

Psychiatric Nursing Intervention program for Enhancing Quality of Life among Family Caregivers of Psychotic Patients

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Abstract

Background: Family caregivers play an important role in the treatment and recovery of psychotic patients, however, they may affect their quality of life. This study aimed to enhance the quality of life among family caregivers of psychotic patients. **Study design:** a quasi-experimental design was utilized to conduct this study. **Setting:** This study was conducted at psychiatric outpatient clinics affiliated to Fayoum university hospital. **Subject:** purposive sample of 50 family caregivers of the psychotic patient and meet the inclusion criteria. **Data collection tools:** (1) Socio-demographic interview questionnaire to assess sociodemographic characteristics. (2) Experience of caring inventory to assess caregiver knowledge about psychotic disorders (3) Quality of life questionnaire to assess caregiver quality of life. **Results:** The present study revealed that there was an improvement in the total knowledge about psychotic disorders among the studied family caregivers post-program implementation, there was a highly statistically significant difference between post-program compared to pre-program regarding the level of quality of life. Also, there was a high positive correlation between total score of knowledge and total score quality of life among family caregivers of psychotic pre-post program implementation. **Conclusion:** Psychiatric nursing intervention program had a positive effect on caregiver knowledge and enhanced their quality of Life, also there was a high positive correlation between total score of knowledge and total score quality of life among family caregivers of psychotic pre-post program implementation. **Recommendations:** design and implement continuous educational programs for family caregivers to provide them with skills for dealing with burdens and stressors which may play an important role in the enhancement of quality of life

KeyWords: Psychiatric nursing intervention program, Family Caregivers, Psychotic Disorders, Quality of Life.

1. Introduction

Psychosis is a group of disorders characterized by thought disorder, abnormal behavior, defective cognition, delusion, and hallucination. [1]. The term psychosis refers to a severe form of mental disorder where there is gross disorganization of personality and severe impairment in social functions; moreover, these patients fail to realize what is real and what is not reasoning, judgment, and insight are lost. Hallucinations and delusions may occur & schizophrenia, delirium, dementia, mania, and depression are examples of psychosis [2].

People with psychotic disorders need lifelong treatment and follow-up, combining medical treatment with rehabilitation and recovery-oriented approaches. These recovery-oriented interventions aim to maintain an optimal quality of life for the patient, despite the severe mental health problems. Traditionally, psychotic patients require intensive treatment and often reside in specialized hospitals, however, in between periods of relapse, most psychotic patients with schizophrenia or depression live in the community and are cared for by their relatives [3].

Caregivers, particularly family members, are considered the principal source of support and important partners in

the rehabilitation of psychotic patients; they spend most of their time providing care for their patients with little knowledge of how to deal with the patient's condition [4]. Moreover, their lack of knowledge, support, and guidance from mental health staff to manage their patients at home may result in creating a source of stress and affects the physical, psychological, and socioeconomic well-being of the caregivers, and increase families' daily responsibilities which affect their quality of life [5].

According to Barnes et al. [6], the concept of quality of life has gained greater attention from the health care providers it is a significant outcome for evaluating or determining the overall health of patients with chronic psychotic disorders as well as their caregivers. QOL is an important goal of treatment in chronic illness, it affects family members, community, and society, and informs professionals, patients, and the public about the challenges associated with chronic diseases, including psychotic disorders.

In the caregiving environment, family caregivers may perceive a greater sense of burden and strain in their caregiving because the burden might have distorted their views towards the care-recipients and affect their relationships, also the family caregivers may conceal their relationship with the patient and avoid social interaction,

face social exclusion because of the nature of disease's symptoms, fail to acknowledge the illness and avoid treatment of the patient [7]. Moreover, the stigma that attaches to psychotic patients and their families may lead to numerous detrimental consequences from an economic and social perspective and has a great impact on family social relations and employment affecting their quality of life [8].

Psychosis is one chronic illness that raises questions about QOL during the rest of an individual's life course. It is important to consider the way that it persists across generations. The children of those with a psychotic disorder may also experience psychosis because untreated psychosis in a parent can affect their children's social and mental development. This in turn leads to emotional problems and educational failure, and both can adversely affect future employment. These factors increase their own risk of psychotic disorders in their later lives.

