

Stress and Burdens among Family Caregivers of Adult Patients with Cancer at Oncology Center in Al-Najaf City

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Abstract:

Caregivers have an important role in caring and in recovery of patient with cancer. They may experience psychological problems such as anxiety, depression and decreases in quality of life

Adescriptive design cross-sectional study was applied at family caregivers of patients with cancer in oncology center at-AL-Najaf city. The study continued from 20st September 2016 to 7th September 2017, in order to assess stress and burdens among family caregivers of cancer patients, as well as, to find any significant relation for socio-demographic characteristic with their stress and burden. By using a non-probability sampling technique (purposive sampling) based on criteria of one year after diagnosis, a questionnaire composed of three parts; the first part includes inquiry regarding the socio-demographic characteristics of participants, and the second part concerns with stress of family caregivers, while the last part includes questions relating to the burdens of family caregivers.

The results indicate that more than half of sample, 75 (50,3%) with stress. With regard to burden the majority of caregivers 127 (85,2%) with low burden. With respect to the relation of participants' socio-demographic, the data of their stress levels showed no significant association except the gender of caregivers, while concerning the family caregivers burdens only (gender of patients, gender of caregivers and level of education) demonstrated a significant relation.

The study concludes that family caregivers suffering from stress and burden may be due to a lack of medical, social and economic support from governmental and charitable organization. The recommendation was prepare qualified health care professional to deal effectively with negative outcome from caregivers and to improve emotional status.

Key words: stress, burden, family, caregivers, adult patients .

1. INTRODUCTION

Cancer is the name specified to a group of related diseases. In all types of cancer, some of the body's cells begin to divide without stopping and spread into surrounding tissues [1] . In the worldwide, one of the common causes leading to morbidity and mortality is cancer in 2012, the new cases about 14 million [5]. Diagnosis with cancer not only effects on the patient but this a major effect on family and caregivers[6]. More studies found the cancer diagnosis have a greater effect on family than patients [2]. Caregivers have an important role in caring and in the recovery of patients with cancer. They may experience psychological problems such as anxiety, depression and decreases in the quality of life [3]. There is a new style for cancer patients to private homes and early discharge for hospital. This requires more care from the persons that is closest to the patient. This style is marked with the several patients with advanced cancer. Long-term hospitalization and admission to nursing home that un prefer to families, that prefer home care. At home, family caregiver (FC) was the main provider that supports physically and emotionally of the patient. "Family caregivers are mostly the patient's spouse, partner or closest relatives, but significant others

can also take on that role and function" [4]. Family caregivers caring cancer patients have specific emphasis physical, economic, psychosocial effects of caring. Understanding the serious and wide roles of caregivers that they play in the oncology situation and influence for these on their health and well-being can assist care professionals in supporting caregivers, aiming to take their a responsibilities facilities and associations toward those who are in need [7]. Family caregivers that provide care in home needs more knowledge and skills such as monitoring their family member's for acute or chronic conditions, recognizing early signs of impending problems such as medication side effects, knowing how and when to respond,

and procedures such as dressing changes. Most family caregivers accept the role without considering any lack the skills or resources they hold in caregiving tasks. Caregivers are normal to make these difficult tasks alone, without any official assessment of their level of ability associated to formal support [26].

Family caregivers are often more susceptible to stress, which has a negative impact on their behavior and a significant effect on physical health. Previous studies

have shown that they are at risk of impaired immune system failure, heart disease and early death [8]. Cancer patients are exposed to many problems and needs including: disease and treatment monitoring, symptom management, medication administration, assistance with activities of daily living, psycho-emotional support and assistance with instrument care [9],[10].

The problems and needs of cancer patients can lead to more of burden for family caregivers. This may be because they are not prepared to take care of the patient at home [11].

Family caregivers receive only minimal attention from care provider and this intensive the needs of patients [12].

Objectives of the study:

- 1-to assess the level of stress among family caregivers.
- 2-to identify the burdens among caregivers.
- 3-to examine the relationship between the level of stress, burdens and certain variables of (gender of patient, gender of caregiver, age of patient, age of caregiver, level of education, occupation and the degree of relatives).

2. Materials and Methods:

A descriptive design cross sectional study was carried out, so as to get the listed objectives, during the period from 20 September 2016 to 7 September 2017.

