Minimizing Burdens and Enhancing Quality of Life Among Family Caregivers of Patients with Substance Misuse Disorders

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Abstract

Background: Substance misuse disorder is a chronic relapsing disorder that affects the patients and their family caregivers, and its management is associated with severe care burdens that decrease quality of life. **Aim:** This study aimed to minimize burdens and enhance the quality of life among family caregivers of patients with substance misuse disorders. **Design:** A quasi-experimental (single group pre/posttest) design included 128 caregivers who attended with their patients diagnosed with substance misuse disorder during their follow-up visits to the addiction outpatient clinic, psychiatry center affiliated to Ain Shams University Hospitals. **Tools for data collection: 1)** Caregiver's Interviewing Questionnaire**, 2)** Family Burden Interview Schedule (FBIS), **3)** World Health Organization Quality of Life Questionnaire (WHOQoL). **Results:** There was a highly statistically significant relation regarding minimizing burdens among family caregivers of patients with substance misuse disorder, in post-test $p<0.001$ as compared to the pre-program implementation phase including financial burden, disruption of routine family activities, disruption of family leisure, disruption of family interactions, effect on the physical and mental health of caregivers. Moreover, there were statistically significant positive correlations between types of burdens and quality of life domains in mean score pre-and post-program implementation among family caregivers of patients with substance misuse disorder under study. **Conclusions:** Burdens among family caregivers of patients with substance misuse disorder have been minimized post-program implementation as compared to the pre-program. Furthermore, minimizing burdens improved the quality-of-life domains post-program implementation among family caregivers of patients with substance misuse disorder under study. **Recommendations:** Designing and Implementing psychiatric nursing intervention programs for family caregivers of patients with substance misuse disorder in private and other governmental hospitals, in rural as well as urban communities to improve their quality of life. Conduct a further study to evaluate the impact of counseling programs on drug-addicted patients' treatment, relapse, and quality of life.

Keywords: Substance misuse disorders, Quality of Life, Caregivers, Burdens.

Introduction:

Substance misuse 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 **(Barati, Bandehelahi, Nopasandasil, Jormand, & Keshavarzi, 2021).** As mentioned by **Mancheri, Sabzi, Alavi, Vakili, & Maghsoudi, (2021),** family members who live with drug-addicted patients are affected by incalculable losses such as financial instability, physical, psychological, and verbal violence that reduces the quality of life and constitute a burden for both the family and the drug user. Moreover, **Uluyol, & Bademli, (2020)** explained that family caregivers of addicted patients tended to get sick because of frequent pressure anxiety, embarrassment, aggression, fears, and frustration related to drug addiction. Although **Yu, Liu, Li, Zhou, Xi, Xiao, & Tebes, (2020)** added that the family members suffer in different degrees based on their closeness to the patients with substance misuse disorders.

In addition, **González-Saiz, Rojas, & Castillo, (2009)** illustrated that in patients with substance misuse disorders, the behaviors are usually less predictive, and less reliable. Caregivers lose self-confidence and become more isolated to protect themselves from further embarrassment. they suffer from monetary problems. Moreover, **Shanahan, Seddon, Ritter, & Lourenco, (2020)**added

that emotional problems like embarrassment, guilt, hurt, anger, frustration, loneliness, fear, hopelessness, and grief make the family caregivers go through intense psychological suffering and the traditional role of the family are damaged socially, financially, emotionally and become dysfunctional.

In this context, **Size, Jacke, Kief, Franz, & Mann, (2013),** mentioned that family member's quality of life (QoL) is adversely affected due to burdens of patient care, disruptive behaviors of addicted patients, and frequent relapses that contribute to caregivers' negative attitude and therapeutic nihilism. Quality of life and care burden has emerged as important treatment outcome measures for substance misuse disorder whose natural course compromises remission and relapse. Qol is a multidimensional construct that incorporates the individual's physical, mental, psychological, social, and spiritual functioning **(Saladino, Mosca, Petruccelli, Hoelzlhammer, Lauriola Verrastro, & Cabras, 2021)**.

Burden among family caregivers of patients with substance misuse disorder has been described by **Alasmee & Hasan, (2021),** as a feeling of distress developed due to the presence of mental disorders in the family that assign responsibilities of patient care on one of the family members for many aspects of home, personal and family life.

Quality of life was defined by **World Health Organization, (1996)**as the individual's perception of their position in life in the context of the culture and value system in which they live and their goals, expectations, standards, and concerns.

Quality of life domains among family caregivers of patients with substance misuse disorder. were classified by **Vederhus, Pripp, & Clausen, (2016)** to financial, marital, physical, mental health, social, and performance-related domains. regarding the financial domain of QOL, **Ahmed, & Jalal, (2020),** explained that family caregivers are usually unable to accumulate savings, need to borrow money, or failed to provide the necessities of life. Moreover, physical health dominos of quality of life is greatly affected due to addiction of family member, they usually suffer from stress-related bodily pain.

