Relationship between Burden and Self-efficacy among Family Caregivers of Patients with Substance Use Disorders

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Abstract

Background: Substance use disorders (SUDs) have a major negative impact on family caregivers in many aspects causing various burdens in quality of life while self-efficacy allows family caregivers to evaluate capability to control and manage caregiving stress and burden**. Aim:** This study aimed to assess the relationship between burden and self-efficacy among family caregivers of patients with substance use disorders. **Design:** A descriptive relational study design was utilized in this study. **Setting**: This study was carried out in the addiction outpatient clinic in Abassia mental health hospital affiliated to General Secretariat of Mental Health and ministry of health. **Subjects:** A sample of 140 family caregivers of patients with SUDs who full field specific inclusion criteria. **Data collection tool:** Data was gathered1) Interviewing Questionnaire includes three parts: a) patient and family caregiver's demographic data, b) history of SUDs, c) Knowledge about SUDs; 2) Burden of family caregivers for patients with substance use disorders; and 3) self-Efficacy Scale. **Results:** date analysis show that more than two thirds of the studied caregivers had severe level of caregiving burden, and more than three quarters of them had low levels of self-efficacy, also three fifths of them had unsatisfactory knowledge about SUDs. There was a highly significant negative correlation between family caregivers' burden and their self-efficacy. There was a high negative correlation between family caregiver's knowledge and their caregiving burden; also there was a high positive correlation between family caregiver's knowledge and their self-efficacy. **Conclusions**: caregivers with low self-efficacy and unsatisfactory knowledge regarding SUDs experienced severe level of caregiving burden. **Recommendations:** Designing and implementation of Psycho-educational program for family caregivers of patients with substance use disorder to enhance their self-efficacy, coping abilities and quality of life and to overcome their burden of caregiving.

Keywords: Substance use disorders, family caregivers, burden, self-efficacy

Introduction:

Substance use disorders are a multidimensional trouble that threatens the quality of life of not only the individual but also their families, causing increasing stress. It describes as a disease, which may lead to psychological and physiological symptoms associated to stress or trauma in the family of the addicted individual and may cause a deep impact in these individuals. The care provided by family members to this individual is multidirectional and include financial aid, management of disease symptoms, and continuation of treatment **(Kaur, Mahajan, Deepti, & Singh, 2018).**

Substance use disorders are something that persons all over the world struggle with daily, how loved ones tend to view a family member with a substance use disorders differ among different countries or cultures. In some countries, having a family member who abuses substances can bring an incredible amount of shame and dishonor to the family **(Khadzhi, 2021).**

Burden of family caregiver is any unwanted or negative consequences experienced by caregivers of people with mental illness as a result of taking care of responsibility for patient with SUDs. Also, the World Health Organization (WHO) states caregiver burden as "the emotional, physical, financial demands and responsibilities of an individual's illness that are placed on the family members, or other individuals involved with the individual outside the health-care system **(Walke, Chandrasekaran, & Mayya, 2018).**

Caregiving burden can be either objective burden such as family disruption, financial crisis, limitations on activities of daily living and social interactions, or subjective burden which is a perceived feeling of getting overwhelmed by the care they are providing **(Farag, 2021).**

Family caregiver's life is affected negatively in many aspects, including interpersonal and social relations, leisure time activities, and financial resources. At the same time, the presence of a patient in the family usually increases intrafamily conflicts and may negatively affect the well-being of other family members **(Sharma, Sharma, Gupta, & Thapar, 2019).**

In general, burden among caregivers include physical, psychological, emotional, social, and financial difficulties that family members faced because of taking care of responsibility for patients with substance abuse **(Farag, 2021).**

Self-efficacy is the confidence that caregivers are able to perform a task or manage a situation. Family caregivers with high self-efficacy believe that they have the skills and ability to help them maneuver through life and achieve their goals **(Harter, Barrera, Turner, Glassner, Brackett, Rivette, & Meyer 2018).**

Also, self-efficacy is about learning how to carry on when one does not apply in positive when facing a challenge, higher motivation, stronger effort put into a task, lower aspiration and poor responsibility to goals, pessimistic attitude toward obstacles and greater vulnerability to burden and stress **(Harter etal., 2018).**

So nurses are the frontlines in dealing with patient and could be responsible for holding evidence-based programs including social skills, groups programs and motivation enhancement. They can encourage the patients and their family caregivers to understand life problems and adverse effects of substance abuse in aggravating such problems and show them how to pay attention on problems required information; accordingly, they can play a prominent role in decreasing the hazard of burden among caregivers with substance use disorders **(McKeever, Spaaeth-Brayton, & Sheerin, 2019).**

Significance of the study:

Substance use disorder leads to the disintegration of communities, imposes significant economic and social costs, as a result of its effects on human health and increased crime and mortality in the community, making it a major threat to society. While massive resources are devoted to control the spread of substance use disorder, it is widespread in the community regardless of age, economic status, educational level, race or ethnicity, and location **(Chikezie & Ebuenyi, 2019).**

In Egypt, the primary care provider is commonly a family member and s/he is the main source of support for patient. Therefore, family caregivers who achieve care for patient are at high risk for burden and consequent influence on daily living to a large extent **(Bayoumi, 2018).**

