CHAPTER 4

FINDINGS AND DISCUSSION

This descriptive correlational study was to identify the family support and self-care behaviors, and to examine the relationship between family support and self-care behaviors of breast cancer patients receiving combined therapy at six university hospitals in Beijing, China. The findings from this study and the discussion regarding the findings were presented in this chapter.

Findings

Sixty-one breast cancer patients receiving combined therapy who met the eligible criteria were selected as subjects in this study by purposive sampling. The subjects were interviewed by the investigator guided by the instruments. The statistical package for social science (SPSS) were used for data analysis.

The findings from this study were organized into four Parts:

Part I   Demographic data of subjects;

Part II   Family support;

Part III   Self-care behaviors;

Part IV   The relationship between family support and self-care behaviors.

Part I Demographic data of subjects

A total of sixty-one women with breast cancer were selected as subjects in this study. The mean of age of the subjects was 46.59 years. The sixty-one subjects were divided into groups of age, marital status, family role, educational background, occupation, average family income, way of medical payment, presence of chronic illness and stage of breast cancer. The detailed demographic characteristics of the subjects were presented in tables 1 to 2.

Table 1 Frequency and percentage of subjects grouped by age, marital
status, family role, educational background and occupation

Variable	Frequency (N = 61)	Percentage (%)
Age (years)		
24-29	3	4.92
30-39	17	27.87
40-49	19	31.15
50-59	11	18.03
60-72	11	18.03
Marital Status		
Married	55	90.16
Single	2	3.28
Divorced	1	1.64
Separated	0	0.00
Widowd	3	4.92
Family Role		
Grandmother	1	1.64
Mother	36	59.02
Wife	17	27.87
Sister	0	0.00
Daughter	7	11.47
Granddaughter	0	0.00
Educational Background		
No formal education	9	14.75
Primary school	5	8.20
Middle School	14	22.95
Senior high school	13	21.31
Diploma/Associate	9	14.75
Undergraduate	10	16.40
Graduate	1	1.64
Occupation		
Teacher	5	8.20
worker	15	24.59
Business person	8	13.10
Health person	6	9.84
Government service	5	8.20
House keeping	3	4.92
Farmer	19	31.15

Table 1 showed that nineteen subjects or 31.15% aged range from 40 to 49 years. Only three subjects or 4.92% were in the age range of 24-29 years. For marital status, fifty-five subjects or 90.16% were married women. There is no subjects being a separated. Only one subjects or 1.64% was divorced. There were thirty-six subjects or 59.02% being the role of mother in the family with only one subject or 1.64% was grandmother. For the educational background, fourteen subjects or 22.95% finished the middle school. Only one subjects or 1.64% completed the graduate level of education. Nineteen subjects or 31.15% were farmers with only three subjects or 4.92% were house keeper.

Table 2 Frequency and percentage of subjects grouped by average family

income, way of medical payment, presence of chronic illness and

stage of breast cancer

Variable	Frequency (N = 61)	Percentage (%)
Average Family Income (yuan/person/month)		
<250	15	24.59
251–500	24	39.34
501–800	16	26.23
>800	6	9.84
Way of Medical Payment		
Total reimbursed or insurance	6	9.84
Partial reimbursed	39	63.93
Total self-paid	16	26.23
Presence of Chronic Illness		
Yes	26	42.62
No	35	57.38
Stage of Breast Cancer		
I	9	14.75
II	41	67.22
III	11	18.03

From table 2, twenty-four subjects or 39.34% reported that their family income were in the range of 251-500 yuan/person/month. The average family income of six subjects or 9.84% were more than 800 yuan/person/month. There were thirty-six subjects or 63.93% received partial reimbursed medical payment with six subjects or 9.84% enjoyed total reimbursed or insurance. Thirty-five subjects or 57.38% reported no presence of other chronic illness. Twenty-six subjects or 42.62% reported the presence of other chronic illness. Forty-one subjects or 67.22% were in stage II of breast cancer. Only nine subjects or 14.75% were in stage I.