Furthermore, long-term substance misuse causes cognitive, emotional, and behavioral changes in individuals that negatively influence caregivers and increase the prevalence of divorce, crisis, economic losses, legal problems, and stigmatization by society followed by family withdrawal. in this perspective, caregivers of individuals with substance misuse disorders should also be considered and supported during the treatment process **(Marcon, Rubira, Espinosa, Belasco, & Barbosa, 2012).** Hence, it is also important to determine the needs of caregivers of the individuals with substance misuse disorder by evaluating their experience, thoughts, and feelings that affect adversely their quality of life and implementing intervention programs to meet their needs (**Rospenda, Minich, Milner, & Richman, 2010).**

According to **Arnaud, Baldus, Laurenz, Bröning, Brandt, Kunze, & Thomasius, (2020)**, disturbances at home, occupational dysfunction, frequent relapses, and frequent hospitalization of patients with substance misuse disorders. leads to caregiver's stress, forced retirement, role changes, role strain/overstrain load, distancing from friends and the reduction of social activities, disruption of unusual routine, and financial pressure. All these activities might limit daily social and physical activities, disrupting the usual routine and family rituals.

Family caregivers were often the only source of support for people with substance misuse disorder. This could involve consistent supervision and monitoring. As a result, caregivers could not go about their lives freely and faced a lot of restrictions in various daily activities related to family care that led them to feel distressed and overwhelmed **(Ganesh, Bhat, and Latha, 2017)**.

As mentioned by **Birkeland, Foster, Selbekk, Høie, Ruud, & Weimand, (2018)**, when an individual family member is addicted, one of the other family members must assume the caregiver's role. The care provided by family members to this individual is multidirectional and includes personal care, financial aid, management of diseases symptoms, and contribution of several burdens. So, **Goit, Acharya, Khattri, &**

Sharma, (2021) explained that family life is affected negatively in many aspects including interpersonal, social relations, leisure time, activities, finical resources, increase interfamily conflicts, and may negatively affect the well-being of other family members so they need counseling intervention to enable them to overcome the challenging burdens of patient care and improve their quality of life through various skills training involves conflict resolution skills, anger management, assertiveness training, stress reduction techniques, problem-solving skills, time management, integration in self-help groups. In addition, **Ganesh, Bhat, and Latha, (2017)**added that other patient-related skills are required to enhance patient motivation to achieve abstinence from substance misuse disorder. In this perspective, **Mattoo, Nebhinani, Kumar, Basu, & Kulhara, (2013)**mentioned that there is a need for treatment systems in which families are also supported in their fight against addiction. The development of intervention programs not only for the patient but also for the caregivers of the patient in the treatment process of substance abuse can also positively affect the luxury rates and treatment process in their illness. Accordingly, **Gervais, Verdon, deMontigny, Leblanc, & Lalande, 2020** illustrated that family interventions can help caregivers to recover from the negative consequences of substance misuse disorder and improve their quality of life.

So, the current psychiatric nursing intervention program aimed to minimize burdens and enhancement the quality of life among family caregivers of patients with substance misuse disorder includes improvement of psychological, social, physical, and spiritual functioning to reduce the burden and improve health and wellbeing among family caregivers of patients with substance misuse disorder.

Subjects and Methods

Aim of the Study:

The current study aimed to evaluate the effect of a psychiatric nursing intervention program on minimizing burdens and enhancing the quality of life among family caregivers of patients with substance misuse disorder.

This aim will be achieved through:

1) Assessing the type and levels of care burdens among patients with substance misuse disorder under study.
2) Assessing the quality of life among patients with substance misuse disorder under study.
3) Accordingly, developing and implementing psychiatric nursing intervention programs to minimize burdens and enhance the quality of life among family caregivers of patients with substance misuse disorder.
4) Evaluating the effect of this intervention program on burdens and quality of life among family caregivers of patients with substance misuse disorder.

Research Hypothesis:

Psychiatric nursing intervention programs for family caregivers of patients with substance misuse disorders will minimize the care burdens and enhance their quality of life.

Research design

A quasi-experimental (single group pre/posttest) design was used to explore the effect of an intervention program on minimizing care burdens and enhancing the quality of life among family caregivers of patients with substance misuse disorder.

Study Setting:

The present study was conducted in an addiction outpatient clinic, psychiatry center at Ain Shams University.

Subject:

A purposive sample of 128 family caregivers of patients with substance misuse disorder who were willing to participate in the study and completed the intervention program.

out of 166 family caregivers of patients with substance misuse disorder (all caregivers available during the time of data collection and meet the inclusion criteria.

Inclusion criteria:

- Age of caregivers: 18-65 years
- Sex: Both Sexes
- Direct caregivers of patients with substance misuse disorder.
- Able to read and write

- Willing to participate in the study and agreed to give written consent for participation in the study.
- Free from psychotic disorders or major cognitive impairments or current substance use.

Data Collection Tools:

The data was collected using an interviewing questionnaire that included four sections as follows:

1) **The First Section: Caregiver's Interviewing Questionnaire:** It contains data pertinent by caregiver's age, sex, marital status, level of education, monthly income and degree of relativeness, duration of care for patients with substance misuse disorder, history of caregiver's chronic physical illness, history of psychiatric co-morbidity, caregivers history of legal problems related to substance misuse disorder, previous history of substance misuse disorder among other family members.

2) **The Second Section: Family Burdens Interview Schedule (FBIS):** It has been originally developed by **Pai and Kapoor, 1981** in English language to assess the perceived burden of care among family caregivers of patients diagnosed with any form of psychiatric illness, or substance abuse disorder and translated into the Arabic language by **Alasmee N & Hasan A. 2021.** FBIS has 24 items rated on a 3 Likert scale where 0 (No burden), 1(Moderate burden), and 2 (severe burden). the highest score suggests the highest perceived burden of care.