Substance use was estimated at 14.4 per cent equivalent to 14.3 million individuals aged 15-64 who used psychoactive substances for non- medical reasons in the past. About 4.7% of the population, accounting for about 4.6 million people, used opioids (such as tramadol, codeine or morphine) for multiple years for non-medical reasons **(Chikezie & Ebuenyi, 2019).**

The higher the SUDs family caregivers' self-efficacy score, the less the burden is. Self-efficacy has influenced the perceived caregiver's burden as an enforcing and positive

factor **(Ramzani, Zarghami, Charati, Bagheri, & Lolaty, 2019).**

The family caregivers should have guidance from the nurses on dealing with difficult challenges and provide support for them. An understanding of the burden between family caregivers of people with substance use disorder and self-efficacy may help to know importance areas that lead to meet specific needs, how to reduce burden and stress level, so this study aims to assess the relationship between burden and self-efficacy among family caregivers of Patients with substance use disorders **(Haji Sayed Javadi, Hashemi, & Zamir, 2021).**

Aim of study

The aim of this study was:

To assess the relationship between burden and self-efficacy among family caregivers of Patients with substance use disorders.

The aim of this study was achieved through answering the following questions:

1. What are the levels of burden among family caregivers of Patients with substance use disorders?
2. What are the levels of self-efficacy among family caregivers of Patients with substance use disorders?
3. What is the relation between burden and self-efficacy among family caregivers of Patients with substance use disorders?

Subject and Methods

Research design:

A descriptive relational study design was used in this study to assess relationship between burden and self-efficacy among family caregivers of patients with substance use disorders.

Research setting:

This study was conducted in the addiction outpatient clinic in the Abassyia Mental health hospital, affiliated to ministry of health

Subjects of the study:

Purposive sample of 140 family caregivers of patient with substance use disorder. Sample size was estimated according to the following equation (S= x2NP (1-P) ÷ d2 (N-1) + X2P (1-P**) (Krejcie, R.V.,& Morgan, D.W,1970) .**the previously mentioned setting according to certain criteria .

- Age: adult caregivers
- All educational level and different socio-economic standards
- Family caregivers who accept to participate in the study.
- Free from any psychiatric illness.
- Not responsible for caregiving of other patient in the family.
- Primary caregivers who closely related and directly involved in the care of the patient with substance use disorder for at least one year.

Tools for data collection:

The tools used for data collection were:

1. **Interviewing questionnaire** was designed by the researcher and included three parts as the following:

a. **First part**: Demographic sheet for family caregivers and patients:

It was designed to assess demographic data of both family caregivers and patients with substance use disorders and it divided into:

- Patient's demographic data: included age, gender, marital status, residence, educational level, occupation and the monthly income

- Family caregiver's demographic data: included caregiver's age, gender, level of education, occupation, relation to patient, marital status, the monthly income and how many years of caregiving to substance abuser.

b. **The second part:** History of illness regarding SUDs included data about the type of narcotic substance, start of substance abuse, route of administer the drug ,motives for use, numbers of previous treatment and number of relapses after periods of abstinence.

c. **The third part:** Knowledge about substance use disorder: Designed by the researcher to assess family caregiver knowledge about substance use disorders, it include: concept, signs and symptoms, cause, types of substance and methods of treatment.

❖ **Scoring:**

7 items self-report questionnaire, where each item is rated on a three point likert scale (0-2). in which "Yes=2", "No=2" and "I don't know=0". total score is calculated by summing up all obtained response.

Knowledge	**Scores**	
Satisfactory	≥ 60%	(8-14)
Unsatisfactory	< 60	(0-7)

II. Burden of family caregivers for patients with substance use disorders:

Developed by the researcher based on **(Zarit.1980) and (Thara etal.1998)** to assess caregiving burden among family caregivers of patients with substance use disorders. It includes29 items each item is rated on a three point Likert Scale (1-3). in which Never and Rarely=1"," Sometimes"=2 and" Always"=3. The caregiver had to choose any one of the choices for each of the question.

 It includes 5 domains as following: Physical burden consist of (6items), Psychological burden consist of (5items), Social burden include (12items) financial burden consist of (5items) and overall burden consist of (1 item).

 scoring for burden scale (29 items):

Level of burden	**Scores**
Mild burden	(29-39)
Moderate burden	(40-60)
Severe burden	(61-87)

III. **Self-Efficacy Scale** is a 10 item that it was designed by (Ralf Schwarzer, 1981) to assess self-belief to cope with a variety of difficult demands in life.

❖ **Scoring:**

SES 10 items each item is rated on a four point Likert Scale (1-4) in which "Not at all true =1"," Hardly true=2","Moderately true =3"and "Exactly true=4 ". The caregiver had to choose any one of the choices for each of the question. The total score is calculated by finding the sum of all the items with range from 10 to 40.below 20 considered low self-efficacy and more than 20 was high self-efficacy.

Tools validity and reliability

To achieve the criteria of trustworthiness of the tools of data collection in this study, the tools were tested and evaluated for their face and content validity, and reliability by jury group consisting of 3experts at Faculty of Nursing of Ain Shams University with specialties in the field of nursing including Psychiatric/Mental Health Nursing.