Part II   Family support

To identify the family support of breast cancer patients receiving combined therapy, the scores of family support were obtained from the subjects' response. The descriptive statistics of scores of family support were carried out. Mean, standard deviation, and average rating score of family support were calculated. Table 3 to table 5 showed the results related to family support perceived by breast cancer patients receiving combined therapy.

Table 3   Mean and standard deviation of family support of subjects

Variable	Total Score	$\bar{X}$ (N = 61)	SD
Family Support	15	11.03	4.08

Table 3 described that total score of family support was 15. The mean score of family support perceived by subjects was 11.03 with the SD of 4.08.

Table 4 Average rating score of family support of subjects

Variable	Average rating score	SD (N=61)
Family Support	.74	.27

Table 4 revealed that the average rating score of family support was .74 with the SD of .27. Comparing the average rating score of family support with the criteria of determining the amount of family support, it is obvious that a more amount of family support was perceived by the subjects.

Table 5 Frequency and percentage for the amount of family support of

subjects

Amount of family support	Frequency (N=61)	Percentage (%)
Less (.01- .49)	12	19.67
More (.50-1.00)	49	80.33

From table 5, forty-nine subjects or 80.33% perceived that the amount of their family support were more. Only 12 or 19.67% perceived that their family support were less.

Part III Self-care behaviors

To identify the self-care behaviors of breast cancer patients receiving combined therapy, the scores of self-care behaviors were obtained from the response of the subjects. The descriptive statistics of the scores of family support were carried out. The means, standard deviations, and average rating scores of total self-care behaviors and the scores of subscales of MSCBQ were calculated. The results were shown in tables 6 to 8.

Table 6 Mean and standard deviation of self-care behaviors of subjects

Variables	Total Score	$\bar{X}$ (N=61)	SD
Behaviors for universal self-care requisites	75	57.66	8.12
Behaviors for health deviation self-care requisites	135	104.70	13.03
Psychological self-care behaviors	55	43.03	6.80
Physical self-care behaviors	155	119.33	14.85
Total self-care behaviors	210	162.36	18.94

Table 6 showed the mean score of the total self-care behaviors of subjects was 162.36 with the SD of 18.94. The scores of behaviors that subjects performed to meet universal self-care requisites and health deviation self-care requisites were 57.66 with the SD of 8.12, and 104.70 with the SD of 13.03 respectively. The score indicating performance of psychological self-care behaviors was 43.03 with the SD of 6.80. The score of physical self-care behaviors was 119.33 with the SD of 14.85.

Table 7   Average   rating score of self-care behaviors of subjects

Variable	Average rating score	SD (N=61)
Behaviors for universal self-care requisites	3.84	.54
Behaviors for health deviation self-care requisites	3.88	.48
Psychological self-care behaviors	3.91	.62
Physical self-care behaviors	3.85	.48
Total self-care behaviors	3.87	.45

Table 7 showed the average rating scores of self-care behaviors of the subjects. From table 7, the subjects performed a more amount of total self-care behaviors with the average rating score of 3.87 and SD of .45, more behaviors for universal self-care requisites with the average rating score of 3.84 and SD of .54, and more behaviors for health deviation self-care requisites with the average rating score of 3.88 and SD of .48. The average rating score of psychological self-care behaviors was 3.91 with the SD of .62 indicating that the subjects performed a more amount of psychological self-care behaviors. The average rating score of physical self-care behaviors, which was 3.85 with the SD of .48, indicated a more amount of physical self-care behaviors were performed by the subjects.

Table 8 Frequency and percentage for the amount of self-care behaviors
of subjects

Amount of self-care behaviors	Frequency (N=61)	Percentage (%)
Less (1.00–2.99)	2	3.28
More (3.00–5.00)	59	96.72

From Table 8, most of the subjects or 96.72% performed a more amount of total self-care behaviors. Only 3.28% of them performed a less amount of total self-care behaviors.

