

Effects of Counseling Intervention on Awareness and Burden of Family Caregivers of Patients with Bipolar Disorder

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ABSTRACT

Bipolar disorder is a recurrent and long term mental illness that can seriously affect the lives of patients and their families. This study aimed to investigate the effect of counseling intervention sessions on caregivers' awareness and burden regarding their patients with bipolar disorder; through improving their knowledge, attitudes and practices toward their patients with bipolar disorder and reducing their burden. The sample included 100 caregivers' accompanying their patients with bipolar disorder, who attended to the Out-Patient Clinic in Al-Abbassia Mental Health Hospital. The tools used in the study were 1) Interviewing questionnaire to assess the caregivers' awareness, which covered socio demographic data about caregivers and their patients with bipolar disorder, patient history of illness, questions to assess the knowledge of caregivers about bipolar disorder; questions to assess caregivers' positive and negative attitudes toward their patients with bipolar disorder; and questions to measure their practices toward patients with bipolar disorder. 2) Burden Interview Questionnaire to assess the level of burden of caregivers' (physical, psychological, social and financial). This questionnaire was applied before and after the counseling sessions. The results of this study showed improvements, with highly statistically significant differences between before and after application of the counseling intervention program regarding to caregivers' awareness (knowledge, attitudes and practices) and their burden toward their patients with bipolar disorder. The study recommended that counseling clinic for family caregivers of patients with bipolar disorder is needed to offer appropriate information and support through open dialogues between caregivers and health professionals in order to plan for intervention and guide families to know how to deal with their patient's problems and disabilities.

Key words: Bipolar disorder - Caregivers' awareness - Burden - Counseling

INTRODUCTION

Bipolar disorder (previously called manic-depressive illness) is a brain disorder that involves changes in brain function leading to dramatic mood swings, characterized by episodes of mania or hypomania and episodes of depressed mood. These mood swings is a serious mental condition causes unusual shifts in patients' energy, activity levels, thinking, behavior and the ability to carry out daily tasks. Bipolar disorders symptoms can result in impair

normal functioning, damaged relationships, poor work or school performance, and even suicide (Varcariolis, 2016). The causes of bipolar disorder are not clearly understood, but both environmental and genetic factors play a role. Many genes of small effect contribute to risk. Environmental factors include a history of childhood abuse, and long-term stress (Doheny, 2015).

Bipolar disorder usually begins in early adulthood, with the average age of onset around 18-24 years. In Egypt, bipolar disorder represents 20.3% of all mental

illness cases. Early diagnosis, proper treatment and finding the right medication are important as they lessen the effects of the disorder on individuals and families (**Asaad et al., 2014**).

The world health organization ranked bipolar disorder collectively as the 6th most common moderately to severely disabling condition in the world for any age group (**WHO, 2014**). Bipolar disorder affects not only the life of the person with bipolar but the lives of those who care for them. Close family and friends (bipolar caregivers) can be a primary source of support for a person with bipolar disorder. Bipolar disorder is a major cause of suffering for patients, but the burden it indirectly imposes upon families and caregivers is a matter of increasing clinical concern. Caregiver burden has been described as the presence of problems, difficulties or adverse events which affect the life of the psychiatric patient's significant others, It is known that people who care informally for those with long-term illnesses suffer from increased levels of stress, depression and ill-health (**Perlick et al., 2010**).

Caregivers and other family members play a central role in their bipolar disorder patient's treatment. Everyone benefits from balance in life but, for people with bipolar disorder, balance is even more important. Regular and healthy sleep patterns are crucial because lack of sleep can lead to relapse. Good nutrition, exercise, financial stability, something meaningful to do, participation in community, an enjoyment of nature or the arts, as well as attention to spirituality are additional ingredients in healthy living. People with bipolar disorder need to pay close attention to the quality of their personal and work relationships (**Eker & Harkin, 2012**).

Caregivers of people with bipolar disorder face different challenges than with other illnesses. The caregiver will be affected by cultural and social attitudes to the illness,

and these have important effects on the level of burden experienced. Manic episodes of the illness are very disruptive to daily life, work and family relationships. Great demands may be placed on family members to be involved in care giving. These demands can persist even during remission, where residual symptoms are often still present (**Reinares et al., 2010**).

Caregivers of people with bipolar disorder may experience a different quality of burden than is seen with other illnesses. Caregivers' previous experiences of health services may influence their beliefs about the illness. Caring for a relative with bipolar disorder poses both their perception about disorder and their burdens as increased expenditure of time and money, and emotional burdens as worry, tension, and grief (**Perlick et al., 2010**).