Pilot Study

The pilot study was conducted on 10% of the total sample (14 family caregiver of patient with substance use disorders) at the beginning at July 2022 to evaluate and test the simplicity, applicability and feasibility of the research tools, in order to estimate the time needed to collect data. According to the results of the pilot study, no modifications were done in the tools and pilot sample was included in study sample.

Field work

First step:

Before starting the data collection, the researcher obtain the approval of the Ethics Committee, dean of the College , hospital manager , nurses in clinics and family caregivers Maintain confidentiality of information

The researcher was introduced herself to the family caregiver of patient with substance use disorders and explain the aim of the study in order to obtain family caregiver oral agreement to participate in the study.

Data were collected daily for 3 days/ week (Saturday- Sunday-Tuesday) during the morning and afternoon during the day (10.00 a.m:2.00.m) for 20-35minutes at outpatient clinic.

Second step:

The researcher individually interviewed the family caregiver of patient with substance

use disorders who agreed to participate in the study, and assisted each family caregiver in filling in the tools. Filling in the tools took about 20- 35minutes.

The study was conducted in waiting areas that near from addiction outpatient clinic. Through the place that was well ventilated, quiet as possible and had adequate spacing for filling the interview questionnaire.

Ethical considerations:

After securing official requirements for carrying out the study, the caregivers were informed that they are allowed to participate or not in this study and that they have the right to withdraw from the study at any time. Oral consent was taken from each family caregiver to participate in the study sample. The researcher explained the objectives and nature of this study to the family caregiver included in the study .the researcher assured maintaining anonymity and confidentiality of the subject data with reassurance about of the information given and that it will be used for scientific research only.

Confidentiality of obtained information was assured, and the subjects were informed about their right to participate or not in the study and withdraw at any time without giving any reason. The participants were also assured about anonymity, and that data will only be used for the purpose of the study.

IV. Statistical design:

The statistical analysis of data was done by using the computer software of Microsoft Excel Program and Statistical Package for Social Science (SPSS) version 22. Data were presented using descriptive statistics in the form of frequencies and percentage for categorical data, the arithmetic mean (X) and standard deviation (SD) for quantitative data. Qualitative variables were compared using chi square test $(X)^2$, P-value to test association between two var iables and Pearson correlation test (r- test) to the correlation between the study variables.

Degrees of significance of results were considered as follows:

- P-value > 0.05 Not significant (NS)
- P-value ≤ 0.05 Significant (S)
- P-value ≤ 0.01 Highly Significant (HS).

Results:

Table (1): shows demographic data of the studied patients, less than two thirds (65.0%) of the studied patients their age ranged from 30-<40 years, their mean age was 32.05 ± 4.63 years. As regard to gender and marital status, the majority and less than half (80.7% & 47.9%) of the studied patients were male and married, respectively. Also, more than three quarters (77.9%) of them were residing in urban areas. Regarding educational level, it was found that, less than half (45.0%) of them had secondary education. Also, the majority (87.9%) of the studied patients were working, less than half (47.2%) of them were worker. Furthermore, the majority (81.4%) of the studied patients, their monthly income was not enough.

Table (2): displays demographic data of the studied caregivers, more than two fifth (43.6%) of the studied family caregivers their age ranged from 30-<40years, and their mean age was 37.54 ± 8.05 years. As regard to gender and marital status, more than half and less than three quarters (57.1% & 70.7%) of the studied family caregivers were female and married, respectively. Also, more than three quarters (77.9%) of them were residing in urban areas. In relation to educational level, more than one quarter (29.3%) of them had basic education. Also, less than three quarters (72.1%) of the studied family caregivers were working, less than half (43.6%) of them were employee. Furthermore, less than two thirds (65.0%) of the studied caregiver, their monthly income was not enough. Moreover, less than three quarters (72.1%) of the studied family caregivers shared the patient's treatment expenses. Also, the minority (12.1%) of the family caregivers had physical illness, more than two thirds (70.6%) of them had hypertension.

Table (3): shows the studied family caregivers according to total burden among family caregivers for patients with substance use disorder , More than half, less than two thirds, more than three quarters, less than three quarters (51.4%, 65.0%, 77.1%, 73.6% &

72.1%) of the studied family caregivers experienced severe burden at physical, psychological, social, financial and overall burden, respectively.

Figure (1): show the studied family caregivers according to their total burden of caregiving of patients with substance use disorder, more than two thirds (70.0%) of the studied family caregivers had severe level of total burden. Also, less than one quarter (24.3%) of the studied family caregivers had moderate level of total burden. While, the minority of them (5.7%) had mild level of total burden.

Figure (2): show the studied family caregivers according to their total self-efficacy, more than three quarters (77.1%) of the studied family caregivers had low level of self-efficacy. While, less than one quarter (22.9%) of them had high level of self-efficacy.

Regarding **Table (4)** shows demographic data of the studied family caregivers and their levels of total self-efficacy, there were highly statistically significant differences between level self-efficacy of the studied family caregivers and their demographic data such as age, gender, education level, adequacy of monthly income, history from physical illness and duration of care giving to substance abuser in which X^2 = 16.99, 30.17, 61.38, 19.67, 30.19 and 26.41 at p = <0.001, respectively. Also, there were statistically significant differences with caregiver's degree of consanguinity, marital status and involvement in the patient's treatment expenses in which X^2 = 14.63, 15.01 and 10.01 at p = <0.05, respectively.