Part IV   The relationship between family support and self-care behaviors

Pearson's product-moment correlation coefficients were utilized to examine the relationship between family support and self-care behaviors of the subjects. The results were shown in table 9.

Table 9   Relationship between family support and self-care behaviors of subjects

Self-care behaviors	Pearson's correlation coefficient (r)
	Family support (N=61)
Behaviors for universal self-care requisites	.22*
Behaviors for health deviation self-care requisites	.29*
Psychological self-care behaviors	.35**
Physical self-care behaviors	.21
Total self-care behaviors	.29*

* p<0.05   ** p<0.01

Table 9 indicated that family support was positively correlated with self-care behaviors of the subjects. The family support correlated significantly and positively with the total self-care behaviors ($r= .29$, $P < .05$). The family support also correlated significantly and positively with three subscales of Modified Self-Care Behaviors Questionnaire: behaviors for universal self-care requisites ($r= .22$, $p < .05$), behaviors for health deviation self-care requisites ($r= .29$, $p < .05$), and psychological self-care behaviors ($r= .35$, $p < .01$). The correlation between family support and physical self-care behaviors was positive but not significant ($r=.21$, $P= .05$).

Discussion

In this section, the findings from the study will be discussed. The content were organized into four parts according to the research objectives and hypothesis of this study.

Demographic data

The mean of age of the subjects in this study was 46.59 years with the range of 24 to 72 years. Most of the subjects in this study were in the age range of 30 to 59 years. This is consistent with the age distribution of breast cancer. Majority of the subjects were married women. When asked about the family role, almost all of the subjects responded that it was difficult to give only one choice. If they had to choose one, the role of mother was considered as the most important by most of them with the percentage of 59.02%, and the role of wife ranked the second with the percentage of 27.87%. The mean of number of family members was 4.54 persons with the SD of 2.31 persons. The most frequently reported family members were husbands with the percentage of 90.16% and children with the percentage of 81.30%. According to the study of Northhouse (1989), husbands and close family members were the primary support resources for the breast cancer patients. Obviously the sources of family support of the subjects in present study were more adequate. There are 22.95% of the subjects in this study who finished middle school education. There were 31.15% of the subjects being farmer and 24.59% of the subjects being workers. Therefore the social status of the subjects in this study were not high. The average family income of 39.34% of

subjects were in the middle level. For the way of medical payment, most of the subjects received partial or total self-paid medical payment. More than half of the subjects reported presence of chronic illness. These chronic illness included hypertension, diabetes, osteoarthritis etc., and they reported that those chronic illness influenced not too much of their daily life activities. The mean of total dose of radiotherapy was 3796.67 rads with the SD of 1200.08 rads and the range of 1980.00 rads to 6678.00 rads. The times of radiotherapy ranged 10-28 times. Daily dose were 180-384 rads. All of the subjects had modified radical mastectomy followed by radiotherapy.

Research objective 1   To identify the family support perceived by breast cancer patients receiving combined therapy.

In this study, the subjects perceived a more amount of family support with average rating score of .74 and SD of .27 (Table 4). There were 80.33% of them who perceived a more amount of family support (table 5). This result can be explained as follows.

According to the findings of Hanucharurnkul (1988), there was a significant and negative relationship between stage of cancer and family support (r= − .28, P < .05), and less family support persisted during patients' treatment. In the present study, all of the subjects were diagnosed with breast cancer for the first time. The period from being diagnosed with breast cancer to being interviewed was less than half year. Most or 67.12% of the breast cancer were in the stage II (table 2). Less than half of them reported presence of other chronic illness and their

chronic illness influenced a little of their activities of daily life. Therefore, their families would like to provide more support to them.