There is a need to better understand caregivers' views and personal perceptions of the stresses and demands arising from caring for someone with bipolar disorder. This will be necessary in order to develop practical, appropriate, and acceptable interventions, and to improve the training of professionals working with caregivers (**Jönsson et al., 2011**).

As reported by (**Chang et al., 2010**) that burden experienced by family caregivers of people with bipolar disorder are associated with problems in health, mental health, and cost. Psychosocial and counseling interventions targeting the strains of care giving for a patient with bipolar disorder are needed. Also psycho-education can help patients to adjust and come to terms with a chronic illness, enhancing treatment compliance, providing information and emotional support to patients and their families. If caregivers beliefs about bipolar disorder are primarily based on cultural as opposed to medical models of illness, there is a need to make professionals aware of this when offering information and support to

individuals and groups of informal caregivers.

The nurse must recognize her responsibility in educating the patient as well as the caregivers about Bipolar Disorder and its treatment so that frequent admissions to hospital and the duration of stay can be reduced. Families experience a lot of burdens like (financial, social and psychological) in serving as long term caregivers for their loved ones. Although the primary focus of family psycho-education was to improve patient outcomes, an essential intermediate goal is to promote the well-being of the family. Administrators of mental health services should be aware of the needs of the caregivers of patients having long term illness and formulate policies which enforce mental health professionals to include psycho social interventions in their day to day interventional activities with the patients and caregivers (Ghadirian et al., 2009).

SIGNIFICANCE OF THE STUDY:

Caring for someone with any illness is difficult. Caring for someone with a psychiatric illness is especially hard for many reasons. For family caregivers, coping with someone who is manic or depressed takes a heavy emotional toll and strains the relationship, often to the breaking point. An added burden is the stigma of mental illness, which leaves families feeling frightened and isolated, unaware that many other families share their experience. Health care coverage is far more limited than for other illnesses. Health professionals may fail to focus on issues regarded by caregivers as important, paying more attention to ones they perceive as key. There is also a risk of paying insufficient attention to the views of caregivers, the nature of the relationship between caregiver and patient, social circumstances, and culturally situated health beliefs, all of which may have an impact upon both treatment interventions and the

burden of care experienced by informal caregivers (Vian et al., 2013) .

Families and friends who support people with bipolar disorder need support themselves. Counseling intervention is considered an important way for them to understand what their loved one is experiencing and to help them to cope with their illness. There is an emphasis that the caregivers should be equipped with sufficient knowledge to engage, communicate with, and cope with their patient problems. As well, counseling can help family to regulate their deficits in different areas of the problem to become a part of solution to their patient's condition, making changes in their lives and provide accepted secure environments and opportunities that enhance effective treatment to prevent future relapses.

AIM OF THE STUDY

This study aimed to investigate the effect of counseling intervention sessions on caregivers' awareness regarding their patients with bipolar disorder.

It will be achieved through:

- Assessment of caregivers' awareness (knowledge, attitudes and practices) toward their patients with bipolar disorder.
- Assessment of caregivers' burden regarding their patients with bipolar disorder.
- Accordingly, developing and implementing counseling sessions to improve caregivers' ' awareness (knowledge, attitudes and practices) toward their patients with bipolar disorder and reducing their burden.

Hypothesis:

Counseling intervention will improve parents' caregivers' awareness (knowledge,

attitudes and practices) toward their patients with bipolar disorder and reducing their burden

MATERIAL AND METHODS

Technical design:

Research design: A quasi-experimental design was utilized to conduct the study.

Setting: This study was conducted at the outpatient clinics in Al-Abbassia Mental Health Hospital.

Subjects:

A purposive sample was obtained from 100 family caregivers with their patients who have been diagnosed with bipolar disorder, coming to the above mentioned setting, were recruited for the study. The subjects met the following criteria:

- Sex: both sexes (males and females)
- Free from other psychiatric disorders.
- Free from significant psychological co-morbidities.

Tools:

The tools used in the study for data collection were:

1) **An interviewing questionnaire**, designed by the researchers, based on the literature review, to assess caregivers' awareness, it consists of:

- Socio demographic data about caregivers and their patients.
- History of patient illness regarding bipolar disorder.
- Questions to assess caregivers' knowledge about bipolar disorder (definition, causes, manifestations,

types, associated disturbance, treatment and pattern of caring).

- Questions to assess caregivers' positive and negative attitudes toward their bipolar disorder.
- Questions to assess caregivers' practices toward their patient with bipolar disorder, these will be through assessing the possible caregivers' responses towards patient undesirable behavior related to mood symptoms.