Nurses should be fully involved in the development of psychiatric nursing intervention programs to help them in dealing with psychotic patients and enhancement their quality of life. because nursing staff can emerge as leaders and role models for psychotic patients and their families and young student nurses, [9]. furthermore, It is important to remember the nursing role as an educator and for the curriculum of educational programs regulators because of the prolonged practice and clinical experience, moreover, they have a basic role in the prevention, treatment, and rehabilitation of psychotic patients and support their families and communities [10].

Significance of the Study

Previous research findings focused on problems of psychotic patients; however, they did not acknowledge the caregiver's quality of life, distress, burden, and social exclusion from society. Therefore, the current study will address whether caregivers are emotionally, physically, economically, and societally affected and improve their quality of life. In addition, the current research study will help health professionals to incorporate families' problems into their intervention programs simultaneously with their mentally ill relatives.

The caregiving role might negatively affect all aspects of the patient's caregivers' QOL. Accordingly, this study returns in benefit to the practice and increase the body of knowledge of family caregivers regarding the concepts included in the study that might enhance their coping abilities, highlight the importance and potential benefits to family caregivers by reducing the burden associated with psychotic disorders and helping them develop effective intervention strategies that make patients and their caregivers enhance their QOL

AIM OF THE STUDY

The study aims to: Enhancement of quality of life among family caregivers of psychotic patients

SUBJECTS AND METHODS

I. Technical design:

The technical design for this study includes the research

design, setting, subjects of the study, and the tools for data collection.

Research Design:

A quasi-experimental design (one group pre/posttest) was utilized to achieve the aim of this study.

Research Setting:

The study was conducted at the psychiatric outpatient clinics was to Fayoum university hospital, this hospital served Fayoum city and the governorate.

Subjects of the Study:

A purposive sample of (50) family caregivers of psychotic patients They were selected according to the following inclusion criteria:

- Both sex (male and female).
- Duration of patients' illness more than six months
- The caregiver should be the main provider of care for the patient with

Data Collection Tool:

Tool(1): Socio-demographic questionnaire for family caregivers of psychotic patients:

This sheet was developed by the researchers, and it consists of personal and social characteristics of family caregivers as age, marital status, educational level, occupation, place of residence, duration of illness, number of hospitalization, relation to the patient, and if there is any other psychotic/mentally ill patient in the family.

Tool (2): Experience of Caring Inventory (ECI)Questionnaire:

This sheet was developed by Zmuker, Burgess, Heman, and Bensor (2011) to be used in measuring the degree of satisfaction of family caregivers with knowledge about psychotic disorders. This sheet consists of data about psychotic disorders as causes, symptoms treatment, relapse, and methods of caring for psychotic patients

Scoring system:

Each item of the experience of caring inventory scale that requires participants to respond on a 2-points Likert-type scale, ranging from 1 (correct) to 2 (incorrect). Subjects with a total score reach or more than 60% were considered to be satisfied with knowledge and those with less than 60% were considered to be unsatisfied with knowledge.

Tool (3): The Schizophrenic Caregiver Quality of life scale: SCQ (Questionnaire)

This scale was developed by Ganguly et al. [11] to be used for assessing the impact of caregiving on caregivers of patients with schizophrenia and modified by the researchers. This scale consists of 75 items that are grouped into ten domains, namely: physical health, emotional health, social relationship, daily life activities, caregiving burdens, patient dependence, worries for the patient, perception of caregiving, dealing with patient's symptoms, and relationship with the therapeutic team,

the first domain is physical health consists of (10) items, the second domain emotional health at consists of (12) items.

The third domain is social relationships that consist of (9), the fourth domain is daily life activities that consist of (10) items, the fifth domain is caregiving burdens that consist of (21) items, the sixth domain is patient dependence which consists of (2) items, the seventh domain is worries for the patient that consists of (3) items, the domain of the eights perception of caregiving that consists of (2) items, the ninth domain is dealing with patient's symptoms that consists of (3) items, finally the tenth is a relationship with the therapeutic team domain which consists of (3) items.