The majority or 90.16% of the subjects in this study were married women. The subjects reported that the support was provided by their major family members, were husbands (90.16%) and children (81.30%). The finding is consistent with the study of Northouse (1989) indicated that husbands and close family members were primary sources of support of breast cancer patients. Assistance in daily life activities, love, understanding, and concern from husbands and children contribute to the patient's perception of being supported.

Almost all of the families in China are tied by blood relation, and the family relationship is tight. The family members always concern each other. The community care in China is fostered even though it is still in the developing process. Most of Chinese patients are cared for by family members if not hospitalized. All subjects in this study were outpatients. The subjects in this study perceived a more amount of support from family members.

The findings about family support from this study is consistent with findings of the study by Zemore and Shepel (1989). In their study, the breast cancer patients perceived greater emotional support from families than did the control group. The family relationship was strengthened by the diagnosis of treatment of breast cancer. The family members had become more closer to each other and more caring for the patients (Zemore and Shepel, 1989).

There was 19.67% of the subjects in this study who perceived that their family support were less (Table 5). Some subjects reported that they seldom communicated with their family members. Some family members were not willing to listen when the subjects expressed their feelings to them. Some family members could not pay more attention on the subjects' psychosocial status. Some families were described as supportive, but sometimes they had difficulties in expressing their support. They often said "Do not worry", "Do not say that. This is nothing", and "Think ahead" as the expression of comforting the patients; all of these inhibited the patients' expression of feelings. This may result from family member's lack of knowledge and skill to provide effective support to the patients. Therefore, it is important and necessary to instruct the family members to provide support to the patients.

Research objective 2   To identify the self-care behaviors   of breast cancer patients   receiving combined therapy.

The findings showed that the subjects performed a more amount of total self-care behaviors with the average rating score of 3.87 and SD of .45 (Table 7). The scores of subscales of MSCBQ indicated that the subjects also performed a more amount of behaviors for universal self-care requisites with average rating score of 3.84 and SD of .54, behaviors for health deviation self-care requisites with average rating score of 3.88 and SD of .48, psychological self-care behaviors with average rating score of 3.91 and SD of .62, and physical self-care behaviors with average rating score of 3.85 and SD of .48. The majority of them or 96.72% performed a

more amount of self-care behaviors. The findings related to self-care behaviors were interpreted as follows.

First, those findings might be a consequence of the selection of sample. All of the subjects were selected in the outpatient department of radiotherapy. They were ambulatory patients. They came to the outpatient department for treatment every time by either themselves or were accompanied by family members. In addition, less than half of the subjects or 42.62% (Table 2) reported no presence of chronic illness, and these subjects stated that the illness influenced a little of their performance of activities in daily life. Therefore, most of the subjects in this study were able to engage in daily life activities, and they were able to perform most of the self-care behaviors.

The second reason is that all of them started to receive radiotherapy four to six weeks after operation. Most of them had recovered from the operation. They could carry out most of the daily life activities by themselves. The third, two of the six radiotherapy departments made an appointment of time for treatment with patients according to the disease, for example, the breast cancer patients received the treatment from 10:00 am to 11:30 am. This arrangement provided the patients with opportunity to communicate each other about the caring of breast cancer and its treatment. Also, the patients could contact with their physicians or nurses almost every day. When they reported their changes of the condition or discomforts to their physicians, they could receive some health education about how to care for themselves.

The fourth, the relatively high amount of psychological self-care behaviors may be due to the advance of treatment of breast cancer. When asked about the psychological adjustment to the current life, most of the subjects reported the hope of recovery from the disease and confidence regarding the combined therapy. They believed that their breast cancer could be cured by the advanced technique.

Therefore, it is not surprising that the subjects in this study were found to perform more amount of self-care behaviors. This indicates that the subjects were still had some partial self-care deficit. Some of them or 3.28% still performed less amount of self-care behaviors. For example, more than half of the subjects did not know they should drink more fluids than usual. Some of them did not know what kind of food they should avoid. Some of them thought that they should not engage in activities. Most of them reported that they did not have the record of the effect of the treatment. Some of them reported that they could not make an effective adjustment to the disease. Some subjects were reluctant to express their feelings to others.