Scoring system:

A scoring system was followed to obtain the outcome of caregivers' knowledge, attitudes and practices according to the following:

Part1: is related to caregivers' knowledge, it includes 6 questions, graded as:

Correct/complete answer = 2 degree, Correct/incomplete answer = 1 degree, and Incorrect answer = zero.

Part 2: is related to caregivers' positive and negative attitudes, it includes 15 questions

The answer with "Yes" = 1 degree and the answer with "No" = zero.

Part 3: is related to caregivers' practices and responses toward their patient, it includes 12 questions. The answer with Always=2 degree, Sometimes=1 degree and Never = zero degree.

2) Burden Interview Questionnaire (Zarit et al., 1980).

It was consistent of 29 statements to assess caregivers' physical, psychological, social and financial burden.

A scoring system of the scale consisted of four point scale of responses for each statement indicated how often the caregiver feels that way: never (0), rarely (1), sometimes (2) or nearly always (3).

The total score was obtained by summing the response rate for all statements. The burden level was rated mild burden if the score ranges between 0-29, moderate burden if it is 29-59 and severe burden if the score is 59-87.

Validity & Reliability:

The developed tool was reviewed by experts in psychiatry and psychiatric mental health nursing, as well as experts in socio-behavioral sciences, who reviewed the tool for clarity, relevance, comprehensiveness, understanding, applicability and ease for implementation. Validation was through majority agreement.

Testing the Arabic interviewing questionnaire sheet was done using Alpha Cronbach test. The Statistical result was 0.82.

Operational design:

Pilot study:

A pilot study was carried out on a sample of 10 caregivers accompanying their patient with bipolar disorder to test the designed assessment tool and its applicability on the sample, in order to estimate the time needed to collect data, and to identify obstacles or problems in data collection and accordingly necessary modifications were done. Subjects who shared in the pilot study were excluded from the main study sample.

Administrative design:

Official permissions were obtained from the administrators of the outpatient

clinics in Al-Abbassia Mental Health Hospital.

Ethical consideration:

The researchers emphasized to caregivers that the study was voluntary and anonymous. Caregivers had the full right to refuse to participate in the study or to withdraw at any time without giving any reason.

Field Work:

Data collection was carried out, from October 2015 to April 2016. The interview methods were used for data collection; subjects were interviewed by the researchers, after explaining the aim of the study that was conducted through four phases:

1. Pre-assessment phase. It was done before the implementation of the counseling intervention; the objective was to identify the caregiver' needs regarding to knowledge, attitudes and practices toward their patients with bipolar disorder and their physical, psychological ,social and financial burden .

2. Development of the therapeutic intervention phase. According to the identified caregivers' needs; the researchers developed counseling sessions, aimed at improving caregivers' awareness toward their patients with bipolar disorder and reducing their burden. Sessions include accurate knowledge about bipolar disorder, appropriate caring practices toward patient`s behaviors.

3. Implementation of counseling sessions' phase. The researchers interviewed with each caregiver individually to fill in the tools of data collection. Then the researchers explained the aim and objectives of the program to the caregiver, the researchers makes assure that all questions were completed. The tools of data collection were

filled in by the caregivers or by the researchers when the caregiver was not educated. Filling in the tools lasted from 20-25 minutes for each subject included in the study. The subjects (100) were divided into subgroups; each of them consisted of 10 subjects (5 groups on Sunday and the other 5 groups on Tuesday). Counselling sessions was implemented for each group separately (2 days/week) the duration of each session lasted from 45 - 60 minutes. The period of implementation of the counseling sessions was achieved within 8-10 weeks; each session consisted of the following activities:

Participant's acquaintance, expressing feelings, exchange experiences, interaction with others, training to listen attentively and arrange what the subject wants to say.

- At the end of each session, the researchers make conclusion, take feedback from every participant and give homework e.g., schedule for diary. Also at the beginning of each session the researchers review and discuss their homework.

Approach of the researchers during the sessions:

Leaving them expressing inner feelings freely, listening attentively to every subject, control the session, encouragement and involvement, constructive criticism and appraisal of achievement, encouraging speaking or stopping speaking to listen without interruption.

Contents of counseling program: The content covers the knowledge regarding bipolar disorder (definition, causes, manifestations, types, associated disturbance, treatment, nursing management, how to deal with the patient in home and strategies to facing burden).

4. Evaluation phase: The pre-assessment tools were repeated again at the

end of counseling sessions (post-test), feedback of each session to measure the progress of the subject's awareness in relation to their knowledge about bipolar disorder, their positive and negative attitudes toward their patient, their practices regarding patient's behaviors and their level of burden.