FBIS has Six Dimensions of Disruption in the Family including:

1. Financial Burden
2. Disruption of routine family activities
3. Disruption of family leisure
4. Disruption of family interactions
5. Effect on the physical health
6. The effect on mental health

The total score ranged from (0-48), and the level of burdens was categorized into the following:

- 1- >16 (No to Mild Burdens)
- 16-> 32 (Moderate Burdens)
- 32-48 (Severe Burdens)

3) **World Health Organization Quality of Life Questionnaire (WHOQoL BREF) 1996:**

This questionnaire was originally developed by **World Health Organization** in 19 different languages including Arabic, English, French, etc. to measure the quality of life and health care. WHOQoL BREF questionnaire was developed to provide a short-form quality of life assessment that looks at Five domains includes:

1. Physical Health Domain
2. Psychological Condition Domain
3. Social Relationships Domain
4. Environmental Domain.
5. Self-Assessment Domain (Overall quality of life concept)

WHOQoL BREF contains a total of 26 questions. respondents answered each dimension using a five-point Likert scale which ranged from 1 (Not at all), 2 (Not Much), 3 (Moderately), 4 (A Great Deal), and 5 (completely). The total score ranged from (26-130) where the higher score indicates higher WHOQoL in each domain.

Operational Design

The operational design for this study included the preparatory phase, pilot study, fieldwork, ethical considerations.

Preparatory phase:

It included reviewing past, current, local, and international related literature, and theoretical knowledge of various aspects of quality of life and minimizing burdens among family caregivers of patients with substance misuse disorder. The selected tools were modified by the researchers to be used in this study.

Tool validity and reliability:

It was ascertained by experts from psychiatric/mental health nursing, their opinions were elicited as regards the tool format layout, knowledge accuracy. Internal consistency (Cronbach alpha) and Pearson correlation coefficient (r) were tested for each tool.

Tool	Reliability "Pearson,s	Cronbach's Coefficient
Family Burden Interview Schedule (FBIS	0. 88	0.93
World Health Organization Quality of Life	0. 85	0.82

Pilot Study:

A pilot study was carried out on (13) family caregivers of patients with substance misuse disorder as representing around 10% of the total sample before conducting the actual study to ensure clarity of the questions, applicability of data collection tools, and time needed to complete them. All subjects who were involved in the pilot study were excluded from the main study sample. The tool was finalized based on the results of the pilot study.

Fieldwork:

The psychiatric nursing intervention program consumed six successive months for all program phases (pre-program assessment, program intervention, and post-program evaluation). 128 participants' understudy completed baseline assessment before the intervention began during the first 3 weeks of January 2021. Based on the assessment findings, the psychiatric nursing intervention program was developed by the researchers and revised by a specialized psychiatrist and professor of psychiatric/mental health nursing before its application.

For the implementation of the psychiatric nursing intervention program, the researchers met each family caregiver individually and introduced themselves; explained the purpose and nature of the study; and ensured the confidentiality of data. Caregivers were asked if they were interested and agreed to participate in the study. After that, the questionnaire forms were filled in by the caregivers and the researchers offered help if they needed it. The questionnaires took about 20-30 minutes. The caregivers were integrated into Six subgroups, each group consists of 20-22 members, 3 groups on Sunday and 3 groups on Tuesday from 9 am -2 pm, each group received a total of 18 training sessions (3 theoretical sessions and 15 practical sessions), each session took from 60 to 90 minutes during their follow-up visit to the addiction outpatient clinic, starting from the fourth week of January 2021, up to the first week of June 2021. The researchers informed the participants that their progress, home assignments, and any faced difficulties will be followed up through phone contact until the next meeting. Post-test was done at the period from the beginning of the 2nd week of June 2021 to the 4th week of June 2021.

Psychiatric nursing intervention sessions:

The researchers used different teaching methods and media such as small group discussions, brainstorming discussions, demonstration and Re-demonstration, real-life situations, and colored handouts during the implementation of the psychiatric nursing intervention program

The psychiatric nursing intervention Program was divided into two main parts:

Part I: Theoretical Part (3 sessions);

This part Included general information about substance misuse disorder as the meaning of addiction, types of psychoactive substances, causes & risk factors of addiction, signs, and symptoms of addiction, adverse consequences of addiction, treatment models, relapse prevention, quality of life domains, dimensions, the impact of addiction on quality of life, types of burdens related to diagnosis of the family member with substance misuse disorders.

Part I: Practical Training Part (15 sessions):

The intervention program was used to train the family caregivers of patients with substance misuse disorders on skills needed to minimize burdens associated with the diagnosis of substance misuse disorder among family caregivers that negatively affects the quality of life including:

1) Stress reduction techniques include deep breathing exercises, guided imagery, progressive muscles relaxation (3 sessions)

2) Practicing a healthy lifestyle includes (eating a complete balanced diet, getting a restful sleeping (3 sessions)

3) Mood monitoring and control through cognitive restructuring, management of negative thoughts, anger management skills, and spiritual care (3 sessions).

4) Social Skills Training includes (communication skills, conflict resolution skills, priority setting, problem-solving skills, seeking social support, and integration in self-help groups (3 sessions).

5) education for caregivers about the management of patient-related burdens include, management of peer pressures, craving intervention, lapse management (3 sessions)

Ethical Considerations:

At the initial interview, each caregiver was informed about the aim and nature of the study, and the participation would be voluntary; hence every caregiver had the right to participate or refuse to be included in the work, and they were informed about the right to withdraw at any time without giving any reasons, and without any consequences. The consent for participation was taken written. In addition, the confidentiality of any gathered data was assured.