The findings of this study relative to self-care behaviors are consistent with the findings of Hanucharurnkul (1988, 1989). Hanucharurnkul reported a relatively high amount of self-care behaviors ($\bar{X}$ = 163.75, SD = 18.2) performed by cancer patients in Thailand with a possible range of score 41-205. The mean score of self-care behaviors in the present study was 162.36 with SD of 18.94.

The findings of the present study pertained to self-care behaviors were contradictory to the findings of Dodd (1984, 1987, 1988). In the

studies of Dodd, the cancer patients were found to perform few self-care behaviors. The disparities may be due to differences in social cultural background, tools used in the study, and settings in which data were collected.

Hypothesis   There was a positive relationship between family support and self-care behaviors of breast cancer patients receiving combined therapy.

The slightly positive and significant correlation (r= .29, p< .05) between family support and self-care behaviors (Table 9) indicates that the patients who perceived more family support will perform more self-care behaviors.

There are also positive and significant correlations between family support and subscales of self-care behaviors: behaviors for universal self-care requisites (r= .22, P < .05), behaviors for health deviation self-care requisites (r= .29, p < .05) and psychological self-care behaviors (r= .35, P < .01). The correlation between family support and physical self-care behaviors was positive but not significant(r= .21, p= .05) (Table 9). Those results can be explained as follows.

According to Orem's theory of self-care, performance of self-care requires motivation, knowledge and skill. Family can influence individual's motivation to engage in self-care and influence the kind and amount of self-care behaviors. Family support contributes to the members' feelings of being loved, valued and feelings of control and self-esteem. Such feelings may encourage the patients to engage in self-care behaviors. For

a women with loss of a breast, support from her husband was more valuable. Therefore the breast cancer women receiving combined therapy were motivated to perform more self-care behaviors to improve the quality of life. Thus the moderate correlation between family support and psychological self-care behaviors was understandable. The family members also provided required information to promote the patients' performance of self-care behaviors, and gave feedback to the patients' performance. Hence the self-care behaviors can be improved.

The correlation between family support and self-care behaviors in the present study was slightly correlated ($r = .29$, $P < .05$). This may be discused according the formulation of basic conditioning factors of self-care agency in the Orem's Self-Care theory (1991). In the Orem's theory (1991), ten basic conditioning factors are presented. The family support was only one of these factors. This is supported by the study of Hanucharurnkul (1988), which found that social support, occupational prestige, and stage and site of cancer accounted for 47% of the variance in self-care. Therefore, the slightly correlated between family support and self-care behaviors is understandable.

The nonsignificant correlation between family support and physical self-care behaviors might be the consequence of sample selection. The subjects in this study were ambulatory patients and they could carry out their activities of daily life by themselves. Therefore the subjects themselves were the primary self-care agents, and the family members were peripheral (Musci & Dodd, 1990).

The correlation between family support and self-care behaviors in this study is consistent with the findings of some previous studies. In the study of Hanucharurnkul (1988), social support and self-care behaviors were positively correlated (r= .59, p < .001) with the 98.2% of the sources of social support being from family members. In the study of Zemore and Shepel (1989), emotional support was positively correlated with psychological adjustment of postmastectomy patients. This is consistent with the findings of the present study that family support correlated positively and significantly with the psychological self-care behaviors (r= .35, p < .01).

The findings of the positive correlation between family support and self-care behaviors were different from the findings of some previous studies. In the study of Musci and Dodd (1990), there was not a significant correlation between family functioning and self-care behaviors of breast cancer patients. Dodd and Dibble (1993) found that cancer patients with lower social support scores performed more self-care behaviors. The differences may be due to the different tools used, different health conditions of the subjects, and the settings in which data were collected