present study were in general wards, their conditions were not very seriously. Therefore, their parents' feelings were different from the parents whose children were in NICU.

Among individual items, it is interesting to find that need to have access to a nearby telephone was the most frequently identified by parents in this subgroup. It may related to the few telephone was accessed by parents in the wards. When parents accompany their child in the hospital, they did not want to loss contact with their family or

others. In addition, most of the parents in this study were in extended family. The major convenient way to communicate with others for help was by telephone. Need to talk to the friends or relatives about the feelings was the least frequently identified by parents in this subgroup. It was inconsistent with Kirschbaum's(1990) study in which eighty percent of parents indicated that having friends nearby for support was important. It may relate to the Chinese culture and the personality of the subjects. They did not want to pour out their grievances or troubles with others, except their spouse.

The physical need was also high, it was consistent Kasper and Nyamathi's (1988) research. However physical need was not included in the most important needs in Kirschbaum's research(1990). It may related to the different condition of these hospitals. According to Maslow(1970), unmet the physical needs would influence the satisfaction of higher level needs. Meeting parental physical needs is important to maintain the parents' health and well-being so that they can deal with the existing stress and accept their new role in the hospital (Kasper & Nyamathi, 1988). Most parents in the present study lived with the child in the hospital, but the hospitals did not supply beds or rooms for them. The physical conditions of these old hospitals were not

good enough. Therefore, the basic physical were identified frequently by these parents, especially the need for a clean bathroom in which the difference between the needs and received responses was very wide (36.1%). Parents also reported that the bathroom was not clean enough and it was always occupied. According to Nightingale (1859, cited in Narrow & Buschle, 1987), meeting the needs of cleanliness of environment could bring comfort to person. Need a place to wash and hang up clothes in the wards was the frequently identified by parents in physical needs. It may be that these pediatric wards have balcony or corridors for wash and hang up clothes. One mother of an infant reported she needed more hot water. It may related to the weather and the infant needed more hot water for feeding, cleaning the bottle and bathing. These findings indicated that parents were not satisfied with the physical conditions of these hospitals.

The score of need for financial support was moderate, It may relate to the better economic condition in GuangDong province than other provinces in China. Most families (55.5%) had income more than 1500 Yuan per month, which can be considered as the moderately and high well-off families in China. Most parents reported that they could resolve the financial problem by themselves. Therefore this problem was not so important like other needs. Some parents

said that although they did not have enough money, they did not want to ask help from others. This may relate to the personality of the subjects and traditional Chinese culture, they try to resolve their problems by themselves.

The least frequently identified items were need for financial support for transportation. The possibility was that all the families lived in GuangDong province and the fee for transportation was not high. The need for financial support for the hospital fee was more frequently identified by parents. It may be that the cost of treatment and investigations was higher than other costs.

Findings related to the second research objective

Research Objective Two: To describe the received responses for the need of parents of hospitalized children.

needs was high, and also the scores for 3 subgroups: information need, need for the best care for the child and need for parental role were high. The findings were consistent with the studies of Fiser and colleagues (1984) and Phongkampan (1994), but inconsistent with those of Algren (1985) and Sandra (1996). That may relate to the different professional and hospital conditions. The congruency of need and received response was high. It indicated that most of

these needs were important to parents, and nurses or significant others had not only realized their needs but also had do something to meet these needs. Meeting their needs can maintain their physical and psychological homeostasis (Kozier & Erb, 1979). According to Kasper & Nyamathi (1988), these needs were a reaction to the existing stress and possibly a means of defusing it.