Administrative Design

Official letters were issued from the Dean of faculty of nursing, Ain Shams University, to the director of Psychiatry Center at Ain Shams University explaining the aim of the study and requesting their permission for data collection.

Statistical Analysis:

Data entry and statistical analysis were done using SPSS 20.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies for qualitative variables and means and standard deviations and medians for quantitative variables. Quantitative continuous data were compared using the non-parametric Mann-Whitney. Qualitative categorical variables were compared using the chi-square test. Spearman rank correlation was used for assessment of the inter-relationships among quantitative variables and ranked ones. analysis was used. analysis. Statistical significance was considered at a p-value <0.05.

Results:

Table (1) revealed that the mean age of family caregivers of patients with substance misuse disorder understudy was 48.45 years. The majority of participants understudy were females (64.06%), 1st Degree Relative as mother, daughter, wife, son, husband, father (89.06%), divorced or separated (44.53%), and able to read and write or has primary education representing (45.31%, 32.03%) respectively. This study result was also showed that near half of the caregiver's understudy working on technical works with low monthly income represented 47.66% and 50% respectively.

Table (2) represented that near half of the family caregivers under study (46.09%) had addicted patients with a period of addiction ranging from (1-5 years), and 46.1.0 % had a positive patient's history for chronic physical illness Moreover, one-third of caregivers under study (33.59%) had a history of caregivers psychiatric comorbidity. Furthermore, this table revealed that 71.87% of family caregivers understudy had a history of illegal problems related to their patient's substance misuse disorder. and 36.41% had a positive previous history of substance misuse disorder among other family members like husband, brother, son, etc.

Table (3): Indicated that there were highly statistically significant relations between mean scores of types of burdens pre-and post-program implementation among family caregivers of patients with substance misuse disorder $p<0.01$

Table (4) Showed that there was a highly statistically significant improvement of quality of life domains among family caregivers of patients with substance misuse disorder in the post-program implementation phase $p<0.001$ as compared to the pre-intervention phase including physical health, psychological condition, social relationships, environmental domain and overall quality of life and general health domain representing 92.9±13.0, 76.1±25.9, 71.6±23.6 and 84.9±15.0 respectively.

Table (5), There was a moderate negative correlation among all types of burdens and total quality of life score post-program implementation among family caregivers of patients with substance misuse disorder understudy $p<0.001$.

Table (6) Illustrated that there was a highly significant relationship between family caregivers' total quality of life satisfaction and their sex, marital status, occupational level, and monthly income (P<0.001) after the program implementation. Meanwhile, there was no significant relationship between family caregiver's total quality of life satisfaction and their age, and level of education post-program implementation (P >0.05).

Table (7): Showed that there was a highly statistically significant relationship between family caregivers' levels of burdens and their sex, marital, status, and monthly income (P<0.001) post-program implementation. Meanwhile, there was no significant relationship between family caregivers' levels of burdens and their age, level of education, and occupation post-program implementation (P >0.05).

Table (1): Frequency Distribution of Family Caregivers of Patients with Substance Misuse Disorder According to their socio-demographic characteristics (n=128):

Items	Family Caregivers	
	No.	%
Age (Years):		
18- <30	52	40.63
30- < 60	64	50
60-65	12	9.37
Mean ± SD	**(48.45±3.93)**	
Sex:		
Male	46	35.94
Female	82	64.06
Degree of relatives between patients and caregivers:		
1st Degree Relative (Son, daughter, husband, wife, mother, father)	114	89.06
2nd Degree Relative (Uncle, Aunt, Grand Mother, Grand Father)	14	10.94
Marital Status:		
Married	33	25.78
Single	8	6.25
Divorced/separated	57	44.53
Widowed	30	23.44
Level of Education:		
Read & Write	58	45.31
Primary Education	41	32.03
Academic Education	27	21.09
Postgraduates	2	1.57
Occupational Level:		
Housewife/Unemployed	29	22.66
Student	3	2.34
Professional Work	22	17.19
Technical Work	61	47.66
Retired	13	10.15
Monthly Income (L.E):		
Low	64	50
Moderate	41	32.03
High	23	17.97

Table (2): Distribution of Studied Family Caregivers of Patients with Substance Misuse Disorders According to their Medical History (N=128)

Items	Family Caregivers (n=128)	
	No.	%
Duration of Patient's Addiction:		
Less than one year	26	20.31
1-> 5 years	59	46.09
5-> 10 years	22	17.19
+ 10 years	21	16.41
History of Caregiver's Chronic Physical illness (e.g., DM, Hypertension, etc.):		
Positive	59	46.1.0
Negative	69	53.90
History of caregivers Psychiatric Comorbidity:		
Positive	43	33.59
Negative	85	66.41
Caregivers History of Legal problems related to substance misuse disorder:		
Positive	92	71.87
Negative	36	28.13
Previous History of Substance Misuse Disorder among other family members:		
Positive	47	36.71
Negative	81	63.29

Table (3): Mean Score of Type of Burdens among Family Caregivers of Patients with Substance Misuse Disorders Pre and Post Program Implementation (N=128):

Types of Family caregiver's Burdens	Family Caregivers (N=128)		Paired t-test	(p-value)
	Pre-Program	Post-Program		
	Mean ±SD	Mean ±SD		
Financial Burden	92.7±26.0	39.0±17.5	43.05	(<0.001**)
Disruption of routine family activities	76.1±25.9	32.8±16.1	21.75	(<0.001**)
Disruption of family leisure	83.5±25.9	28.4±16.1	30.81	(<0.001**)
Disruption of family interactions	91.9±15.0	27.0±17.5	47.05	(<0.001**)
Effect on the physical health of Caregivers	76.1±25.9	24.8±16.1	18.75	(<0.001**)
Effect on the mental health of Caregivers	81.5±25.9	21.4±16.1	23.81	(<0.001**)