Table (5):shows correlation between the family caregivers' burden subscales and total self-efficacy , there were a moderate negative correlation between family caregivers' physical, psychological, social, financial, overall burden and their self-efficacy in which r= -0.405, -0.463, -0.543, -0.530, -0.536 at p= <0.01.

Table (6): displays demographic data of the studied family caregivers and their levels of total burden, there were highly statistically significant differences between total burden of the studied family caregivers and their demographic data such as age, marital status, education level, occupation, adequacy of monthly income, history from physical illness and duration of care giving to substance abuser in which X2 = 19.38, 29.37, 31.11, 19.33, 23.66, 21.95 and 39.33 at p = <0.001, respectively. Also, there were statistically significant differences with caregiver's gender, degree of consanguinity, residence and involving in the patient's treatment expenses in which X2 = 13.96, 11.34, 15.07 and 9.025 at p = <0.05, respectively.

Table (1): Frequency distribution of the studied patients according to their demographic data (n=140).

Items	No.	%
Age		
20-< 30 years	42	30.0
30-<40 years	**91**	**65.0**
≥ 40 years	7	5.0
Mean ± SD= 32.05 ± 4.63 Max= 44 Min= 21 Range=23		
Gender		
Male	**113**	**80.7**
Female	27	19.3
Marital Status		
Single	51	36.4
Married	**67**	**47.9**
Divorced	16	11.4
Widow	6	4.3
Residence		
Rural	31	22.1
Urban	**109**	**77.9**
Educational level		
Illiterate	14	10.0
Basic education	17	12.1
Secondary education	**63**	**45.0**
High education	43	30.7
Post graduate studies	3	2.1
Occupation		
Working	**123**	**87.9**
Not working	17	12.1
If working, what is the type of work? (n=123)		
Worker	**58**	**47.2**
Employee	23	18.7
Free business	42	34.1
Monthly Income		
Enough	11	7.9
Not Enough	**114**	**81.4**
Enough and more	15	10.7

Table (2): Frequency distribution of the studied family caregivers of patients with SUDs according to their demographic data (n=140).

Items	No.	%
Age		
20-< 30 years	30	21.4
30-<40 years	**61**	**43.6**
40-<50 years	29	20.7
≥ 50 years	20	14.3
Mean ± SD= 37.54 ± 8.05 Max= 60 Min= 25 Range=35		
Gender		
Male	60	42.9
Female	**80**	**57.1**
Marital Status		
Single	20	14.3
Married	**99**	**70.7**
Divorced	6	4.3
Widow	15	10.7
Residence		
Rural	31	22.1
Urban	**109**	**77.9**
Educational level		
Illiterate	31	22.1
Basic education	**41**	**29.3**
Secondary education	36	25.7
High education	32	22.9
Post graduate studies	0	0.0
Occupation		
Working	**101**	**72.1**
Not working	39	27.9
If working, what is the type of work? (n=101)		
Worker	35	34.6
Employee	**44**	**43.6**
Free business	22	21.8
Monthly Income		
Enough	12	8.6
Not Enough	**91**	**65.0**
Enough and more	37	26.4
Involving in the patient's treatment expenses		
Yes	**101**	**72.1**
No	39	27.9
Suffer from physical illness		
Yes	17	12.1
No	**123**	**87.9**
***If yes, what is this? (n=17)**		
Hypertension	**12**	**70.6**
Diabetes	10	58.8
Heart disease	**8**	**47.1**

***Numbers are not mutually exclusive.**

Table (3): Frequency distribution of the studied family caregivers according to types of caregiving burden among family caregivers of patients with substance use disorder (n = 140).

Burden subscales	Mild burden		Moderate burden		Severe burden		Mean ± SD
	No.	%	No.	%	No.	%	
Physical Burden	**10**	**7.1**	**48**	**34.3**	**72**	**51.4**	**12.65 ± 3.44**
Psychological Burden	**7**	**5.0**	**42**	**30.0**	**91**	**65.0**	**11.50 ± 1.61**
Social Burden	**7**	**5.0**	**25**	**17.9**	**108**	**77.1**	**29.46± 2.02**
Financial Burden	**9**	**6.4**	**28**	**20.0**	**103**	**73.6**	**12.03 ± 1.62**
Overall Burden	**5**	**3.6**	**34**	**24.3**	**101**	**72.1**	**2.71 ± 0.48**