Statistical analysis:

Data entry and statistical analysis were done using the Statistical Package for Social Science (SPSS) version 16.0. For statistical analysis, data were tabulated, coded, revised, analyzed using number and percentage distribution in order to determine whether there were significant differences or not and comparisons between pre and post tests were done using the arithmetic mean, standard deviation, Chi-square test and Pearson correlation. Statistical significance was considered at p-value <0.05.

RESULTS:

Table (1): It shows that three quarter (75%) of caregivers under study were females. less than third (30%) of them were mothers and (28%) of them were wives. The greatest proportion of them (86%) was married for more than half of them (54%), their age ranged between 30- < 50 years with a mean age of 37.6 ± 6.3 . Approximately two fifth (44%) of them were moderate educated and (72%) of them were working.

Table (2): It reveals that less than half (46%) of patients under study their age ranged between of 18 < 29 years with a mean age of 33.2 ± 9.7 . Less than two thirds (60%) of them were males. Almost less than half (42%) of them were married and two fifth (40%) of them were highly educated, more than half (52%) of them were not working and approximately two thirds (64%) of them were from rural areas.

Table (3): It reveals that less than three quarter (72%) of patient under study had

gradual onset of the symptoms, and more than half (57%) of them had weekly duration of these symptoms. Besides, two thirds (66%) of them had increase in the intensity of symptoms, three fifth of the patients (42%) were suffering from bipolar disorder for more than one year. Almost majority (88%) of patient under study had suffered from side effects of medication.

Table (4): As observed from this table, before counseling intervention, the majority of caregivers had incorrect knowledge about the bipolar disorder, however after counseling intervention, the frequency of correct answers (definition, causes, manifestations, types, associated disturbances, treatment and caring for their patient) were upgraded and statistical differences were found to be highly significant ($p < 0.001$).

Figure (1): Denotes that there is a highly statistically significant difference between before and after counseling sessions as regards the total scores of the caregivers' positive attitudes towards their patients with bipolar disorder which increased significantly after counseling ($X^2 = 157.5$, $p < 0.001$). Meanwhile, there is a highly statistically significant difference between before and after counseling sessions as regards the total scores of the caregivers' negative attitudes towards their patients with bipolar disorder,

which decreased significantly after counseling ($X^2 = 196$, $p < 0.001$).

Tables (5): As shown in this table, a post-intervention improvement has been observed in most of the items related to caregivers' practices towards caring their patients with bipolar disorder. The majority of caregivers became respondents to the patient's behaviors better than their responses as before counseling intervention. There was a highly statistically significant difference in the total scores of caregivers' practices towards patients ($p < 0.001$).

Tables (6): It indicates that, there was a highly statistically significant correlation between before and after counseling sessions, in total scores of caregivers' knowledge, attitudes and practices toward their patients with bipolar disorder. Scores respectively ($r = .433, .320, .312$ with $P < 0.001$).

Table (7): displays the comparison of burden interview scale scores pre - post-counseling session, It indicates that, less than three quarters (72%) of caregivers, experienced a severe burden before intervention, meanwhile in post-intervention there were more than two thirds (68%) of them experienced a mild burden. There was a highly statistically significant difference between family caregivers, burden scores pre - post- counseling, implementation ($X^2 = 50.05$ at $P < 0.01$).

Table (1): Distribution of socio-demographic characteristics of family caregivers (n=100).

Items	No & %
Age (years):	
20 -< 30	15
30 -< 50	54
50 +	31
X ±SD 37.6 ± 6.3	
Sex:	
Male	25
Female	75
Level of Education:	
Read & write	17
Moderate	44
University/Post-graduate	38
Marital Status:	
Married	86
Divorced	6
Widow	8
Degree of relative:	
Father	12
Mother	30
Husband	10
Wife	28
Daughter	17
Son	7
Occupation:	
Working	72
Not working	28

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Table (2): Distribution of socio-demographic characteristics of patients with bipolar disorder (n=100).

Items	No.
Age (years) :	
18-<29	46
29<40	44
40 +	10
Mean \pm SD	33.2 \pm 9.7
Sex:	
Male	60
Female	40
Marital status :	
Single	38
Married	42
Divorced	20
Widowed	4
Level of education:	
Illiterate	8
Read & write	20
Primary & secondary school	32
University level	40
Work status:	
Working	48
Not working	52
Residence area:	
Urban	36
Rural	64

Table (3): Distribution of patients with bipolar disorder regarding to their history of illness (n=100).