(*) Statistically significant at p<0.05, (**) Statistically highly significant at p<0.001, non-Significant at p >0.05

Table (4): Mean Score of Quality-of-Life Domains among Family Caregivers of Patients with Substance Misuse Disorder Pre and Post Program Implementation (N=128):

Quality of Life Domains	Family Caregivers (N=128)		Paired t-test	(p-value)
	Pre-Program	Post-Program		
	Mean ±SD	Mean ±SD		
Physical health	28.0±16.5	92.9±13.0	57.05	(<0.001**)
Psychological condition	26.8±16.1	76.1±25.9	17.75	(<0.001**)
Social Relationships	14.5±11.1	71.6±23.6	28.81	(<0.001**)
Environmental domain.	24.0±16.5	84.9±15.0	48.05	(<0.001**)
Self-Assessment (Overall Quality of Life and General Health)	22.7±16.1	72.1±25.9	15.64	(<0.001**)

Table (5): Correlation between Total Quality-of-life Satisfaction and Types of Family Caregiver's Burdens Pre and Post Program Implementation (n=128).

Types of Family caregiver's Burdens	Total Quality of life Satisfaction			
	Pre-program (n=128)		Post-program (n=128)	
	r	p-value	R	p-value
Financial Burden	-.57	(>0.05)	-.42	(<0.001**)
Disruption of routine family activities	-.67	(>0.05)	-.56	(<0.001**)
Disruption of family leisure	-.81	(>0.05)	-.48	(<0.001**)
Disruption of family interactions	-.48	(>0.05)	-.57	(<0.001**)
Effect on physical health	-.64	(>0.05)	-.65	(<0.001**)
Effect on mental health	-.57	(>0.05)	-.47	(<0.001**)

Table (6): Relationship between socio-demographic characteristics of studied Family Caregivers of Patients with Substance Misuse Disorders' and Total Quality of Life Satisfaction Pre and Post Program Implementation (n=128):

Items	Total Quality of life Satisfaction	
	Pre (n=128)	Post (n=128)
	Mean ±SD	Mean ±SD
Age (Years):		
<30	38.5±15.3	64.5±15.4
30< 60	46.6±6.7	91.4±62
60-65	67.2±3.1	77.3±7.8
f test (p value)	**0. 29 (0.830)**	**3.622** (>0.05)
Sex:		
Male	26.2±2.8	70.4±2.2
Female	76±15.3	95.5±2.6
t test (p value)	**.547 (.586)**	**2.640**** (<0.001)
Marital Status:		
Married	51.2±7.2	81.2±1.9
Single	44.3±12.5	88.6±6.3
Divorced/separated	61.1±7.5	90.4±2.2
Widowed	53±12.2	95.5±2.6
f test (p value)	**1.031 (0.385)**	**3.534**** (.<0.001)
Level of Education:		
Read & Write	41.2±9.6	91.2±3.9
Primary Education	28.6±18.7	88.6±15.3
Academic Education	40.4±10.9	90.4±2.6
Postgraduates	78.6±14.1	88.6±15.3
f test (p value)	**.292 (.831)**	**.668** (>0.05)
Occupational Level:		
Housewife	39.5±7.9	81.4±7.7
Student	24.0±31.5	61.0±31.6
Professional Work	27.7±8.5	68.7±1.5
Technical Work	51.0±21.6	77.0±11.6
Retired	48.7±8.5	85.7±5.5
f test (p value)	**1.791 (.158)**	**.495**** (.<0.001)
Monthly Income (L.E):		
Low	31.2±8.9	82.2±1.6
Moderate	51.4±8.6	78.6±5.7
High	67.2±8.9	80.4±1.6
f test (p value)	**.633 (.597)**	**.081**** (<0.001)

(*) Statistically significant at p<0.05, (**) Statistically highly significant at p<0.001, Non-Significant at p >0.05

Table (7): Relationship between socio-demographic characteristics of studied Family Caregivers of Patients with Substance Misuse Disorders' and Levels of Burdens (n=128):

Items	Levels of Burdens (n=128)	
	Pre (n=128)	Post (n=128)
	Mean ±SD	Mean ±SD
Age (Years):		
<30	61.5±10.9	34.3±20.2
30< 60	82.3±72	41.5±6.4
60-65	97.3±6.7	49.1±2.2
f test (p value)	**.637 (.594)**	**3.002** (>0.05)
Sex:		
Male	69.4±2.2	33.2±1.4
Female	85.5±2.5	41±02.1
t test (p value)	**.106 (.916)**	**.652**** (<0.001)
Marital Status:		
Married	78.2±2.8	41.2±7.2
Single	88.6±6.1	34.3±12.5
Divorced/separated	82.4±4.2	31.1±7.5
Widowed	91.5±1.5	23±12.2
f test (p value)	**1.531 (.215)**	**.550**** (<0.001)
Level of Education:		
Read & Write	81.2±3.9	31.2±9.6
Primary Education	87.6±15.3	29.6±16.4
Academic Education	60.4±2.6	25.4±10.9
Postgraduates	58.6±15.3	23.6±15.7
f test (p value)	**.412 (.745)**	**2.392** (>0.05)
Occupational Level:		
Housewife	74.3±6.3	31.4±7.2
Student	79.1±42.5	24.0±31.4
Professional Work	68.7±2.5	37.7±45
Technical Work	74.1±15.1	41.0±31.8
Retired	86.8±7.8	38.7±2.4
f test (p value)	**2.583 (.061)**	**2.133** (>0.05)
Monthly Income (L.E):		
Low	72.2±1.6	35.2±8.9
Moderate	88.6±47	41.8±2.6
High	79.2±1.6	47.2±8.9
f test (p value)	**.391 (.760)**	**.387**** (<0.001)

(*) Statistically significant at p<0.05, (**) Statistically highly significant at p<0.001, Non-Significant at p >0.05

Discussion:

Substance abuse disorder is known to be a lifelong illness associated with the reduction of the general functionality of the patient that places a great burden on the family and affects their quality-of-life satisfaction. This study aims to minimize burdens and enhance the quality of life among family caregivers of patients with substance misuse disorders.

Regarding socio-demographic characteristics of family caregivers understudy, the present study showed that the majority of caregivers understudy were female from first degree relatives mostly as mother, sister, daughter, or wife, with mean age 48.45±3.93. It can be attributed to the 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. This study finding was agreed with the finding of **Rabie, Shaker, Gaber, El-Habiby, Ismail, El-Gaafary, & Muscat, 2020** who found that most family caregivers of drug addicted patients were females, especially in the middle east as they take care of their patients and spent their time and money looking after them due to their high sense of responsibilities and cultural background

Regarding marital status, this study results revealed that near half of the family caregivers understudy were divorced or separated. It could be due to adverse effects of substance misuse disorder in the marital life where it increases

interfamilial conflicts, sense of disgust by partner toward the addicted patients, limited family connection, failure to provide the necessity of life, frequent financial problems, aggression, hostility, domestic violence, frequent illegal problems, and stigmatization from society. These results were supported by **Lander, Howsare, & Byrne,2013** who mentioned that substance misuse disorder could break down the family due to inability to cope with negative feelings such as denial, anger, and anxiety that make family members blame each other's, exhibiting intolerance attitude between partners in addition to other burdens of patient care and leading to separation or divorce.

Concerning the previous history of substance misuse disorder among other family members, the current study illustrates that near a quarter of the caregiver's understudy had a positive history of substances substance misuse disorder with another family member e.g., husband, son, father, etc. This could explain the fact that modeling addicted family members' behaviors could enhance the unhealthy attitude toward using un-prescribed use of psychoactive substances as a method of coping with life stressors and increased prevalence of addiction among family members. These results were supported by **Navabi, Asadi, & Nakhaee, (2017)who** mentioned that family circumstances can enhance the risk of substance abuse through the availability of drugs at home atmosphere and provide a negative model for other family members to use drugs as a method of coping with life stress leading to the development of substance misuse disorder.

With regards to patients' history of legal problems related to substance misuse disorder, this study showed that the majority of family caregivers understudy had a history of illegal problems related to behaviors of their patients with substance misuse disorder. It may be due to lack of planning, disorganized impulsive behaviors that produced due to intoxication of psychoactive substances leading to participation in frequent conflicts with others, stealing, lying or cheating, fighting using illegal weapons, arrest due to having illegal drugs, or driving drunken that in-turn put the caregivers in illegal problems and necessitate further actions and additional financial resources to solve such issues. This Study result was supported by **Yassa, & Badea, (2019)** who found that caregivers of patients with substance misuse disorder suffered from frequent illegal problems due to patients' addictive behaviors such as stealing, getting loans, using weapons, etc.

This study results revealed that the majority of family caregivers understudy suffer from financial burdens, especially among family caregivers with low monthly. It can be due to the high cost of treatment, loss of patient's source of income, loss of job due to drug intoxication, and frequent relapses. These results were agreed by **Moreira, Figueiró, Fernandes, Justo, Dias, Barros, & Ferigolo, (2013)** who found that financial burden was the most common destructive source of stressors among family caregivers of patients with substance misuse disorder.

This study also elaborated that there was a highly statistically significant relationship between disruption of family activities and lack of leisure time due to burdens of patient care before and after program implementation. It could be due to positive effects of program Implementation on the management of interfamilial conflict through the caregivers training on conflict resolution skills, stress reduction techniques, money management training, time management, effective communication with their patients, and management of social stigma. These results were agreed by **Choate, 2015** who proposed that family caregivers of substance misuse disorder patients greatly need intervention counseling to maintain family function through training them on communication skills, time management, assertive behaviors to limit their social conflicts and improve social interaction. Hence, minimize patient's risky behaviors, relapse, and frequent hospitalization.

This study results showed that most family caregivers of patients with substance misuse disorder reported minimized their burdens post-program implementation compared to the pre-program phase, this could be attributed to the positive impact of the psychiatric nursing intervention program and

train the family caregivers on the management of negative feelings includes anger, shame, guilt, anxiety, depression, and sorrow, and how to deal with negative feelings. These study results were supported by **Ritland, Jongbloed, Mazzuca, Thomas, Richardson, Spittal, & Guhn, 2020** who explained that training family caregivers of addicted patients on how to deal with stressful situations could minimize their psychosocial logical burdens of care through healthy coping with their burdens and control of their negative emotions and improve their family functionality.