Scoring system:

Each item of the quality-of-life scale requires participants to respond on a 3-points Likert-type scale, ranging from 1 (always) to 2 (sometimes) and 3 (never). The higher score the lower quality of life. Subjects with a total score reach or more than 70% were considered to have lower QOL and those from 40 % to 70% were considered to have moderate QOL and those 40% or less were considered to have higher QOL.

Operational design:

It includes the preparatory phase, pilot study, and fieldwork.

A) The preparatory phase:

This phase involved a review of related literature and theoretical knowledge of several aspects of the study using books, articles, internet periodicals, and magazines to gain a clear picture of all aspects of the research topic.

B) Ethical considerations:

All studied samples were informed that participation in the study was entirely voluntary before it began. Subjects were told that the information gathered from the questionnaires would be kept private and that no personal identification would be required in any way, and family caregivers were informed that the tool's content would only be used for research purposes and that they could refuse or withdraw from the study at any times.

C) A pilot study:

A pilot study was undertaken after the adaptation of the tools and before starting the data collection. It was conducted on 5 family caregivers of psychotic patients. The purpose

of the pilot study was to test the applicability, feasibility, and clarity of the tools. In addition, it served to estimate the approximate time required for interviewing the family caregivers as well as to find out any problems that might interfere with data collection.

D) Fieldwork:

After receiving official approval to perform the study from the manager of El-Fayoum university hospital.

The researchers began collecting data by introducing themselves to the family caregivers and giving them a brief explanation of the study's goal.

The data was gathered by interviewing the family caregivers in the hospital. Each interview was 20 to 30 minutes long.

The data gathering was performed between January 2021 and June 2021. From 9.00 a.m. to 2:00 p.m., the researcher visited the selected units three times every week (Saturday, Monday, and Tuesday).

Every session of the program has general and specific objectives; these were achieved through several teaching methods and media as lecture, group discussion, role playing, booklet, video, and posters. At the beginning of the first session, an orientation of the quality of life enhancement program and its purpose took place. The importance and benefits of the program were explained to all the caregivers under the study to motivate them to follow instructions which were included in it.

Each session started by greeting the caregivers, assessing the caregivers motivation for learning, getting feedback about what was given through the previous session, and present the objectives of the new topic, taking into consideration using simple language to suit the educational level of the caregivers. The researcher emphasized the importance of adherence to each step of the quality of life program, and the rationale for and the benefits of engaging in each new behavior were explained.

Motivation, problem solving and reinforcement techniques were used to enhance active participation for all caregivers in the program plan. The booklet was handed for every caregiver. The researcher encouraged the caregivers to express their readiness for changing their behavior. After finishing of the program sessions, the researcher thanked the family caregivers for participation and asked for any inquiries unclear points.

- **The program content was as follows:**

- **Introductory Session (40 minutes):** During this initial session the researcher explained the aim of the program, determined the place of meeting, the time table, and administered the pre-assessment. During this session family caregivers fill in data collection tools (pretest).
- **Session (1) (30 minutes):** The focus of this session was to provide an overview about meaning, types, causes, and symptoms of Psychotic disorders.
- **Session (2) (30 minutes):** The focus of this session was to provide an overview about treatment of psychosis and method of caring of psychotic patient.
- **Session (3) (30 minutes):** The focus of this session was to provide an overview about meaning, importance and dimensions of quality of life.
- **Session (4) (30 minutes):** The focus of this session was to provide tips for dimensions of quality of life and how caregiving role can effect on family caregivers QOL.
- **Session (5) (45 minutes):** The focus of this

session was to apply communication skills in real situations, and nonjudgmental, acceptance of self and patient.

- **Session (6) (45 minutes):** The focus of this session was to develop personal plan to cope with the tasks of caregiving.
- **Session (7) (45 minutes):** The focus of this session was to develop skills of cognitive restructure to overcome thoughts disorder.

Session (8) (45minutes): The focus of this session was to design personal plan for managing negative feelings and emotions as hostility and criticism.

Session (9) (45 minutes): The focus of this session was to demonstrate critical problem solving techniques to management the range of difficult behavior. .

- **Session (10) (45 minutes):** The focus of this session was to apply deep breathing technique.
- **Session (11) (45minutes):** The focus of this session was to implement of progressive muscles relaxation technique.
- **Session (12) (45 minutes).** The focus of this session was to demonstrate of guided imagery technique promoting positive feeling towards patient and replacing negative feeling with positive ones

Evaluation phase

Evaluation of outcome of the program was carried out by the researcher immediately after implementation of the program (post- test) that have been used in pretest to estimate the effect of quality of life enhancement program on family caregivers of psychotic patients.

III. Administrative design:

El-Fayoum University Hospital received an official letter from the Dean of the Faculty of Nursing asking for authorization to perform the study. To obtain permission and assistance for data collection, this letter includes the study's aim and a copy of the data collection tool.

IV. Statistical design:

Using the computer program SPSS (Statistical Package for the Social Science), data analysis was performed, and acquired data was structured, coded, computerized, and tabulated. For qualitative variables, descriptive statistics in the form of frequencies and percentages were used, while for quantitative data, the mean was used. A statistically significant value was considered at (p≤ 0.05), A highly statistically significant value was considered at (p≤ 0.001), while (p> 0.05) indicate not statistically significant.

2. RESULTS

Table (1): Distribution of family caregivers of psychotic patients according to their socio-demographic characteristics (n=50).

Age:		
<35	11	22
35-45	11	22
45-55	18	36
55 or more	10	20
Mean + SD :	44.34±9.8	
Sex:		
Male	25	50
Female	25	50
Level of education:		
University	11	22
Secondary school	32	64
Read and write	7	14
Place of residence		
Rural	20	40
Urban	30	60
Occupation:		
Employee	20	40
Self-employed	12	24
doesn't work	18	36
Marital status:		
Single	4	8
Married	40	80
Widowed	1	2
Divorced	5	10
Relationship with the patient:		
Father	14	28
Mother	16	32
Husband / Wife	4	8
Brother/sister	11	22
Other	5	10

Table (1) shows that (36%) of family caregivers were aged between 45 and- and55 years old, and it was found that (50%) of them were females, (60%) of them lived in urban areas. When it came to marital status, (80%) of them were married. In comparison, the educational level of those caregivers was (64) secondary education. Regarding the relation to a patient, the table also reveals that (32%) of the studied family caregivers were mothers.

Table (2) distribution of the studied family caregivers regarding Knowledge about psychotic disorders pre and post-program (n=50)

Variable	Pre-program		Post-program		Chi-square	
	Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory		
	N	%	N	%	X ²	P-value
Information for caregivers about psychotic illness	19	38	31	62	14.729	<0.001*
Symptoms of psychotic illness	16	32	34	68	23.377	<0.001*
Relapse (recurrence of disease)	21	42	29	58	23.253	<0.001*
Treating psychotic illnesses	18	36	32	64	26.272	<0.001*
Methods of caring for a psychotic patient	17	34	33	66	36.079	<0.001*

Table (2) illustrates that 62% of family caregivers were unsatisfied with knowledge about psychotic disorders preprogram compared with 24% post program, while, 68% of them unsatisfied with knowledge about symptoms of psychotic illness but this percentage decreased to be 20%. On the other hand, 58% of the studied family caregivers were unsatisfied with the knowledge about a relapse of disease preprogram, this percentage became 12% post-program According to treating psychotic illness, 64% of family caregivers had no experience with the treatment of psychotic illness before the program, but this percentage decreased post-program to be 14%, and finally, 66% of the studied family unsatisfied with the knowledge about the method of caring for a psychotic patient preprogram compared with 8% post-program.

Table (3): distribution of the studied family caregivers regarding total knowledge about psychotic disorders (n=50).

Total knowledge	Pre-program		Post-program		Chi-square	
	N	%	N	%	X2	P-value
Satisfactory	18	36	42	84	24.000	<0.001*
Unsatisfactory	32	64	8	16		
Total	50	100	50	100		

Table (3) illustrates that, reveals that, 36% of studied family caregivers satisfied with total knowledge about psychotic disorders preprogram, but this percentage increased to be 84% post-program, on the other hand, 64% of family caregivers unsatisfied with total knowledge preprogram, however, post-program this percentage decreased and became 16%.

Table (4) : Distribution of studied family caregivers according to total QOL domains (n=50)

Domains	Pre-program			Post-program			Chi-square				
	High	Mode	Low	High	Mode	Low	X2	P-value			
	N	%	N	%	N	%					
Physical Health	12	24	16	32	24	25	17	34	6	14.9	<0.001*
Emotional Health	12	24	18	36	24	25	15	30	7	14.6	<0.001*
Social relationships	12	24	21	42	13	26	14	28	5	20.3	<0.001*
Daily life activities	6	12	12	24	36	36	12	24	8	30.4	<0.001*
Caregiving burdens	3	6	11	22	37	36	16	32	36	51.9	<0.001*
Patient dependence	12	24	22	44	13	25	13	26	8	10.5	0.005*
Worries for the patient	12	24	24	48	12	25	19	38	36	14.0	<0.001*
Perception of caregiving	12	24	19	38	13	26	14	28	6	11.8	0.003*
Dealing with patient's symptoms	12	24	18	36	24	25	15	30	9	19.6	0.008*
Relationship with the therapeutic team	9	18	17	34	24	25	18	36	7	16.8	<0.001*

Table (4) illustrates that there were statistically significant relations ($p \leq 0.05$) in total patients' dependence score and total dealing with patients symptoms score pre and post-program implementation, moreover, there were highly statistically significant relations were observed as regards physical, emotional, social relationships, daily life activities, caregiving burdens worries for the patient and relationship with the therapeutic team ($p \leq 0.001$) pre and post-program implementation. However, there was no statistically significant relationship between the perception of caregiving scores pre-and post-program ($P \geq 0.05$).

Table (5) Distribution of studied family caregivers according to the total quality of life (n=50)

Total QOL	Pre-program		Post-program		Chi-square	
	N	%	N	%	X2	P-value
High	10	20	29	58	18.672	<0.001*
Moderate	18	36	15	30		
Low	22	44	6	12		
Total	50	100	50	100		

Table (5) reveals that there was an improvement in the total level of QOL post-post-program implementation, and 20% of family caregivers had a high level of QOL preprogram compared with 58% post-program.

Table (6): Correlation between total knowledge score and total QOL score (n=50).

Total QOL score	Total knowledge score	
	R	P-value
Pre-program	0.752	<0.001*
Post-program	0.861	<0.001*

Table (6) clarifies that there was a highly positive statistical correlation between the total score of knowledge and the total score of QOL pre and post-program.

3. Discussion

Results of the current study revealed that more than one-third of family caregivers' age ranged between (45-55) years old, and half of them were females, also, most family caregivers were mothers and fathers. This result might be related to the that, this age may have more knowledge and oriented towards disorders, moreover, they can cope better with stressors, and burdens and be able to take responsibility for caregiving.

This result is in agreement with [3], who studied QOL, in family caregivers of patients with bipolar disorder compared with family caregivers of schizophrenia and healthy control, and they found that more than one-third of the sample was aged between 45-55 years.

This result is congruent with the results of [Caqueo-Urizar et al. \[12\]](#), who assessed QOL in caregivers of patients with bipolar disorder with manic episodes and its correlation with the severity of illness and found that half of the sample were males. This consistency may be due to the most male caregivers in the Egyptian culture are breadwinners of their families which encourage them to search for solution and treatment for their patients to

restore their life.

This result contradicted [Zendjidjian et al. \[13\]](#), who assessed what specifically contributes to disturb non-verbal fluency in patients with bipolar disorder: ineffective performance initiation slowed processing, and lack of execution strategy and found that majority of the sample were aged between twenty to forty years.

Regarding the level of education and occupation, it was found that nearly two-thirds of the studied family caregivers were secondary educated, moreover, near to half of them were employed. This is maybe due to low income which may prevent caregivers complete their education. Meanwhile, generally, education might have a positive impact on the care and management of psychotic disorders and caregivers with high concentration may be trusted more in their ability to understand physician directions regarding medication schedules compared to those with lower education or uneducated.

This finding agrees with a study carried out by [Ochoa et al. \[14\]](#) in a study entitled "Pathways to anxiety: effect of coping strategies for disruptive behaviors in a patient with schizophrenia". Who found that most of the participating caregivers were secondary educated, and most of them were employed.

The result contradicts the result of [Rodwin \[15\]](#), who studied the impact of living with patient bipolar disorder: Making sense of caregiver burden and found that about one-third of the family caregivers had not received any formal education and another third had secondary education and one four had completed graduation.

This inconsistency due to increased education may be associated with better outcomes for patients and overcoming impairments in psychological, social, and occupational functioning for patients and their caregivers. In the line of contradiction, the study of [Stanley \[16\]](#) who assessed schizophrenia and health-related quality of life among caregivers: a review the of the burden of disease and clinical trials and reported that more than two-thirds of the sample was unemployed but slightly less than one-third of them were employed.

Regarding the place of residence, the current study findings indicated that near to two-thirds of the studied sample were living in urban areas. A possible explanation for such a result is that the cultural background and awareness of the urban population about psychiatric illness is more than the rural population.

Another possible explanation for this result is that decrease number of governmental psychiatric/ health hospitals and institutions in rural areas and psychiatric facilities usually are found in urban areas that are distant and need transportation, also the cultural background which may be due to low mental health literacy, increase stigma of mental illness, and low media, which impedes family caregivers from seeking help for their patients .,

This result is consistent with [Foldemo et al. \[17\]](#), who found that the highest percentages of the sample were less than three quarters living in urban areas and more than one quarter lived in the village.

This result is contradicted by [Caqueo-Urizar et al. \[12\]](#), who assessed the quality of life in caregivers with bipolar mood disorder with current manic episodes and its

correlation with the severity of illness and found that more than three-fifths of the patients resided in urban areas and slightly less than two-fifth in rural areas

Concerning marital status and the relation of family caregivers to patients, the result of the current study clarified that most of the sample were married, and more than one-third of family caregivers were mothers. From the researcher's point of view, this result could be due to the caregiving is often expected performed by females especially mothers because the women have more responsibility towards their sons and home, so, they may be trusted more in their ability to care for the patient with psychosis who needs more specific care.

This result is supported by [ZamZam et al. \[18\]](#) who assessed caregivers' burden in families of patients suffering from schizophrenia and reported that more than three-fifth of the studied sample were married and more than one-third were um married.

However, [Li et al. \[10\]](#), found contradicting findings, as the majority of caregivers in their study they assessed the use of self-care strategies in the management of the bipolar disorder and the relation of symptoms, illness intrusiveness, and quality of life, they reported that more than half of the sample were divorced.

Concerning family caregivers' knowledge regarding psychotic disorders, the current study clarified that there was a highly statistically significant difference found between pre-and post-programs regarding information, manifestations, treatment, relapse, and method of caring. This result may be because a high percentage of the secondary and high educational level could learn.

In addition, they were able to practice self-learning about disorder and treatment and proper methods of care. By enhancing the family caregivers' knowledge regarding psychotic disorders can be realized that they are in a unique position to manage their patients' disease effectively and efficiently through education, advice, and supportive guidance.

This result agrees with [Neupane et al. \[7\]](#), who assess psychoeducation and online mood tracking of patients with bipolar disorder: in a randomized controlled trial and reported that psychoeducation did achieve its primary didactic objective of increasing knowledge of the bipolar disorder.

Concerning the family caregivers' knowledge regarding the percentage of total knowledge about psychotic disorders under study pre-and post-program, the current study revealed that more than one-third of the studied sample had a satisfactory level of knowledge preprogram, and the majority of their knowledge improved to two-thirds post-program In addition, there was a highly statistically significant difference were found pre and post-program.

This result may be because a high percentage of the current study had finished secondary and high educational level and had better learning. Moreover, the family caregivers had a desire to restore their lives and achieve the maximum level of satisfaction in all aspects of their life by motivating and increasing family caregivers' readiness to learn from the intervention program,

This result is in agreement with [Chakrabarti et al. \[19\]](#),

who stated that four sessions of individual psychoeducation may have some positive effects on knowledge but seem to be effective in preventing recurrence in patients with mood disorders during one-year prospective follow up.

Similarly, Radua et al. [3], studied web-based intervention to improve quality of life in late-stage schizophrenia: randomized controlled trial protocol and suggested that psych educational intervention is more effective in caregivers of people with late-stage of schizophrenia.

Regarding physical dimension, the current study revealed that one-quarter of the studied sample had high physical QOL in preprogram. Whereas in post-program it was found that, more than half of the studied sample had high QOL. This result may be because of an intervention program that improves health-related QOL through performing regular physical exercise, eating a well-balanced diet, and proper sleeping.

Concerning the total physical dimension, the findings of the current study clarified that there were highly statistically significant differences ($p \leq 0.001$) between pre-and post-program family caregivers of psychotic patients. This result may be due to an increase in the family caregivers' awareness regarding the symptoms of psychotic disorders, and needed lifestyle modifications.

This result is in agreement with Radua et al. [3] who assessed caregiver burden and health-related quality of life among caregivers of people with schizophrenia pre and post-intervention and stated that there was a high statistically significant difference regarding physical QOL dimension in which ($p \leq 0.001$).

In addition, this result is inconsistent with Radua et al. [3], who assessed the evaluation of the effect of meantime supplementation in the treatment of acute manic phase of elderly patients: a double-blind randomized controlled trial and the study showed that there was a highly statistically significant difference between the study control group and regarding physical QOL dimension ($p \leq 0.001$).

Regarding the emotional health domain, the finding of the present study showed that there are highly statistically significant differences between the pre-and post-program of the caregivers of psychotic patients as regards emotional health domain ($p \leq 0.001$). In addition, less than a quarter of the studied sample had high total emotional health QOL in pre-intervention, while, more than half of the studied sample had high total emotional health during post-program.

This result may be due to the educational program sessions helping caregivers to know the sources and effects of stress, replace negative emotions with positive ones, and improve their emotional states which can lead to reducing emotions of over-involvement and reduction in psychological stress. Also, the management program helped them in dealing with their problems and used effective coping with negative thoughts and emotions.

The result of the current study congruent with a study was done by Shiyasi et al., (2018) in a study entitled "Developing stress management program for caregivers of patient with mental illness and its effectiveness on their mental health". The sample included 50 family caregivers.

Results showed significant improvement in the mental well-being of caregivers and diminishing their anxiety and depression.

In the same line, these findings come in agreement with the study by Noorbakhsh, (2015) in a study entitled "Positive Program Can Reduce Depression, Anxiety, and Stress of caregivers who have patient with mood disorders" who illustrated that, a reduction in stress, anxiety and depression levels of caregivers after attending the program.

Also, this finding comes in harmony with the study conducted by Zahid et al. [20] in a study entitled "The Effect of Stress Management Program Using Cognitive Behavior Approach on Mental Health of Caregivers of Patients with Schizophrenia", who confirmed the effectiveness of stress management programs. The results revealed significant improvement in the mental well-being of family caregivers and diminishing their anxiety and depression. Similarly, Ochoa et al. [14] suggest that caregivers with anxiety try to find other positive coping strategies to diminish their distress.

In this line, Grover et al. [21] showed that caregivers by perceiving their patients' behavioral problems as a result of a biological disability, replace their feelings of anger and irritation with feelings of empathy and compassion. The study revealed that the emotional component of the caregivers' reactions decreased.

Regarding the social relationship dimension, the current study revealed that less than one-quarter of studied family caregivers had high social relationship QOL pre-intervention. Whereas near to two-thirds of the studied sample had a high relationship with QOL. This result is due to that the majority of the studied sample lived within a social context with their patients and provided patients with functional and emotional support, in addition to, the effect of the program that is concerned with improving social skills and seeking others help.

In addition, there were highly statistically significant differences between pre and post-intervention programs as regards the social relationship dimension of quality of life among family caregivers of psychotic patients ($p \leq 0.001$). This result was supported by Schmid et al. [22] who assessed the quality of life in major depressive disorder and bipolar disorder patients' caregivers, they reported that there were highly statistically significant differences between the study and control groups as regards social relationship QOL dimension ($P < 0.001$). They returned their result to the long duration of illness and less than one-third of their samples were unemployed.

This result is in the same line as Williams et al., who determined the quality of life in caregivers of patients with dementia and reported that there were highly statistically significant differences between the studied sample and the control group regarding the social relationship QOL domain

On the other hand, this result is consistent with Hanzawa et al. [23] who assessed the quality of life in schizophrenia and bipolar disorder: the impact of symptomatic remission and resilience and revealed that there were no statistical differences between patient and control groups

regarding social relationships ($p < 0.001$). This inconsistency may be due to the differences in socio-demographic characteristics in the current study.

Regarding total OOL, the current study illustrated that there was a highly statistically difference between pre- and post-program regarding total QOL ($P < 0.001$). Moreover, near to half of the studied sample had low QOL in preprogram, while nearly two-thirds of them had high QOL in post-program. This result may be due to life satisfaction being increased in parallel with modifying the abilities of studied family caregivers. Another explanation of this result is that trust in God's mercy and their faith which obligate the caregiver to cope and accept their patients.

This finding was consistent with Rofail et al., (2016), who conducted a study about the impact of caregivers of patients with schizophrenia on quality of life. They emphasized that family caregivers of patients with schizophrenia reported lower levels of quality of life.

In the same line, these results came in agreement with Chakrabarti et al. [24], who carried out a study about caregiver burden and impact on QOL for impaired elderly: a cross-sectional study in rural Lower Egypt, they reported that family caregivers of patient with dementia experienced a higher level of burden and severe psychological stress which may lead to lower QOL.

In this context, the study conducted by Nehra et al. [25], carried out a study on the QOL of caregivers of patients with schizophrenia in Saudi Arabia. The study found that caregivers of patients with dementia experienced a lower level of QOL, especially in the areas of financial burden, disruption of family activities, and disruption of family life. The current study illustrated that there was a highly statistically significant correlation between total knowledge and total QOL pre- and post-program among family caregivers of psychotic patients. This result may be due to the association between better awareness of the well as an increased ability to cope with its challenges and increase the ability to handle their life and rearrange their priorities when caring for their patients, accept their caregiving role, deal with signs and symptoms of psychosis, cope with stressors and try to seek help from other and try to repair their social relationships.

This result is supported by Ganguly et al. [11] who assessed the impact of the caregiving burden on the quality of life of caregivers of patients with schizophrenia and reported that the level of education was significantly associated with QOL and enhanced improvement in the caregivers' QOL, indicating the caregivers with higher knowledge and highly educated had better QOL.

Comprehensively, the result of the current study supports the research hypothesis and many past research findings and indicated that the use of supportive coping skills had a positive impact on psychotic disorders and enhance physical and psychological wellbeing among psychotic patients and their family caregivers. In conclusion, the use of intervention programs that contain different coping skills can help family caregivers of the psychotic patient to face the challenges of caregiving.

4. Conclusion

In the light of the current study, it can be concluded that there was an increase in the level of knowledge satisfaction among family caregivers regarding psychotic disorders after the program implementation. with a highly statistically significant difference between pre- and post-program implementation. ($P \leq 0.001$). In addition, there was an enhancement in the quality of life of family caregivers after program implementation. as regards with a highly statistically significant difference pre- and post-program implementation. ($P \leq 0.001$).

5. Recommendations

- Regular and continuous educational programs are important to improve caregivers' adjustment toward the care of their psychotic patients and provide them with skills for dealing with stressors and caregiving burdens.
- Establish awareness programs in the psychiatric hospitals for family caregivers about psychosis.
- Counseling clinics for family caregivers of patients with psychosis are needed to minimize their burdens and inform them about the coping strategies for dealing with their patients.
- Self-help group service should be available in a psychiatric hospital to provide an opportunity for caregivers to share their feelings, problems, ideas, and information with others who are undergoing similar experiences. Also, provide them with an opportunity to meet and support each other.
- Continuous training of psychiatric nurses' team to know how to assist the family caregivers and teaching new skills to deal with their stress and psychotic patients in a positive manner.
- All treatment services provided should be affordable and evidence-based.
- Further researches about burdens, stressors, and coping strategies among caregivers of patients with psychosis are important in support of caregivers.
- Future research should focus on the effect of stigma on the quality of life of caregivers of psychotic disorders and how to overcome this problem

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