Items	No.
Onset of symptoms:	
Sudden	38
Gradual	72
Duration of symptoms:	
Days	25
Weeks	57
Months	18
Intensity of symptoms:	
Stable	14
Increased	66
Decreased	20
Duration of disease:	
Less than one year	23
1 - < 3	42
3 +	35
Medication side effects :	
Yes	88
No	12

Table (4): Comparison of parents' knowledge regarding to bipolar disorder before and after the program (n=100).

Item	Pre-program	Post-program	X ²	P value	Significance
	No & %	No & %			
Definition:					
Correct	23	73	50	<0.001	Sig.
Incorrect	77	27			
Causes					
Correct	21	80	69.6	<0.001	Sig.
Incorrect	79	20			
Manifestation					
Correct	37	61	11.5	<0.001	Sig.
Incorrect	63	39			
Types :					
Correct	28	69	33.8	<0.001	Sig.
Incorrect	72	31			
Associated Disturbances:					
Correct	22	74	54.2	<0.001	Sig.
Incorrect	78	26			
Treatment					
Correct	25	65	32.4	<0.001	Sig.
Incorrect	75	35			
Caring of patient :					
Correct	24	70	45.4	<0.001	Sig.
Incorrect	76	30			

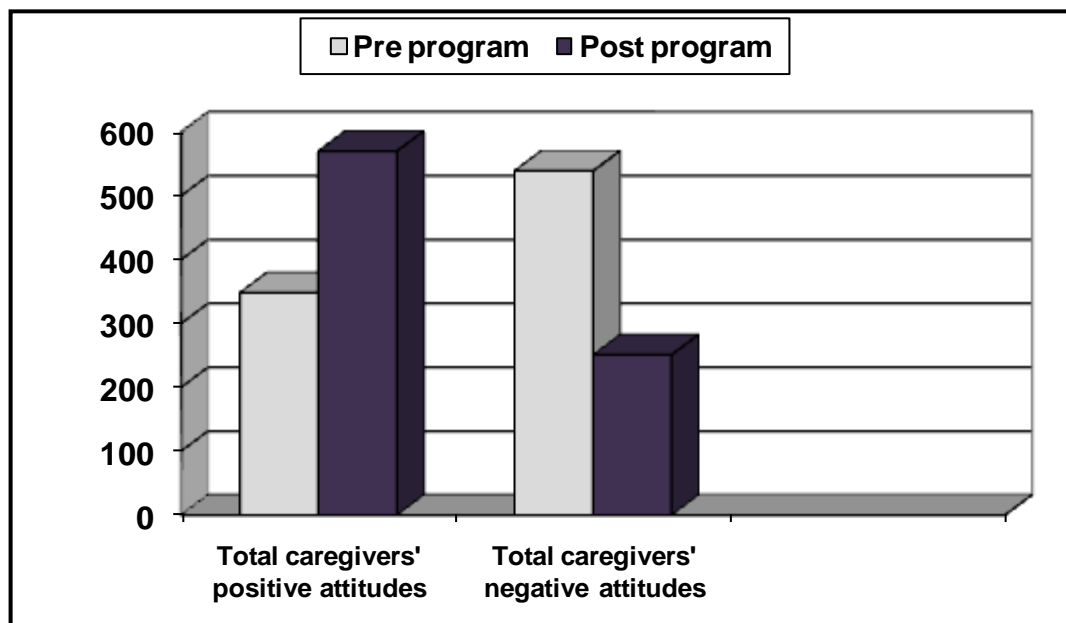


Figure (1): Comparison of total caregivers' positive & negative attitudes towards their patient with bipolar disorder before and after program (n=100).

X² = 15.75 p <0.001 (H. S.) (for total positive attitudes)

X² = 19.6 p <0.001(H. S.) (for total negative attitudes)

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Table (5): Comparison between caregiver's practices towards their patients with bipolar disorder before and after the program (n=100).

Caregiver's Practices	Pre-program No & %			Post-program No & %		
	Never	Sometimes	Always	Never	Sometimes	Always
Understanding patient condition	60	30	10	8	17	78
Reduce pressure and stress on patient	86	10	4	20	30	50
providing support and reassurance	77	11	12	8	40	52
Promote social interaction and friendships	70	21	10	12	17	71
Enhancing self-esteem	76	12	12	17	23	60
Encouraging regular sufficient sleep	82	10	8	10	15	75
Emphasize medication compliance	50	27	23	8	12	88
Regular consultations with psychiatrist	67	23	10	10	18	72
Providing healthy nutrition	72	14	12	12	13	75
Avoiding overly stimulating environments	52	28	20	13	14	73
Daily exercise that you find enjoyable	74	16	10	14	16	70
Getting regular physical checkups	74	14	12	16	20	64
Dealing with crisis situations	72	15	13	14	15	71
Total	70.15					
X² & P-value (for total always practices)	36.20 P <0.001 H. S.					
X² & P-value (for total sometimes practices)	32.58 P <0.001 H. S.					
X² & P-value (for total never practices)	31.02 P <0.001 H. S.					