Regarding the quality-of-life domains, this study results revealed that the social relationship is the most affected domain pre-program implementation due to the social stigma of substance misuse disorders that made them receive very limited social support from relatives, neighbors, and community. meanwhile, this social burden was minimized among more than half of family caregivers understudy due to social skills training, seeking social support skills that are acquired post-program implementation. these study results were supported by **O'Shay-Wallace, (2019)** who mention that family caregivers of drug-addicted patients need to receive social skills training and receive social support to manage the social burden associated with addiction.

Also, there was observed a remarkable degree of improvement in quality-of-life domains post-program implementation phase. This improvement could be attributed to the positive effect of a psychiatric nursing intervention program on minimizing caregivers' burdens and improving their psychological, social, and environmental domains of quality of life. These results were supported by **Flint, (2018),** who noted a strong statistical correlation between mental and physical burdens of addicted patient care and quality of caregivers' life, where mental and emotional health significantly affect QoL because they are linked directly to their illness process and loss of ability to face the environmental challenges associated with addicted patients care includes conflicts, threats, emotional distance and loss of hope. Accordingly, **Kumpfer, (2009)** added that the mental and emotional health of caregivers must be strengthened to improve their relationship with their patients and capabilities of providing care to their patient family members.

This study was also noted that there was a significant correlation between the type of burdens and quality of life domains among family caregivers of patients with substance misuse disorder before and after program implementation. These results are attributed to the fact that emotional problems have a direct impact on physical and social wellbeing. Therefore, the burdens of caring substance abusers adversely deteriorate the caregiver's quality of life domains. These study results were agreed by **Birkeland, Weimand, Ruud, Maybery, & Vederhus, 2021** who mentioned that burdens and challenges associated with the care of patients with substance misuse disorder might compromise the caregiver's whole life and affects their emotional, physical health, social interaction domains of quality of life.

The present study illustrates the positive effects of a psychiatric nursing intervention program on the quality of life of family caregivers understudy, where there were improvements in the physical health domain of quality-of-life domains post-program implementation compared to the pre-program phase. This could be attributed to practicing healthy lifestyle behaviors including healthy food, practicing physical exercise, demonstration of stress reduction techniques (e.g. deep breathing exercise, guided imagery, etc.), follow-up for chronic illness that capture a positive impact on caregivers' health. This study result was in a harmony with the study conducted by **Hamza, Gladding, & Moustafa, 2022** who reported that the caregivers of patients with substance misuse disorders experience a lack of energy and need immediate counseling sessions to resume their physical health related to lifestyle modification including heating a healthy food, exercising, getting comfortable sleeping, etc.

Conclusion:

- Burdens among family caregivers of patients with substance misuse disorder have been minimized in the post-program implementation phase compared to the pre-program implementation phase, including financial burden, disruption of routine family activities, disruption of family leisure,

disruption of family interactions, effect on physical and mental health.

- Minimizing burdens improved the quality-of-life domains post-program implementation among family caregivers of patients with substance misuse disorder under study.

Recommendations:

- Implement the psychiatric nursing intervention program on family caregivers of patients with substance misuse disorder in private and other governmental hospitals, in rural as well as urban communities to improve their quality of life.
- Conduct a further study to evaluate the impact of counseling programs on drug-addicted patients' treatment, relapse, and quality of life.

References:

Arnaud, N., Baldus, C., Laurenz, L. J., Bröning, S., Brandt, M., Kunze, S., & Thomasius, R. (2020). Does a mindfulness-augmented version of the German Strengthening Families Program reduce substance use in adolescents? Study protocol for a randomized controlled trial. Trials, 21(1), 1-15.

Ahmed, A. L. M. S., & Jalal, A. L. O. A. (2020). Family disintegration as a model. journal of historical & cultural studies an academic magazine, 11(2/43).

Alasmee N & Hasan A. A (2021): Validity and Reliability of Family Burden Interview Schedule in Arabic, Journal of Nursing & Health Science, 7(6), 1-7.

Birkeland, B., Weimand, B., Ruud, T., Maybery, D., & Vederhus, J. K. (2021). Perceived family cohesion, social support, and quality of life in patients undergoing treatment for substance use disorders compared with patients with mental and physical disorders. Addiction Science & Clinical Practice, 16(1), 1-9.

Birkeland, B., Foster, K., Selbekk, A. S., Høie, M. M., Ruud, T., & Weimand, B. (2018). The quality of life when a partner has substance use problems: a scoping review. Health and quality of life outcomes, 16(1), 1-14.

Barati, M., Bandehelahi, K., Nopasandasil, T., Jormand, H., & Keshavarzi, A. (2021). Quality of life and related factors in women with substance use disorders refer to substance abuse treatment centers. BMC Women's Health, 21(1), 1-7.

Choate, P. W. (2015). Adolescent alcoholism and drug addiction: The experience of parents. Behavioral Sciences, 5(4), 461-476.

Flint, A. J. (2018). Improving the quality of life: substance use and aging. Canadian Centre on Substance Use and Addiction.

Ganesh, S, Bhat SM, and Latha, K.S (2017): Burden and Quality of life among Caregivers of Persons with Alcohol Dependency Syndrome, A Hospital-Based Interventional Study, Journal of Humanities and Social Science, 22(12):20-28.

Goit, B. K., Acharya, B., Khattri, J. B., & Sharma, R. (2021). Burden and Quality of Life Among Primary Caregiver of Alcohol Dependence Syndrome. American Journal of Psychiatry and Neuroscience, 9(1), 1.

Gervais, C., Verdon, C., deMontigny, F., Leblanc, L., & Lalande, D. (2020). Creating a space to talk about one's experience of suffering: families' experience of a family nursing intervention. Scandinavian journal of caring sciences, 34(2), 446-455.

González-Saiz, F., Rojas, O. L., & Castillo, I. I. (2009). Measuring the impact of psychoactive substance on health-related quality of life: an update. Current Drug Abuse Reviews, 2(1), 5-10.

Hamza, E. G. A., Gladding, S., & Moustafa, A. A. (2022). The Impact of Adolescent Substance Abuse on Family Quality of Life, Marital Satisfaction, and Mental Health in Qatar. The Family Journal, 30(1), 85-90.

Kumpfer, K. L. (2009). Guide to implementing family skills training programs for drug abuse prevention.

Lander, L., Howsare, J., & Byrne, M. (2013). The impact of substance use disorders on families and children: from theory to practice. Social work in public health, 28(3-4), 194-205.

Mancheri, H., Sabzi, Z., Alavi, M., Vakili, M. A., & Maghsoudi, J. (2021). The Quality of Life of Women with Addicted Husbands and its Related Factors in Gorgan, Iran. Journal of Research Development in Nursing and Midwifery, 18(1), 9-12.

Mattoo, S. K., Nebhinani, N., Kumar, B. A., Basu, D., & Kulhara, P. (2013). The family burden with substance dependence: a study from India. The Indian journal of medical research, 137(4), 704.

Moreira, T. D. C., Figueiró, L. R., Fernandes, S., Justo, F. M., Dias, I. R., Barros, H. M. T., & Ferigolo, M. (2013). Quality of life of users of psychoactive substances, relatives, and non-users assessed using the WHOQOL-BREF. Ciência & Saúde Coletiva, 18, 1953-1962.

Marcon, S. R., Rubira, E. A., Espinosa, M. M., Belasco, A., & Barbosa, D. A. (2012). Quality of life and stress in caregivers of drug-addicted people. Acta Paulista de Enfermagem, 25(SPE2), 7-12.

Navabi, N., Asadi, A., & Nakhaee, N. (2017). Impact of Drug Abuse on Family Quality of Life. Addiction and Health, 9(2), 118-119.

O'Shay-Wallace, S. (2019). "We Weren't Raised that Way": Using Stigma Management Communication Theory to Understand How Families Manage the Stigma of Substance Abuse. Health communication.

Ólafsdóttir, J., Orjasniemi, T., & Hrafnsdóttir, S. (2020). Psychosocial distress, physical illness, and social behavior of close relatives to people with substance use disorders. Journal of Social Work Practice in the Addictions, 20(2), 136-154.

Pai S and Kapour RL(1981): The burden on the family of Psychiatric Patient: development of interview schedule, Journal of Psychiatry, 138:332-335.

Ritland, L., Jongbloed, K., Mazzuca, A., Thomas, V., Richardson, C. G., Spittal, P. M., & Guhn, M. (2020). Culturally safe, strengths-based parenting programs supporting Indigenous families impacted by substance use—a scoping review. International Journal of Mental Health and Addiction, 18(6), 1586-1610.

Rabie, M., Shaker, N. M., Gaber, E., El-Habiby, M., Ismail, D., El-Gaafary, M., & Muscat, R. (2020). Prevalence updates of substance use among Egyptian adolescents. Middle East current psychiatry, 27(1), 1-8.

Rospenda, K. M., Minich, L. M., Milner, L. A., & Richman, J. A. (2010). Caregiver burden and alcohol use in a community sample. Journal of addictive diseases, 29(3), 314-324.

Saladino, V., Mosca, O., Petruccelli, F., Hoelzlhammer, L., Lauriola, M., Verrastro, V., & Cabras, C. (2021). A narrative review is the vicious cycle: problematic family relations, substance abuse, and crime in adolescence. Frontiers in psychology, 2906.

Salize, H. J., Jacke, C., Kief, S., Franz, M., & Mann, K. (2013). Treating alcoholism reduces the financial burden on caregivers and increases the quality of adjusted life years. Addiction, 108(1), 62-70.

Shanahan, M., Seddon, J., Ritter, A., & De Abreu Lourenco, R. (2020). Valuing families' preferences for drug treatment: a discrete choice experiment. Addiction, 115(4), 690-699.

Uluyol, F. M., & Bademli, K. (2020). Feelings, Thoughts, and Experiences of Caregivers of Individuals with Substance Use Disorder. ADDICT: The Turkish Journal on Addictions, 7(3), 199-206.

Vederhus, J. K., Pripp, A. H., & Clausen, T. (2016). Quality of life in patients with substance use disorders admitted to detoxification compared with those admitted to hospitals for medical disorders: follow-up results. Substance Abuse: Research and Treatment, 10, SART-S39192.

World Health Organization. (1996). WHOQOL- BREF: Introduction, administration, scoring and generic version of the assessment: field trial version, December 1996 (No. WHOQOL-BREF). World Health Organization.

Yassa, H. A., & Badea, S. T. (2019). Patterns of drug abuse in Upper Egypt: cause or result of violence?. Egyptian Journal of forensic sciences, 9 (1), 1-9.

Yu, Y., Liu, Z. W., Li, T. X., Zhou, W., Xi, S. J., Xiao, S. Y., & Tebes, J. K. (2020). A comparison of psychometric properties of two common measures of caregiving burden: the family burden interview schedule (FBIS-24) and the Zarit caregiver burden interview (ZBI-22). Health and quality of life outcomes, 18(1), 1-9.