Ethical consideration

The participants answered of the question of the current study and its goals and then a voluntary verbal consent was obtained in order to participate in the study beside, the confidentiality of information which taken or

obtained from participants will be saved. in addition, an ethical approval was obtained from the ethical committee of research in the Faculty of Nursing/University of Kufa regarding the confidentiality and anonymity of participants.

Setting of the study

The study was conducted at the oncology center in Al-Najaf city.

Sample of the study

A non-probability sampling technique (purposive sample) based on the criteria of patient diagnosis with one year. A sample of 149 family caregivers was taken from the oncology center by using SPSS (SPSS → Data → Select cases).

Instrument of the study

By studying the related literature and studies the questionnaire was ready and reformed depending on previous studies. It was divided into three main parts (part one contained demographic information, part two included questions related to stress of family caregivers of adult patients with cancer and part three included questions that determine the burdens among family caregivers). The total number of questions for this tool was 38 questions (questions related to the demographic are 6 , questions on the stress are 10 and questions related to burden are 22) Questions that determine stress and burden was Likert scale with 5 alternatives. **High Knowledge:** mean score > 2.4

The Results:

TABLE (1): STATISTICAL DISTRIBUTION OF STUDIED SAMPLE ACCORDING TO THEIR SOCIO-DEMOGRAPHIC DATA:

SAMPLE (N=149)

Demographic data	Rating and intervals	Frequency	Percent
Patients' age groups / years	18-29	7	4.7
	30-44	17	11.4
	45-54	40	26.8
	55-64	35	23.5
	65 and more	50	33.6
Care givers' age	18-29	11	7.4

groups / years	30-44	86	57.7
	45-54	47	31.5
	55-64	5	3.4
Gender of care givers	Male	110	73.8
	Female	39	26.2
Gender of patients	Male	108	72.48
	Female	41	27.52
Occupation	Employee	44	29.5
	free work	70	47.0
	Housewife	29	19.5
	Retired	1	0.7
	Unemployed	5	3.4
Residence area	Rural	47	31.5
	Urban	102	68.5
Level of education	Unable to read and write	12	8.1
	Able to read and write	4	2.7
	Primary school graduated	38	25.5
	Secondary school graduated	50	33.6
	Institute graduated	18	12.1
	College graduated	27	18.1
Degree of relative	1.0	139	93.3
	2.0	10	6.7
Total		149	100

TABLE (2): STATISTICAL DISTRIBUTION OF THE OVERALL STUDY SUBJECTS' RESPONSES TO THE (STRESS DOMAIN) ITEMS:

Main Domain	Levels	Frequency	Percent
Overall Stress	Low	74	49.7
	Fair	75	50.3
	Total	149	100.0

TABLE (3): STATISTICAL DISTRIBUTION OF THE OVERALL STUDY SUBJECTS' RESPONSES TO THE (BURDEN DOMAIN) ITEMS:

Main Domain	Levels	Frequency	Percent
Overall Burden	Low	127	85.2
	Moderate	22	14.8
	Total	149	100.0

TABLE (4): CORRELATION BETWEEN CAREGIVERS' BURDEN AND STRESS

Main domains	Statistical parameters	Burden	Stress
Burden	Pearson Correlation		.624**
	Sig. (2-tailed)		0.0001
	N		149
Stress	Pearson Correlation	.624**	
	Sig. (2-tailed)	0.0001	
	N	149	
**. Correlation is significant at the 0.01 level (2-tailed).			

TABLE (5): RELATIONSHIP BETWEEN OVERALL CAREGIVERS' STRESS AND THEIR DEMOGRAPHIC DATA:

Demographic data	Chi-square Value	d.f.	p-value
Age of patients	5.040	4	0.283 NS
Age of caregiver	0.327	3	0.955

			NS
gender of patients	0.857	1	0.355 NS
gender of caregiver	3.984	1	0.046 S
Occupation	3.972	5	0.553 NS
Residency	4.595	2	0.101 NS
Levels of education	11.929	6	0.064 NS
Degree	1.328	2	0.515 NS

TABLE (6): RELATIONSHIP BETWEEN OVERALL CAREGIVERS' BURDEN AND THEIR DEMOGRAPHIC DATA:

Demographic data	Chi-square Value	d.f.	p-value
Age of patients	1.752	4	0.781 NS
Age of caregiver	0.667	3	0.881 NS
gender of patients	9.454	1	0.002 HS
gender of caregiver	7.582	1	0.006 HS
Occupation	5.491	5	0.359 NS

Residency	0.415	2	0.812 NS
Levels of education	20.20	6	0.003 HS
Degree	1.857	2	0.395 NS

TABLE (7): MEAN DIFFERENCES (INDEPENDENT SAMPLE T-TEST) BETWEEN THE CAREGIVERS' BURDEN AND SOME OF DEMOGRAPHIC DATA:

Demographic data	Rating	Mean	Std. Deviation	t- value	d.f.	p-value
Gender of patients	Male	71.963	9.42945	3.078	147	0.002 HS
	Female	65.951 2	13.3696 5			
Gender Of Caregivers	Male	71.736 4	9.56549	2.731	147	0.007 HS
	Female	66.282 1	13.4828 3			

TABLE (8): ANALYSIS OF VARIANCE OF THE CAREGIVERS' BURDEN ACCORDING TO THEIR LEVELS OF EDUCATION:

Levels of education	Mean	Std. Deviation	Std. Error	F	P- value
Unable to read and write	60.5833	14.09357	4.06846	5.926	0.001 HS
Able to read and write	78.5	12.3	2.95804		
Primary school graduated	66.2368	10.2415	1.66139		
Secondary school graduated	74.58	7.66676	1.08424		

Institute graduated	66.6667	13.19536	3.11018		
College graduated	73.125	9.72363	1.98483		

1. Discussion:

Part-I: Discussion of the Socio-demographic Characteristics Related Family Caregivers of Patient with Cancer. Table one explain that more than one third of patients are with age (65 and more).

Regarding the age of caregivers, more than half (57,7%) are with age ranging from (30-44) years old .In relation to gender, the majority of caregivers and their patients were males (73,8%),(72,48%) respectively.

Furthermore, the study results indicated that (47%) of caregivers were with free of work and (68,5%) of them from urban residency.

Concerning the subject's level of education, more than one third (33,6%) of them are graduates from the secondary school. The great majority of caregivers (93,3%) were of first degree in their relation with their patients.

The current study shows that a group of (149) family caregivers are with the same number of patients.

Our study recorded that the common age of patients was 65 year and above. This age is more susceptible to cancer because of hormonal disturbance and the person with aging is more effected by diseases that may influence on the immune system and organs. This finding is similar to a study done by Melissa Grossman et al., (2015), who reported that the common age of participants was 65 and above years.

The current study found that most patients are males (72.48%) and this may be because of men are more susceptible to radiation and risk factors that can lead to cancer, as well as war and its waste, which is also a major cause of cancer. This result is similar to the result of the study conducted in (2012) by M. Tevfik

Dorak, and Ebru Karpuzoglu who found that most cancer patients was male.

This study find, that above half of family caregivers was of the age (30-44) years and the majority of them were males, this results can be interpreted as: the male with this age was more productive and can tolerate to provide care for relatives. This is reinforced by a study done in (2005) by Sherine et al, who reported that the population of the male subjects was higher compared to the female and the age of family caregivers was with a mean of (42,1)year.

In relation to the occupation and level of education, our study finds that (47%) of family caregivers were with free work, and most of them (33,6%) were secondary school graduates. This result may be because they have more time and free. Therefore most of the family caregivers are from them. This results agrees with the results of study conducted by Maheshwari and Rajinder in (2016) who found that one third of family caregivers were self-employee.

More than half for family caregivers are from urban residency (68.5%). This result can be interpreted via the place of the oncology center that is located in the city. People living in the city are more urbanized, therefore, more conscious in seeking medical care. This results are in contrast to Maheshwari and Rajinder who reported that (68.9%) from are rural areas.

Our study can be justified be the fact that cancer is a major problem that requires patience and endurance in the patient's care. These traits are only available in close relatives who have great emotional ties. This is reinforced by study in (2016) by Maheshwari and Rajinder who reported that most commonly, the family caregivers for cancer patients are from first degree.

Part-II: Discussion of the Level of Stress among Family Caregivers of Adult Patient with Cancer

Table two shows that the level of stress ranges between fair and low in equal percentages approximately.

The present study explain that cancer is a stressor for both the patient and his family. This result was identical to many of the results of studies. One of the studies found that in all four caregivers of patients with cancer, one was suffering from stress. (Mahadevan, et al., 2013).

Family caregivers suffer from much stress than non-caregivers (Pinquart & Sorensen., 2003).

About 16% of family caregivers feel emotionally stressed and 26% believes that taking care of patients is stiff on them emotionally (Center on Aging Society., 2005). Care giving may lead to a continuous worry (Center on Aging Society., 2005).

In addition, family caregiver's sense less control for lives compared to non-caregivers (Marks, et al., 2002; Pinquart & Sorensen., 2003). That is may be associated to stress.

Those who cannot hold wholl responsibilities of caregiving (Center on Aging Society., 2005), too, experience a lot of stress of feeling.

Part-III-A: Discussion of the Burden among Family Caregivers of Adult Patients with Cancer

Table three depicts that the great majority of sample are with low level of burdens (85.2%).

Cancer is a great source of burden for patients and family caregivers. This may be related to patients, needs that include physical, psychological, and emotional support. This requires much knowledge and more skills from family caregivers and developed responsibilities for them. These responsibilities may lead to much burden that includes social and economic burdens. Therefore, caregivers are constantly exposed to great burdens and do not pay attention to themselves.

Many studies noted some family caregiver's burden of patient with cancer. One of these studies was

conducted by Sihame et al in (2015) who found a great influence of cancer patients on family caregivers. Informal caregivers' burden should be recognized by the society. Assistance and information from healthcare professionals remains the key to improve the ability of caregivers to cope with caring for patients affected with cancer.

Family caregivers are involved in each step of the management including: "patient follow-up, diagnosis announcement, treatment decision and side effects monitoring". They often try to hide the diagnosis from the patients to overprotect him, which is frequent in our culture.

Braun M et al., (2007) and melon s et al (2006) stated that anxiety and depression are most commonly reported in family caregivers of patients with cancer.

Sihame et al in (2015) noted that a negative social impact on family caregivers may lead to the distraction of daily routines and the change for social relationship.

Family caregivers associated with economic costs was significant factor in burden of caregivers for both males and females (Daniel .,2012).

In this study, the level of burden for family caregivers for patients with cancer has been noted where everyone has a burden with variations, although all government services are provided free, which include care and treatment.

Part- IV: Correlation between Caregivers' Burden and Stress

Table four which shows the correlation between caregivers burden and stress and record high significant between of them, this result can be related to long period of exposures to stress can develop more social and economic burdens.

Part- V: Discussion Relationship between Socio-demographic Characteristics and level of Stress among Family Caregivers of Adult Patient with Cancer

The current study findings presented that there was

no significant relationship between the caregivers socio-demographic characteristics (age of patient, gender of patient, age of caregivers, occupation, residence, level of education, degree of relative) and the overall stress level, except the gender of caregivers. This result is in agreement with Gul, et al., (2012). who reported high significant between the level of stress and gender of caregivers.

Part-VI: Discussion of the Correlation between Demographical Characteristics and Burdens

This study found no significant between the (age of patient, age of caregivers, occupation, residence, degree of relative) and the burdens.

But it reported a high significant relationship between the gender of patients and gender of caregivers with burdens, where the high burdens was noticed among males. our justification is that males are responsible for the economic status and more exposed to social problems. This result is reinforced by the study done by Gul, et al., (2012) who found a significant relationship between the gender of patients and the gender of caregivers with the level of burden. In addition, the finding of the study showed a high significant it association between the caregivers burdens with the level of education and concluded that the caregivers be with high education were with low burden. This result may be related to the fact that educated people are more tolerant and more understanding of the instructions from doctors and the competent health staff. This result is similar to the study finding conducted by Inger, et al., (2013) who recorded that caregivers with higher levels of education were associated with lower levels of burden

Conclusion:

According to these results:

1. Family caregivers of cancer patients were suffering from stress and burdens.
2. Socio-demographic variables of patient gender, caregivers gender and level of education were highly significance with burden. Only the gender of caregivers was significant with stress.

The study concludes that there is a lack of medical, social, and economic support from governmental and charitable organization.

Recommendations:

1. Family caregivers needs should be assessed by an interdisciplinary team.
2. Periodic screening for them to early diagnosis of mental symptoms.
3. Preparing a qualified health professional to deal effectively with negative outcomes from caregivers and to improve emotional status.

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