Table (6): Correlation between caregivers` Knowledge , attitudes and practice score in pre and post intervention (n=100)

items	Pre- program	Post-program	P- value
Total Knowledge score	r =.301	r =.433	0.000**
Total attitudes score	r =.121	r =. 320	0.000**
Total practices score	r =.204	r =.312	0.000**

Table (7): Comparison of burden interview scale scores pre and post-counseling implementation among caregivers of patients with bipolar disorder (n=100)

Item	Pre-program	Post- program
	No.& %	No.& %
Mild	4	68
Moderate	24	20
Sever	72	10
χ^2	50.05	
P-value	< 0.01 (Highly significant)	

DISCUSSION

Families have patients with bipolar disorder, when providing them love and support can make a difference in treatment and recovery. They can help them by learning about the illness, offering hope and encouragement, keeping track of symptoms, and being a partner in treatment. But these caregivers are especially vulnerable, as they face complex situations related to patient conditions beside the insufficient knowledge regarding illness and experienced a negative attitudes toward patients' condition which leading to increased caregiver anxiety and burden which is also associated with poor patient outcome. The present study aimed to investigate the effect of counseling intervention sessions on caregivers' awareness and burden regarding their patients with bipolar disorder.

Concerning socio-demographic data related to caregivers, the finding of the present study showed that three quarter of caregivers under study were females. Less than third of them were mothers and wives, as well as the greatest proportion of them was married. This result was similar to a study carried out by **Perlick et al., (2007)**, which experienced that women have always been the traditional caregivers provide more hours of care and they are more likely to give assistance with personal hygiene, household tasks and meal preparation. Men, on the other hand, are more likely to help with financial management, transportation and home repairs. Although women provide the bulk of care, the contributions of men should not be overlooked. They frequently provide

support and affection to the primary caregiver.

The current study has shown that age of more than half of caregivers ranged between 30- < 50 years. This finding is in accordance with **Ogilvie et al., (2006)**, who found that age of caregivers ranged from 18-62 years. Whereas **Fristad et al., (2014)**, who found that in their studies extra age ranged from 26 to 85 years. This discrepancy between different authors may be due to the difference in culture.

The present study result showed that, less than half of patients under study their age ranged between of 18 < 29 years . This result was similar to a study carried out by **Depp et al., (2010)**, who reported that, bipolar disorder diagnosis is typically between the ages of 20-40 years.

Concerning patients' gender, the current study result showed that, less than two thirds of them were males. This result agreement with **Abraham et al., (2014)**, who stated that less than three quarters of the studied sample were males, This results is to some extent supported with **Hendrick et al., (2011)**, which reported that bipolar disorder affects men and women differently, and this may impact the course and treatment of the condition, depressive symptoms are more dominant in women with the condition, whereas manic features are more common in men. The gender difference in symptoms depression in women and mania in men is reflected in the first episode of the illness and considered the reason for the longer delay in women receiving a correct diagnosis compared to men.

The current study has shown that almost less than half of the patients under study were married. As well as two fifth of

the them had finished highly education ; This could be due to the fact that educated patients have more knowledge, more compliance to treatment and use more positive coping patterns than non educated patients.

In relation to studied patients' work status the finding of the current study shows that more than half of them were not working and approximately two thirds of them were from rural areas This result is matching with a study carried out by **Wingo et al., (2009)**, who reported that the highest percentage of studied sample was unemployed. Also this result was in disagreement with a study by **Javadpour et al., (2015)**, who found that the highest percentages of patients were less than three quarters living in a big city and more than one quarter lived in a village.

The present study result indicated that less than three quarter of patient under study had gradual onset of the symptoms, and more than half of them had weekly duration of these symptoms. Besides, two thirds of them had increase in the intensity of symptoms, three fifth of the patients were suffering from bipolar disorder for more than one year. Almost the majority of patient under study had suffered from side effects of medication. This result was agreement with the study carried out by **Fayez (2016)**, who clarified that, less than three fifths of patient with bipolar disorder had weekly duration of symptoms and the majority of the subjects had an increase in the intensity of symptoms

Considering caregivers' knowledge regarding to bipolar disorder, the current study revealed that, before counseling intervention, the majority of caregivers had incorrect knowledge about the bipolar disorder, however after counseling

intervention, the frequency of correct answers (definition, causes, manifestations, types, associated disturbances, treatment and caring for their patient) were upgraded and statistical differences were found to be highly significant ($p < 0.001$). This may be due to the fact that two fifths of caregivers were of moderate education. Besides, there was a lack of communication and health-education about bipolar disorder provided for caregivers from health professionals in the out-patient clinics as the workers in these clinics are too busy with a lot of patients and a very limited time for health education. This result is supported by **Vian et al., (2013)**, who explained that the primary nursing intervention for patients with mental illness is to teach their families about the disorder and to provide information and guidance that can help them effectively take care of their patients. Further, the educated caregivers are more exposed to the prevailing facilities that will improve their patient's condition and enhance the strategies that they can adopt to cope effectively with the psychological stress and they have frequent contacts with the experts and professionals.

Also this result also corresponds to the study carried out by **Linu et al., (2015)**, who concluded that, the average improvement of knowledge score in the experimental group of caregivers who received psycho-education (33.6 ± 8.6) is significantly higher than the control group (17.6 ± 8.5). A significant difference was found between the groups ($p=0.001$). On the other hand, it can be inferred that psycho-education is important for the caregivers to have a better understanding about their patient's condition and also to help them in their maintenance treatment. The improvement in knowledge and attitude was retained after three months of intervention.

Investigating caregivers positive attitude towards their patients with bipolar disorder, the current study results denotes that, there is a highly statistically significant difference between before and after counseling sessions as regards the total scores of the caregivers' positive attitudes towards their patients with bipolar disorder which increased significantly after counseling ($X^2 = 157.5, p < 0.001$). Meanwhile, there is a highly statistically significant difference between before and after counseling sessions as regards the total scores of the caregivers' negative attitudes towards their patients with bipolar disorder, which decreased significantly after counseling ($X^2 = 196, p < 0.001$).

This finding can be clarified through the fact that after providing the caregivers with essential information about bipolar disorder and its manifestations throughout the counseling sessions' intervention, there was an improvement in the caregivers' acceptance of their patient's condition as a medical problem rather than a social or behavioral one. This result is compatible with the study carried out by **Miklowitz & Hooley (2012)**, who concluded that, the average improvement of attitude scores in the experimental group (89.7 ± 7.2) is significantly higher than the control group (73.1 ± 9.7). After the psycho-education a significant difference was found between the groups ($p = 0.001$).

The same result was identified by **Ghadirian et al., (2009)** where there was significant improvement in the total score of family attitude questionnaire before and after the intervention between groups ($p = 0.01$)

Furthermore, the findings of the present study revealed that, there was also a highly statistically significant

improvement in post-intervention has been observed in most of the items related to caregivers' practices towards caring their patients with bipolar disorder. The majority of caregivers became respondents to the patient's behaviors better than their responses as before counseling intervention. There was a highly statistically significant difference in the total scores of caregivers' practices towards patients ($p < 0.001$). According to the researcher point of view, these findings may be due to that, caregivers expressed their anger, anxiety and stress regarding their patient's behaviors freely during counseling intervention sessions, they also found supportive listening approach from the researchers during the intervention sessions and gained information and training on how to support, help and encourage their patients.

On the same line, this is also consistent with **Rowe & Morris, (2012)**, who stated that verbal communication and caregivers' effective understanding provide opportunities for patients to talk freely about themselves, build trust relationship, and self-esteem, reduce negative ways to handle their patients' emotions and support them in expressing their emotions and facing their problems. These results are also in agreement with **Murray et al. (2012)**, who studied the quality of life construct in bipolar disorder research and practice mentioned that educating the caregivers can bring about change in patient care. As well as currently the best management of mental ill patients includes individual and family education and social skills' training.

The current study results indicates that, there was a highly statistically significant correlation between before and after counseling sessions, in total scores of

caregivers' knowledge, attitudes and practices toward their patients with bipolar disorder. Scores respectively ($r=.433$, $.320$, $.312$ with $P < 0.001$).

This result is matching with the study carried out by **Linu et al (2015)**, who found that, there was a significant improvement of knowledge and attitude scores among the caregivers in the experimental group as compared to the control group ($p = 0.001$).

The current study results showed that less than three quarters of caregivers' experienced severe burden before intervention. This may be due to being close to patients with bipolar disorders who consequently lead to high level of burden. On the other hand, caregivers who experienced severe level of stress used the coping strategy of problem solving so their burden decreased enormously. Improvement that have occurred after the counseling application could be referred to its content which was developed based on the care givers needs, as well as to its clarity, simplicity, illustrated with pictures, using simple language, frequent repetition and discussion to fix the knowledge and most of family members were interested in caring of their patients.