The three teaching hospitals of SUMS are considered the best hospitals in GuangZhou. The managers of these hospitals pay more attention to quality assurance of treatment and nursing care. Most of the parents reported that the nurses and physicians were kind to them, explained to actively and answered their questions patiently. Therefore, they were satisfied with their information needs, especially the need to know the facts of the child's condition. Usually, the professionals talked about child's condition honestly with the parents. They thought it was benefit for decision making. However, the received responses to need to know the prognosis of the disease were relatively low(75%). The possibility is that professionals did not explain the prognosis in detail and parents wanted to get more clear answers. Meeting parents' information needs can reduce their uncertainty and anxiety, help them coping and promote their ability to take care of the child (Kasper &

Nyamathi, 1988; Robinson, 1987; Schepp, 1991; Whaley & Wong, 1991).

Because of the high medical quality of these hospitals, many people trust them and attend the service of these hospitals. Parents believed that their children had received the best care. Although most items received high responses in this subgroup, parents would like their child get immediate treatment when he/she showed any change in condition or symptoms, the response for this need was relatively low in this subgroup(77.8%). It may be that physicians and nurses were so busy with other children at that time, therefore this child did not get immediate treatment.

For the received responses for parental role needs, because the child's condition was not very seriously in the general wards and the nurses were very busy, meanwhile, the hospital personnel recognized the importance of parents involvement in the care of the child, the parents were encouraged to be with the child and take part in caring for him/her. In addition, most parents in this study were rooming in with their child, they had time and opportunity to take care of the child. Therefore, their needs for parental role were met.

However, the received responses for need for support was moderate, emotional Ιt may be that the professional had not pay enough attention to the parents' emotional reactions. Another possibility may be that the health professionals were too busy to have enough time to communicate with parents. On the other hand, the Chinese culture and personality may influence some parents that they did not want to disturb others although they wanted to talk with them. When a child was sick, open and communication between parents as well as parents and professionals often lacked (Amico & Davidhizar, 1994). Some parents came from remote areas and their spouse stayed at home, so their need for support from their spouse, other family members and relatives were not met. Additionally, received response for the need to have access a nearby telephone was relatively low(56.5%). It indicated that parents had few telephone to contact their family members or significant others.

The received responses for physical needs were also moderate. Because the hospitals are old, the physical condition is not good enough. The difference between needs and received responses of all items in this subgroup were very wide(>20%) except the need to have a place to wash and hang up clothes in the ward. Although there were food and drink sold in the hospitals, parents were not satisfied with

its quality. Furthermore, there were too many patients admitted to the wards, it seemed too noisy and too crowded in the wards. Nursing procedures during the night time often wake up the child, so the parents an not sleep well. Furthermore, the hospital staff had not paid enough attention to the parents' health. Therefore, parents were not so satisfied with it, especially the bathroom.

Although the need for financial support was moderate, the received responses of them were low. Because the health insurance system has not implemented very well, only some parents joined it to receive support. Most of the parents did not know about the welfare foundation available. Some of them borrowed money from their relatives and friends, but they said their relatives and friends were not rich either. Furthermore, there was no special personnel of the hospitals or social workers provide support for the financial problems. Therefore, they must resolve this problem by themselves.

Findings related to the third research objective

Research Objective Three: To compare the difference of needs among parents whose children with different age and different types of illness.

The difference of total score of needs among parent whose children belonged to different age groups were

significant. Needs of parents of adolescents was significantly lower than that of parents of infants, toddlers and school age children. The finding was inconsistent with in Wills, 1983), Moyer(1989) Hymovich(1976, cited Phongkampan's (1994) studies. It is possible that adolescents are able adapt with the hospitalization and independence on parents. Also, adolescents are able to look after themselves better than younger children (Neff & Spray, In the researcher's observation. most adolescents had no parents accompany with them, parents did not have to sty with them and do daily care to them. Parents were less worry and anxious with them. Therefore, parents of adolescents had less needs than others. The parents of toddlers got the highest score of needs among the five age groups. The possibility is that toddler's motor ability developed quickly, they start to walk around and are so curious and want to explore the world. Therefore it is so dangerous for them in the hospital. In previous studies, the toddlers showed the most severe reactions to hospitalization (Prugh et al., 1953; Pobertson, 1970, cited Kristjansdotir, 1991). These may worry the parents and they need more assistance to cope with the situation. The parents may have more needs than the parents of other age groups.

Similarly, parents of toddlers need more information about the child's reaction and how to take care and protect them in the hospital. Their information needs got the highest score in the five age groups. Some adolescents and parents had some experiences about the disease, the caring, and the hospitalization. Furthermore, adolescents are able to learn information about the disease, self-care and hospital routines by themselves, parents may less worry about them. Therefore their information needs were significantly lower than others. In other subgroups the parental needs were similar. Most parents of the different age children need their children get the best care, need to maintain their parental role in the hospital, and need emotional support. They faced the same physical environment in the hospital and the financial problems caused by hospitalization were not influenced by the child's age. These finding were consistent with previous studies (Hymovich, 1976, cited in Wills, 1983; Moyer, 1989; Phongkampan, 1994).

There was no significant difference between the needs of parents of chronically ill children and acutely ill children. It may be that the hospitalization itself and its impact on the child and the parents were more important than the specific characteristics of the two types of illness. The similar impacts caused the similar needs. Chronic illness

lasts longer than acute illness. Parents of the chronically ill children are uncertain about the illness and the future of the child, must manage the special daily care for the child, and must cope with the emotional stress caused by the child's illness and their own social isolation. Meanwhile, the long-term and repeated hospitalization may affect the child's education and psychosocial development and force the parents stay longer in the hospital (Jackson & Vessey, 1992; Robinson, 1987). However, the rapid onset of acute illness causes the unplanned hospitalization, it is a sudden threaten to parents. Parents have less time to accept it and are also uncertain. Usually the symptoms of acute illness look so severe and cause fear and anxiety to parents too (Malow, 1977; Neff and Spray, 1996). Therefore, the needs of parents were similar when the child was hospitalized instead he/she suffered acute illness or chronic illness. It was consistent with findings of Hymovich(1976, cited in Wills, 1983) and Kristjansdottir(1991)'s studies.

When considering subgroups, the difference were insignificant except information need. All parents wanted their children get the best care and maintain their parental role regardless of acute or chronic illness their children suffered. Although parents of chronically ill children needed emotional support because of the long-term disease, parents

of acutely ill children faced a sudden change in their life. The symptoms usually were evident and severe. parents needed emotional support too. Parents of children with acute illness or chronic illness faced the same physical environment in the hospital, so it was not surprised that their physical needs were similar. Although the repeat and long-term hospitalization required more money to the parents of chronically ill children, these parents had try their best to prepare enough money to maintain the long-term treatment before the hospitalization. Some parents of chronically ill children in this study said they had made a financial plan the treatment when they decided to continue treatment. It is possible that some parents had not enough money had given up already. Therefore, the difference of need for financial support between parents of chronically ill children and acutely ill children were not significant. Kristjansdottir (1991) and Hymovich's (1976, cited in Wills, 1983) studies supported this finding.

The difference of parental information needs was significant. Parents of chronically ill children need more information about the disease and home care as mentioned above. Another possibility may be that, in this study, most children with chronic illness suffered from leukemia and nephrotic syndrome. It may be difficult for the parents to

understand the signs and symptoms of these diseases. Also the treatments and investigations of these diseases are invasive and painful. The parents, therefore wanted to know why their child had to undergo such treatment and investigations. These diseases seemed unfamiliar by the parents, they wanted to know more about how the illness influencing the child's growth and development and the most important thing was how to care for the child after discharge and follow the regimen. To acute illness, most children suffered from pneumonia, which is a common disease familiar to the parents. The signs and symptoms of pneumonia look evident and familiar to parents, the treatment and investigation are not so complex and it can be cured within a period of time. Once the child recover, the parents' information needs may decreased. Therefore, information needs of parents of chronically ill children were significant higher than parents of acutely ill children.