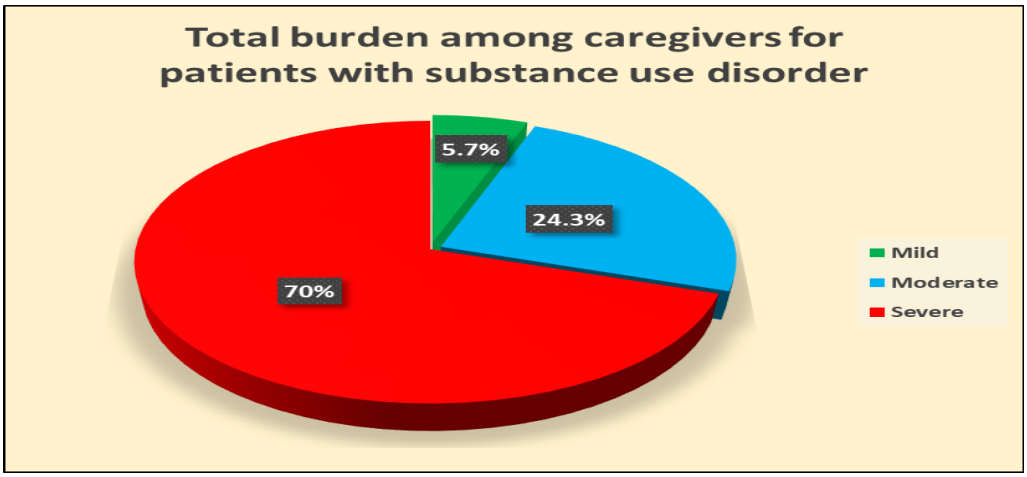

Figure (1): Percentage distribution of the studied family caregivers according to their total burden of caregiving of patients with substance use disorder (n=140).

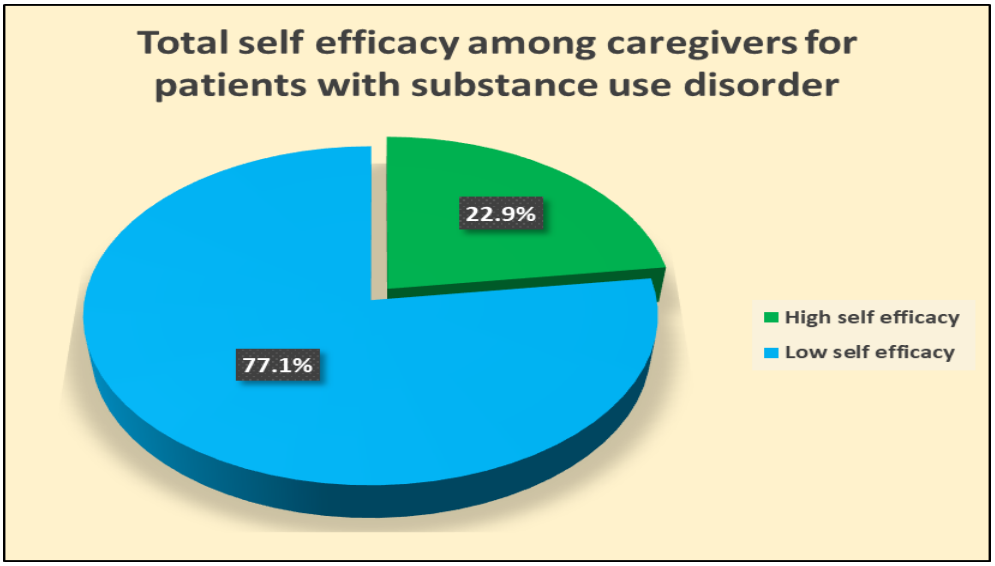

Figure (2): Percentage distribution of the studied family caregivers according to their total self-efficacy (n=140).

Table (4): Relationship between demographic data of the studied family caregivers and their levels of total self-efficacy (n=140).

Demographic data		Levels of total self-efficacy				X^2	P-Value
		Low (n=108)		High (n=32)			
		No.	%	No.	%		
Age (years)	20-< 30 years	30	27.8	0	0.0	16.99	0.000**
	30-<40 years	40	37.0	21	65.6		
	40-<50 years	20	18.5	9	28.1		
	≥ 50 years	18	16.7	2	6.3		
Gender	Male	32	29.6	28	87.5	30.17	0.001**
	Female	76	70.4	4	12.5		
Degree of consanguinity	Father	20	18.5	5	15.6	14.63	0.019*
	Mother	4	3.7	0	0.0		
	Brother	6	5.6	19	59.4		
	Sister	15	13.9	5	15.6		
	Husband	7	6.5	3	9.4		
	Wife	56	51.8	0	0.0		
Marital Status	Single	5	4.6	15	46.9	15.01	0.011*
	Married	93	86.1	6	18.8		
	Divorced	2	1.9	4	12.5		
	Widow	8	7.4	7	21.8		
Residence	Rural	20	18.5	11	34.4	5.400	0.120
	Urban	88	81.5	21	65.6		
Education level	Illiterate	31	28.7	0	0.0	61.38	0.000**
	Basic education	41	38.0	0	0.0		
	Secondary education	34	31.5	2	6.3		
	High education	2	1.8	30	93.7		
	Post graduate studies	0	0.0	0	0.0		
Occupation	Working	90	83.3	11	34.4	6.058	0.099
	Not working	18	16.7	21	65.6		
Monthly Income	Enough	10	9.3	2	6.3	19.67	0.005**
	Not Enough	91	84.2	0	0.0		
	Enough and more	7	6.5	30	93.7		
Involvement g in the patient's treatment expenses	Yes	96	88.9	5	15.6	10.01	0.025*
	No	12	11.1	27	84.4		
history from physical illness	Yes	17	15.7	0	0.0	30.19	0.000**
	No	91	84.3	32	100.0		
Duration of care giving to substance abuser	1-<3 years	7	6.5	25	78.1	26.41	0.000**
	3-<5 years	95	88.0	7	21.9		
	≥ 5 years	6	5.5	0	0.0		

No significant at p > 0.05. * Statistically significant at p ‹ 0.05. **Highly statistically significant at p ‹ 0.001.