This result was in disagreement with a study by **Omranifard et al., (2010)**, who found the significant difference in post test burden scores among caregivers in the experimental and the control group. ($p = 0.007$). The caregivers' burden mainly depends on the condition, type of symptoms and functioning of the patient. The caregivers' perception about bipolar disorder had an impact on the levels of burden experienced. Family interventions deserve special attention since they may help to relieve the burden of care borne by

relatives, which in turn may facilitate the task of supporting the patient. The psycho-educative intervention had reduced the burden among caregivers of persons with Bipolar Disorder and the impact was retained three months after the intervention.

This result was in disagreement with a study by **Bernhard et al., (2006)**, who found the difference in burden scores among caregivers in the experimental (59.3 ± 10.7) and control group (70.1 ± 11.2). The finding indicated that the difference is statistically significant ($p=0.007$). The psycho-education has influenced reduction in burden scores of caregivers in the experimental group.

CONCLUSION

Based on the findings of this study, it is concluded that application of counseling intervention sessions for caregivers having patient with bipolar disorder had a positive effect on the improvement of the level of caregivers' awareness regarding knowledge, attitudes, practices towards their patient with bipolar disorder and reduce caregivers' burden.

RECOMMENDATIONS

Based upon findings of the current In the light of the findings of the present study the following recommendations are suggested:

Caregivers-counseling, family focused psycho-education and family support programs can help both the patient with bipolar disorder and the family members to learn, to recognize early warning signs of oncoming episodes, thus obtain early treatment and identify possible triggering factors. Also are important to

improve caregivers' knowledge, attitudes and practices and consequently reduce caregivers' burden. Further research is necessary to be undertaken for family caregivers that emphasizes, on providing proper awareness about mental illness and strategies to deal with burden of care given, based on caregivers' actual needs' assessment.

REFERENCES

- Abraham, K., Miller, C., Birgenheir, D., Lai, Z., & Kilbourne A. (2014): Self-Efficacy and Quality of Life among People with Bipolar Disorder. *Journal of Nervous & Mental Disease*, volume (202), No. (8), pages: 583-588. Retrieved from <https://www.researchgate.net/publication/263817002>.
- Asaad, T., Okasha, T., Ramy, H., Fekry, M., Zaki, N., Azzam, H., Rabie, M. A., Elghoneimy, S., Sultan, M., Hamed, H., Refaat, O., Shorab, I., Elhabiby, M., Elgweily, T., ElShinnawy, H., Nasr, M., Fathy, H., Meguid, M., Nader D., Elserafi D., Enaba D., Ibrahim, D., Elmissiry, M., Mohsen, N., & Ahmed, S. (2014): Correlates of psychiatric co-morbidity in a sample of Egyptian patients with bipolar disorder. *Journal of Affective Disorders* 347–352. Retrieved from journal homepage: www.elsevier.com/locate/jad.
- Bernhard, B., Schaub, A., Kummler, P., Dittmann, S., Severus, E., & Seemuller, F. (2006): Impact of cognitive-psycho-educational intervention in bipolar patients and their relatives. *European Psychiatry*. 21(2):81-86. DOI: <http://dx.doi.org/10.1016/j.eurpsy.2005.09.007>
- Chang, H.Y., Chiou, C.J., Chen, N.S. (2010): Impact of mental health and caregiver burden on family caregivers' physical health. *Arch Gerontol Geriatr* 2010; 50: 267–71.
- Depp, A., & Jeste, V. (2010): "Bipolar disorder in older adults: A critical review". *Bipolar Disorders*. 6 (5): 343–367
- Doheny, K. (2015): Bipolar disorder health center. Retrieved from <http://www.webmd.com/bipolardisorder/features/8-myths-about-bipolar-disorder>.
- Eker, F., & Harkin, S. (2012): Effectiveness of six-week psychoeducation program on adherence of patients with bipolar affective disorder. *J Affect Disorder*. 138:409-16.
- Fayez, T. (2016): Quality of Life among Patients with Bipolar Disorder. Unpublished master's thesis in Psychiatric/Mental Health Nursing. Faculty of nursing - Ain Shams University.
- Fristad, M.A., & MacPherson, H.A. (2014): "Evidence-based psychosocial treatments for child and adolescent bipolar spectrum disorders.". *Journal of Clinical Child and Adolescent Psychology*. 43 (3): 339–55
- