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RESEARCH ARTICLE

Psychosocial Burdens among Caregivers of Patients with Renal Failure in Al-Diwaniyah Government

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ABSTRACT

Objective(s): The purpose of this study is to assess the level of psychosocial burden among caregivers of patients with renal failure. The study began on October 13th, 2021 and will conclude on May 18th, 2022. Methodology: The design is carried out is A descriptive correlation design. The study is being conducted in Al Diwaniyah City's male and female caregivers of patients with renal failure. We select a non-probability convenience sample of (210) caregivers . The study will use a Zarit Burden Interview (ZBI) questionnaire that is divided into two sections: part I will examine the sociodemographic characteristics of patients with renal failure and part II will examine the sociodemographic characteristics of caregivers and Zarit Burden Interview (ZBI) questionnaire that used to measure the degree of burden for caregiver during caring of Patients with Renal Failure.. A pilot study is used to determine the content validity and internal consistency reliability. The study instrument is used to collect data. The descriptive statistical data analysis approach is used to analyze the data, while the inferential statistical data analysis approach is used to analyze the data.

The results of the study included that (74.8%) of the caregivers of patients with renal failure suffered from moderate to severe burden levels towards caring for their patients.

Conclusion: the major psychosocial burdens of caregivers that results from caring of there patients with renal failure according to the study resulting that renal failure is a stress for each patients and there caregivers.

Recommendations: in this study included that caregivers should be given more attention in terms of burden assessment and burden reduction measures.

Keywords: Psychosocial Burden, Caregiver, Renal failure

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INTRODUCTION

People around the world are affected by chronic kidney disease (CKD), a severe public health problem. An abnormally low glomerular filtration rate, along with diminished kidney function in the areas of regulation, excretion, and endocrine, serve as diagnostic indicators. Patients who have glomerular filtration rates of less than 15 ml/hour/1.73 m2 must receive dialysis in order to live (Frazao et al., 2014).

End-stage renal disease (ESRD) may affect the function of many systems in the body, such as the cardio-pulmonary, gastro-intestinal, muscular-skeletal, nervous system, skin, and reproductive system, while the urine retention and accumulation of nitrogen substances and materials in the blood may be the main symptoms (Smeltzer et al., 2015).

End-stage renal disease (ESRD) may develop as a result of another disease, such as diabetes mellitus, hypertension, renal-vascular disorder, immunologic disorder, lupus erythematosus, tuberculosis, urinary tract obstruction, and obesity, and may progress to prostate and urethral disorders, as well as congenital kidney anomalies. End-stage renal disease is the final stage of chronic kidney disease when the kidneys are unable to function adequately to meet daily needs. Thus, renal replacement therapy is required at this point to ensure survival, and hemodialysis (HD) is considered critical and plays a significant role in extending patients' lives. When HD patients were compared to healthy members of the general population and renal transplant recipients, a significant impairment of renal function was seen (Levey et al., 2015).

Hemodialysis, is a way to clean someone's blood when their kidneys aren't working right. When the kidneys are failing, this type of dialysis removes waste products like creatinine and urea, as well as free water, from the blood outside of the body. Hemodialysis is one of three ways that the kidneys can be replaced (the other two being kidney transplantation and peritoneal dialysis). Apheresis is another way to separate blood components like plasma or cells outside of the body (Bresn, 2017).

Caregivers are those who provide assistance to those in need during times of distress or illness. Their importance becomes more apparent in the event of chronic conditions such as renal failure. They encounter numerous obstacles when it comes to providing high-quality care to their patients. Caregiver load is a term that refers to the extreme stress or strain that someone who is caring for another person who is ill endures. A person caring for someone with a chronic illness, such as renal failure, may face difficulties related to finances, physical strain, mental health, the care receiver's relationship, and social support. The cost of treating the disease and its complications places a major financial burden on renal failure patients Additionally, it places a considerable load on their carers and the broader society (Joy et al., 2019).

Caregiver burden has two objective and subjective dimensions: objective caregiver burden can be considered as duration and the level of effort required to meet the needs of others, which includes the problems related to financial, family, and social costs; and the subjective health burden refers to the level of experience of the caregiver in facing objective caregiver burden, which includes emotional and behavioral problems caused by disease (Bamari et al., 2016).

METHOD

A descriptive correlation study design was carried out. The study was conducted among caregivers of patients with Renal failure living in the urban and rural area, Iraq / AL Diwaniyah.. A non-probability convenience sample of (210) caregiver were selected. All caregivers who agreed to participate in the study signed a consent form.

The study will use a self-reported questionnaire that is divided into two parts: (part one is related to the demographic information of Patients who have Renal failure). Part two, Firstly is related to caregiver's demographic data and Secondly is consists of Zarit scale (22 questions). The content validity is determined by an expert panel, and the internal consistency reliability of the questionnaire depends on the reliability of the Cronbach's alpha correlation coefficient in a pilot study.

The study instrument is used to collect data. The descriptive statistical data analysis approach is used to analyze the data, while the inferential statistical data analysis approach is used to analyze the data.

RESULTS

Table (1): This table represents the descriptive statistics of socio-demographic information of the patient with renal failure in term of frequencies and percentage. Out of (210) Patients participating in this study, their age ranged from 51 to 61years old and made up (22 percent) of the total number of participants. In terms of gender, male patients were predominant and made up more than half in compared with female, it composes (51.4%). Marital status related to the findings, patients were demonstrated as married and constituted the higher percentage (58.6%), It is clear from the findings that majority of study sample were Read and write , it reflected (37.1 percent) out total number,. The findings show the distribution of the studied sample according to the number times of HD per week e, results show that most of the patients go to Hemodialysis three times per week (86.2 percent).

Table (2): This table represents the distribution of the patient's caregiver their demographic characteristics in term of frequencies and percentage The caregiver's ages in study ranged from 19 to 29 years it composes (30.5 %)., while the Gender related to results showed that male caregiver predominated in the sample , accounting for 56.7 % of the total. In terms of education, 22.4 percent who are Read and write in study results . In regards with the number of family members , the showed that majority (59 %) of study sample were contains from 3 to 6 members in the family. Marital status related to the findings, caregiver were demonstrated as married and constituted the higher percentage (71.4 %), The most the of study finding unemployed or house wife (33.8 %) with Hardly enough of monthly income (60%). Were more half of the study sample living in city (70%0), in which (63.8) of them Permanent Accommodation.

Table (3): In the light of statistical analysis cut off point, this table illustrated the items of Psychosocial Burden scale towards caring patients with renal failure where it ranges between No to sever Burden. The study results indicate that the majority of items (45%) were moderate burden level Except item (5, 6,9,11,13,16,18,19) were mild burden (37%), and item (14, 8, 7) were sever burden (13.5%) , While item number (4) were sever burden (4.5%).

Table (1): Descriptive Statistic of Socio-Demographic Characteristic of the Patients with Renal failure.

Demographic Data	Groups	Freq.	%
Age in years	7 to 17	10	4.8
	18 to 28	37	17.6
	29 to 39	29	13.8
	40 to 50	44	21.0
	51 to 61	46	21.8
	62 to 72	34	16.2
	73 to83	10	4.8
	Total	210	100.0
Gender	Male	108	51.4
	female	102	48.6
	Total	210	100.0
educational level	neither can read nor write	50	23.8
	Read and write	78	37.2
	Primary school	20	9.5
	Middle school.	29	13.8
	Secondary school.	8	3.8
	Institute.	11	5.2
	College/ Master's Degree	14	6.7
	Total	210	100.0
Marital Status	Single	45	21.4
	Married	123	58.6
	Divorced	14	6.7
	Widow.	28	13.3
	Total	210	100.0
number times of HD per week	2	29	13.8
	3	181	86.2
	Total	210	100.0

Table (2): Descriptive Statistic of Socio-Demographic Characteristic of the caregiver for Patients with Renal failure

		Freq.	%
Age in years	19 to 29	64	30.5
	30 to 40	56	26.6
	41 to 51	55	26.2
	52 to 62	31	14.8
	63 to 73	4	1.9
	Total	210	100.0
Gender	Male	119	56.7
	Female	91	43.3
	Total	210	100.0
the number of family members	3 to 6	124	59.0
	7 to 10	82	39.1
	11 to 14	4	1.9
	Total	210	100.0
Marital Status	Single /unmarried	51	24.3
	Married.	150	71.4
	Divorced.	2	1.0
	Widow	7	3.3
	Total	210	100.0
educational level	neither can read nor write	12	5.7
	Read and write	47	22.4
	Primary school	20	9.5
	Middle school.	30	14.3
	Secondary school	27	12.9
	Institute	37	17.6
	College/ Master’s Degree	37	17.6
	Total	210	100.0
the work	Employee.	69	32.9
	Freelance / work at home.	70	33.2
	House wife/ unemployed	71	33.8
	Total	210	100.0
monthly income	Enough	26	12.4
	Hardly enough	126	60.0
	Not enough	58	27.6
	Total	210	100.0
living	City.	147	70.0
	Countryside	63	30.0
	Total	210	100.0
accommodation type	Permanent Accommodation	134	63.8
	Rent.	28	13.3
	Other	48	22.9
	Total	210	100.0
who is the caregiver	Father	10	4.8
	Mother	27	12.8
	Brother	23	11.0
	Sister	9	4.3
	Husband	26	12.4
	Wife	36	17.1
	Son.	60	28.6
	Daughter	19	9.0
	Total	210	100.0

Table (3): Caregiver's Responses to the Psychosocial Burden

NO	Items	Mean	S.D.	Evaluation
1	Do you feel that your relative asks for more help than he/she needs?	2.06	.749	**moderate to severe**
2	Do you feel that because of the time you spend with your relative that you don't have enough time for yourself?	2.15	.802	**moderate to severe**
3	Do you feel stressed between caring for your relative and trying to meet other responsibilities for your family or work?	2.73	.729	**moderate to severe**
4	Do you feel embarrassed over your relative's behaviour?	.79	.652	**little or no**
5	Do you feel angry when you are around your relative?	1.21	.762	**mild to moderate**
6	Do you feel that your relative currently affects our relationships with other family members or friends in a negative way؟	1.30	.739	**mild to moderate**
7	Are you afraid what the future holds for your relative?	3.42	.615	**Severe**
8	Do you feel your relative is dependent on you?	3.21	.576	**Severe**
9	Do you feel strained when you are around your relative?	1.87	.704	**mild to moderate**
10	Do you feel your health has suffered because of your involvement with your relative?	2.04	.691	**moderate to severe**
11	Do you feel that you don't have as much privacy as you would like because of your relative?	1.67	.679	**mild to moderate**
12	Do you feel that your social life has suffered because you are caring for your relative?	2.40	.597	**moderate to severe**
13	Do you feel uncomfortable about having friends over because of your relative?	1.38	.616	**mild to moderate**
14	Do you feel that your relative seems to expect you to take care of him/her as if you were the only one he/she could depend on?	3.02	.614	**severe**
15	Do you feel that you don't have enough money to take care of your relative in addition to the rest of your expenses?	2.86	.844	**moderate to severe**
16	Do you feel that you will be unable to take care of your relative much longer?	1.43	.863	**mild to moderate**
17	Do you feel you have lost control of your life since your relative's illness?	2.11	.672	**moderate to severe**
18	Do you wish you could leave the care of your relative to someone else?	1.14	.780	**mild to moderate**
19	Do you feel uncertain about what to do about your relative?	1.89	.865	**mild to moderate**
20	Do you feel you should be doing more for your relative?	2.50	.843	**moderate to severe**
21	Do you feel you could do a better job in caring for your relative?	2.01	.795	**moderate to severe**
22	Overall, how burdened do you feel in caring for your relative?	2.60	.620	**moderate to severe**

N (210), cut off point (0.99), little or no (mean of score 0-.99), mild to moderate (mean of scores (1-1.99), moderate to severe (mean of score 2 -2.99), severe (mean of score 3- 4)

Findings indicate that the (74.8 %) of caregiver were moderate to severe burden level towards caring patients with renal failure, followed by those who were mild to moderate burden (23.3 %), and followed by those who were severe burden (1.9 %).

Figure 1: Distribution of Study Sample (caregivers) by Psychosocial Burden

DISCUSSION

Part I: Discussion of the patient's Characteristics

Table (1) throughout the course of the data analysis of the present study, regarding the gender, the results were rather converging, the result reveals that the male is more than female, male (51.4 %) vs. (48.6 %) for females Table (1). We can conclude from these results this result reflects the higher prevalence of renal failure in males compared with females., as demonstrated by some researches and participants study renal failure disease such as Mashayekhi et al (2015) majority of patients were male (56.1%). It is possible these result can lead us to the fact that male are more likely than female to have renal failure disease in this region.

According to the patient's age, the results showed that the predominant age of the study sample was (21.9%) and their ages were (51-61) years and (21%) with ages (40-50). This finding was reinforced by a study he conducted Rioux et al. (2012) where it was 52 ± 10 years.

Marital status related to the findings, patients were demonstrated as married and constituted the higher percentage (58.6%), which is consistent with a study performed by Mansour, (2013). The study showed that 67.30% of the patient were married. As it known that the effect of the persons marital status, but in light of the Iraqi culture, the marital status after disease may still continuing because of the strong sociocultural band in southern area of Iraq (researcher).

Concerning the educational levels of the patient's, the greater number (37.1%) of them read and write, and (23.8) not read and write that had low level of education. While the result obtained from the study done by Biniaz, et al., (2013), who found that the highest percentage (42%) of the study sample is of low level of education.

Such result is an ordinary outcome for our society because the largest number of families under the line of poverty with insufficient monthly income, poverty makes a large percentage of the population move away from education (researcher).

Relative to the number of hemodialysis per week, the results indicated that the majority of (86.2%) patients have done hemodialysis (3- 4) times per week.This finding agrees with the result obtained from the study done by Mashayekhi et al (2015). The authors showed that (86.3%) of the patient's done hemodialysis 3times per week, also this result agrees with the National Kidney Foundation, (2015) which reported that the hemodialysis is classically done 3 times per week for about 4 hours at each time.

Part II: Discussion of Socio-Demographic Characteristics Related Caregiver of the Patients with Renal Failure

Table (2) the findings indicated that the majority of the gender (56.7%) were (males) of the entire sample this result is supported by the study conducted by Sharma et al (2021) who reported that the mostly (57%) of caregivers gender were male.

And that the majority of caregivers for the patients (37.6) were son/daughter, followed by spouse (wife/ husband) represents (29.5%), this result is supported by the study conducted by hassan et al (2019) who mentioned that the greater number of caregivers (43.4%) were (son/daughter),and followed by (33.7%) were spouse.

According to the researcher, the general culture of Iraqi society, and the strength of family bonding among members of Iraqi families, the largest percentage of caregivers was their children. And because there was a high percentage of patients who were married, the highest percentage in the second place were married couples. Where it is their responsibility to take care of the family and the patient and visit the dialysis center.

Regarding the age of the caregiver, the predominant age group for the study sample (30.5%) is the age group (19-29) years , followed by (26.7%) is the age group (30-40), and followed by (26.2%) for the age group (41-51), While the study that conducted by Chhetri & Baral, (2020) That showed that (39.02%) is the predominant age group (20-39), and followed by (37.39%) for the age group (40-59).

With regard to the number of family members, the majority (59%) of the study sample contains 3 to 6 members of the family. This result was in line with the study that conducted by Cagan et al., (2018) that included less than half (44.17%) of the study sample had 1 to 2 children followed by (38.03%) of the study sample had 3 and more children .

In relation to levels of education, the results show that the majority of the study sample is Read and write (37.1%) Table (2). This result comes along with Bayoumi, (2014) who indicated that (44.0%) of the caregivers with Renal Failure patient were Basic/intermediate .

Table (2) shows that the majority of marital status (71.4%) are married. This result is in line with the general culture of our societies; where both males and females tend to marry early. This finding is consistent with Sharma et al (2021) who found that (73%) of the caregivers are married. The researcher believes that the present result is a product of the natural structure of families in our country which consists of father and mother and their children, all of whom live together. Therefore, the effect of patient with renal failure will be on the family bonding of that family.

Regarding to monthly income, the result of the data analysis showed that the majority of caregivers' monthly income (60%) was hardly enough, Table (2), and this result is consistent with Mollaoğlu (2013) the one who reported that (73.8%)) of the sample belonged to families with a hardly enough amounts of income and Suffering from financial stress.

Researcher believes that the absence and weak government financial support for families of patients with Renal failure from social care networks and the poor economic situation that the country is going through are among the most important causes of financial stress for these families.

Concerning residency, more than two thirds of the study sample (70.0%) are from urban residential area. This result comes along with hassan et al (2019) whose findings indicated that the majority of the study subjects are (54.2%) were living in urban area. The researcher believes that one of the most important barriers families of patients with Renal failure and those living in rural areas is the difficulty of moving to and from the center due to the lack of transportation there, especially during the days of curfews by the government. Or because of bad weather or other obstacles that increase the burden on the provider and caregiver, which is obligatory to bring the patient to the dialysis center on the days specified for the patient to perform dialysis.

In terms of their occupation or the Job of Caregivers the results show that the highest percentage of the study sample (33.8) are Unemployed/ housewives. This result is consistent with Chhetri & Baral (2020) stated that most caregivers of patients with renal failure were the majority (47.15%) Unemployed. Also this result was similar to Bayoumi (2014) that showed (60.0%) are Unemployed/ housewives.

The researcher believes, that the largest percentage of caregivers for patients with kidney failure were that they Unemployed / housewives, because of their commitment to providing care for patients with kidney failure, which takes a lot of time, and thus the caregiver cannot commit to a specific work.

Finally, in relation to the Accommodation Type, the results show that the major group of the study sample (63.8%) are Permanent Accommodation [Table (2)].the researcher did not find a study that supports this result.

Part III:: Discussion of Psychosocial Burden among Family Caregiver of the Patient with Renal Failure

Figure (1) Shows that the level of psychosocial burden among caregiver's ranges between no, mild, moderate and sever. The majority of participants (74.8%) have a moderate to severe burden level of psychosocial burden, followed by those who were mild to moderate burden (23.3 %), and followed by those who were severe burden (1.9 %). through the total scores concerning Likert scale.

This results have the same agreement with the study of Mashayekhi et al (2015) who reported the majority of caregivers of patients with renal failure, In this study (72.5%) of caregivers reported moderate to severe levels of caregiver burden.

the researcher's point of view, Renal failure disease is the leading cause of patient and caregiver burden. This may be related to the patients' requirements, which may include physical, mental, and emotional care. This necessitates that caretakers have significantly greater knowledge, skills, and obligations. These commitments can entail significant social and financial strain. Therefore, the person who cares for others has the biggest duty and does not care for himself.

CONCLUSIONS

The findings indicate that Caring for patients with renal failure is a main source at psychosocial burdens for caregivers. Results show that male patients were predominant and made up more than half in compared with female, it composes (51.4%). Majority of study sample were Read and write (Low level of education), The ages of the largest proportion of the sample ranged between 51 to 61. The results showed that male caregivers were the most common caregivers, it composes (56.7%). The caregiver's ages in study ranged from 19 to 29 years it composes (30.5%). The most of the study finding unemployed or house wife (33.8%) with Hardly enough of monthly income (60%).

ETHICAL CONSIDERATIONS COMPLIANCE WITH ETHICAL GUIDELINES

The study meets with a group of caregivers and after a covering letter begins, he explains to them about the research procedures and the purpose of the study before participating, and obtained oral consent from every care giver before collection the data. Patient's caregiver ensured that the study will elevate the level of awareness about their conditions and will not cause any actual or potential harm for them. The researcher also explained to all caregiver that they can withdraw from the study at any time they want.

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AUTHOR'S CONTRIBUTIONS

Study concept; original draft writing; data collection; data analysis; and final edition review by all authors.

DISCLOSURE STATEMENT:

There are no conflicts of interest reported by the authors.

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