Table (5): Correlation between the family caregivers' burden subscales and total self-efficacy (n=140).

Variables	Family caregivers' self-efficacy	
	r	p-value
Physical Burden	-0.405	0.007**
Psychological Burden	-0.463	0.005**
Social Burden	-0.543	0.000**
Financial Burden	-0.530	0.000**
Overall Burden	-0.536	0.000**

r= correlation coefficient test. P= p-value **highly significant at p ‹ 0.001.

Table (6): Relationship between demographic data of the studied family caregivers and their levels of total burden (n=140).

Demographic data		Levels of total burden						X^2	P-Value
		Mild (n=8)		Moderate (n=34)		Severe (n=98)			
		No.	%	No.	%	No.	%		
Age (years)	20-< 30 years	6	75.0	24	70.6	0	0.0	19.38	0.000**
	30-<40 years	2	25.0	10	29.4	49	50.0		
	40-<50 years	0	0.0	0	0.0	29	29.6		
	≥ 50 years	0	0.0	0	0.0	20	20.4		
Gender	Male	8	100.0	26	76.5	26	26.5	13.96	*1100.
	Female	0	0.0	8	23.5	72	73.5		
Degree of consanguinity	Father	2	25.0	6	17.7	17	17.3	11.34	0.024*
	Mother	0	0.0	0	0.0	4	4.1		
	Brother	6	75.0	17	50.0	2	2.1		
	Sister	0	0.0	8	23.5	12	12.2		
	Husband	0	0.0	3	8.8	7	7.1		
	Wife	0	0.0	0	0.0	56	57.2		
Marital Status	Single	6	75.0	14	41.2	0	0.0	29.37	0.000**
	Married	0	0.0	6	17.6	93	94.9		
	Divorced	0	0.0	4	11.8	2	2.0		
	Widow	2	25.0	10	29.4	3	3.1		
Residence	Rural	0	0.0	11	32.4	20	20.4	15.07	0.01*
	Urban	8	100.0	23	67.6	78	79.6		
Education level	Illiterate	0	0.0	2	5.9	29	29.6	31.11	0.000**
	Basic education	0	0.0	2	5.9	39	39.8		
	Secondary education	0	0.0	6	17.6	30	30.6		
	High education	8	100.0	24	70.6	0	0.0		
	Post graduate studies	0	0.0	0	0.0	0	0.0		
Occupation	Working	0	0.0	13	38.2	88	89.8	19.33	0.005**
	Not working	8	100.0	21	61.8	10	10.2		
Monthly Income	Enough	0	0.0	8	23.5	4	4.1	23.66	0.001**
	Not Enough	0	0.0	0	0.0	91	92.8		
	Enough and more	8	100.0	26	76.5	3	3.1		
Involving in the patient's treatment expenses	Yes	2	25.0	4	11.8	95	96.9	9.025	0.029*
	No	6	75.0	30	88.2	3	3.1		
History from physical illness	Yes	0	0.0	2	5.9	15	15.3	21.95	0.000**
	No	8	100.0	32	94.1	83	84.7		
Duration of care giving to substance abuser	1-<3 years	8	100.0	22	64.7	2	2.0	39.33	0.000**
	3-<5 years	0	0.0	12	35.3	90	93.9		
	≥ 5 years	0	0.0	0	0.0	6	6.1		

Discussion

Substance use disorder is a disease that can affect not only the addicted person but also his/ her family or caregiver's quality of life. It can have a devastating effect on the entire family system. It adversely influences the emotional climate, identity, tasks, and relationship of the family by placing several burdens that altered caregivers' safety and wellbeing **(Mancheri, Sabzi, Alavi, Vakili, & Maghsoudi, 2021).**

Regarding demographic of the studied patients, the result of present study displayed that less than two thirds of the studied patient their age ranged from 30-<40 years, with mean age 32.05 ± 4.63 years, the majority and less

than half of them were male and married respectively. Also, more than three quarters of them were residing in urban areas, less than half of them had secondary education. Also, the majority of them were working, and their monthly income was not enough.

This result explained that with low income, difficulty of fulfilling the requirements of life, the person pushes to substance use as a coping mechanism to get rid of stress and anxiety from the permanent sense of responsibility and overcoming problems. Also, might be due to curiosity, friends or work pressure, deficiency or not enough of education and culture education, availability of all services in urban area more than rural area, lack of supervision, direction, support to male from parent or all family and parents' preoccupation about sons and due to expenditure money on substance in addition to essential needs of life their income was not enough.

This result was supported with **Ebrahem et al., (2022)** who performed study entitled "The Effectiveness of Life Skills Training on Assertiveness, Self-Esteem and Aggressive Behavior among Patients with Substance Use Disorders" and revealed that less than three quarters of the studied patients were from urban areas, more than half were married about two-thirds of the participants finished secondary education. The majority of the participants were worked.

The finding was disagreement with **Ahmed et al., (2022)** who conducted a study entitled "Assessment of Coping Skills and Drug Craving among Addicts" who found that less than half of studied patients had university level and enough income.

As regards to sociodemographic data of the studied caregivers, the result of present study showed that more than two fifth of the studied family caregivers their age ranged from 30-<40 years , and their mean age was 37.54 ± 8.05 years., more than half were female and less than three quarters were married. Also, more than three quarters of them were residing in urban areas; more than one quarter of them had basic education. Also, less than three quarters of the studied family caregivers were working, less than half of them were employee. Furthermore, less than two thirds of the studied caregiver, their monthly income was not enough.

Caregivers were females in the most of current study might be due to high sense of responsibility and self-sacrifice and obligations of females toward caring for their family members as the main source of care and compassion in the family, especially during middle age where they did their maximum efforts to protect their family members and maintain their wellbeing. Also due to involvement in the patient's treatment expenses in addition to difficulty of fulfilling the requirements of life their monthly income was not enough.

These findings agreed with the study accomplished by **Ali, & Mohamed, (2022)** who conducted a study entitled "Minimizing Burdens and Enhancing Quality of Life among Family Caregivers of Patients with Substance Misuse Disorders" and found that the mean age of family caregivers of patients with substance misuse disorder was 48.45 years. Less than two thirds of them were females, less than one third had basic education. Also, near half of them working on technical works with low monthly income.

Regarding degree of consanguinity, the result of current study revealed that two fifths of the studied family caregivers were wife. In general, more than two third of the studied caregivers were females while less than one third of caregivers were males.

This result might be due to the women especially wives are the main caregivers who carry the responsibility or the ill family member.

This result agreed with the study carried out by **Mufti et al., (2021)** who carried out the study to assess "Depression in Primary Caregivers of Patients of Psychoactive Substance Use" and reported that about of half of the studied family caregivers were wife.

According to physical burden among family caregivers for patients with substance use disorder, the current results revealed that majority of them reported sometimes suffer from insomnia and sleep disturbances more than usual, more than three quarters of the studied family caregivers rarely had a poor appetite and

weight loss due to preoccupation about my patient and think that my health has been affected because of the patient's addiction. Also, more than half of studied subjects had severe burden. These results may be due to high pressure they sustain, family members of substance users are thought to experience negative consequences in physical health and 12.1% of studied subjects suffered from physical problems.

This finding supported with the study by **Di Sarno et al., 2021** who conduct study about Mental and physical health in family members of substance users: A scoping review, who reported that affected Family Members of substance users represent a population at higher risk for negative health-related outcomes. Also, cohort with the study by **Pacheco et al., 2020** titled in family members affected by multiple substance misuse relatives and reported that more than half of family member had higher physical symptoms.

This finding in same line with study conducted by **Sharma et al., (2019) who** carried out a study entitled "Study of family burden in substance dependence: A tertiary care hospital-based study" and showed that most of the studied caregivers suffering from physical symptom due to substances use and had less than two thirds of the studied caregivers moderate physical burden .

This finding disagreement with study by **Karimi et al. (2019)** who conducted study about " Effect of the quality of life therapy intervention on the burden of the family caregivers of addicts" and showed most of the studied caregivers always a poor appetite and weight loss due to preoccupation with their patient.

On other hand, this finding disagreement with study by **Goit et al. (2021)** who conducted study to assess "Burden and quality of life among primary caregiver of alcohol dependence syndrome" and showed that most of the caregivers had no burden on the physical health.

Regarding to psychological burden among family caregivers for patients with substance use disorder, the current results mentioned that about one half of studied family caregivers feel sadness and disappointment when near the patient and feel uncertain about what to do about the patient, less than two thirds of them sometimes feel afraid and anxiety from deterioration of the patient condition. Also, about two thirds of them suffered from severe psychological burden.

These findings cohort with **Ólafsdóttir et al. (2020)** who showed that all the study participants except for siblings expressed that substance use disorder had negatively affected their mental health by inducing depression, anxiety, and stress-related physical illness.

Additionally, regular with **Angmo et al. (2022)** about Burden borne by the Primary Caregivers of Patients Seeking Treatment for Alcohol and Opioid Dependence and illustrated that all the caregivers experienced significant amount of burden which has to be addressed for better treatment outcome of the patients.

This finding might be due to two fifths of the studied caregivers were wives. Therefore, the caregiving responsibilities of other family members beside demands of the patient that can lead to compromise their physical and mental health and lead to feelings of stress, frustration, tiredness from the caregiving and can exacerbate existing chronic health conditions. Moreover, low income and financial stress increase psychological burden.

On other hand, this finding disagreed with study by **Kabira, (2019)** who carried out study about "The Family Burden of Care for Persons with Substance Use Disorders" and reported that about of one quarter of the studied caregivers had severe psychological burden. This difference might be due to different setting and the counseling support groups.

Concerning to social burden among family caregivers, less than three quarters of studied family caregivers always spread of news of a family member's addiction expose me to disrepute and social ostracism from the rest of the family and ashamed when someone in my family accuses me of theft and fraud for the purpose of drug use. Likewise, more than three quarters of them had severe social burden. These results may be due to caring for patient with SUDs requires a long time and effort to provide care for them, which withdraws the care provider from the community.

These findings supported with the study by **Sharma et al., 2019** titled in Study of family burden in substance dependence: A tertiary care hospital-based and found that about three quarters of family caregiver had sever social burden. Also, consistent with **Inalou et al., 2022** about Assessment of Social Competence of Adolescents with Substance-Abusing Parents in High Schools in West of Tehran and reported that majority of studied caregiver had social problems.

This finding similar with the result of study performed by **Cicek et al., (2015)** who conducted study entitled " Burden of care and quality of life in relatives of opioid dependent male subjects" and illustrated that most of the studied care had feeling substance affect negative on them life.

These findings may be due to caregiving can be a very challenging task where caregivers don‘t have enough support from the family, friend, society, medical team, and community services, also, lack of social support from others. Also, lack of ability of caregivers to enjoy by social and recreation lead to sense of isolation.

According to financial burden, more than two thirds of studied family caregivers had financial burden related feel that caring for the patient lead to wasting family financial resources on substance instead of spending on important matters in family life and feel that my family financial situation worsen since the patient's addiction. In addition, about three quarters of them had severe financial burden.

These findings attributed to majority of studied family had not enough income. These results agreement with the study by **Abdelrehim et al., 2022** about A path analysis model examining factors affecting burden of care for drug addicts among their family caregivers in Egypt and stated that the caregivers reported a severe burden of care which was predicted by the addict’s drug-related problems, financial hardship, and the caregiver’s occupation. Also, majority of them suffered from high financial burden. Likewise, **Ali & Mohamed, 2022** titled in Minimizing Burdens and Enhancing Quality of Life among Family Caregivers of Patients with Substance Misuse Disorders. Also, similar with the study by **Korade, 2022** titled in Cross-Sectional Research on the Financial Impact on Family Members of Alcohol-Dependent Care Givers, who reported that alcoholism was linked to financial stress on the family.

This finding might be due to majority of the studied caregivers their monthly incomes were not enough. Also, the caregiver needs more expenses for patient treatment including the high cost of treatment and frequent relapses.

This finding supported with study by **Florence et al., (2021)** who conducted a study to assess "The economic burden of opioid use disorder and fatal opioid overdose in the United States and showed that most of studied family caregivers sometimes cannot afford to purchase the necessary treatment for the patient.

Concerning to overall burden and total burden, the present study stated that more than two thirds of studied family had severe burden. These results may be due to less than three quarters of studied family caregivers was involving in the patient's treatment expenses and about two thirds of studied patients no committed with treatment.

These findings similar with the study by **Russell et al., (2022)** about Distress among parents of individuals with substance use disorders: Factors that shape the context of care, who showed that majority of studied parents suffered from high burden related caring their children. **Goit et al. (2021)** about Burden and quality of life among primary caregiver of alcohol dependence syndrome and revealed that burden level on the primary caregiver of alcohol dependent patient was moderate to severe.

The result is in accordance with study by **Chougule et al. (2022)** who performed study entitled’’ A Study to find the Association between Severity of Alcohol Dependence in Male Patients with Caregiver Burden in Their Spouses" and mentioned that less than two thirds of the studied family caregivers had severe level of burden.

Moreover, this result approved with study by **Kabira, (2019)** and represented that most of the studied family caregivers had severe level of burden for caring patients with substance use disorder.

This result might be due to presence of substance abuser in the family that assign responsibilities of patient care on one of the family members for many aspects of home, personal and family life, social, psychological, financial stressors, and the caregivers also showed that they have a psychological, physical, social and financial burden.

According to self-efficacy, the result of present study showed that, more than three quarters of the studied family caregivers had low level of self-efficacy. While, less than one quarter of them had high level of self-efficacy,

this result might be due to family caregivers don't have tricks that help them deal with unexpected and sudden situation and don't be calm when facing difficulties because they can rely on their abilities to adapt, can't solve difficult problems if they try hard and can't re-think to find solutions if they in trouble

Regarding the correlation between the family caregivers' burden subscales and total self-efficacy, the current findings showed that, there were a highly significant negative correlations between family caregivers' physical, psychological, social, financial, overall burden and their self-efficacy which indicate that caregivers who experienced severe level of burden had low self-efficacy, this result might due to family caregivers can't solve most problems if they invest the necessary effort and can't handle anything that comes their way

Conclusion

Based on the results of the present study and research questions, the following can be concluded:

Caregivers with low self-efficacy and unsatisfactory knowledge regarding SUDs experienced severe level of caregiving burden. **As** more than two thirds of them had severe level of total burden for caring patients with substance use disorder. Moreover, more than three quarters of the studied family caregivers had low level of self-efficacy. The present study revealed that there was a highly significant negative correlation between family caregivers' burden. While, there was highly significant positive correlation between total family caregivers' knowledge and their Self-efficacy.

Recommendations

Based upon the results of the current study, the following recommendations were suggested:

1. Designing and implementation of psycho educational program for family caregivers of patients with substance use disorders to enhance their self-efficacy, coping abilities and quality of life and to overcome their burden of caregiving.
2. Establishment of counseling clinics that tailored to provide motivational intervention, emotional regulation and life style modification for patients with SUDs.
3. Early detection of any psychosocial problems through routine screening of burden, psychosocial problems of caregivers of patients with SUDs by qualified PMH nursing.
4. Supportive intervention for caregivers of patients with SUDs.
5. Further qualitative studies to assess burden and self-efficacy among family caregivers of patients with SUDs.

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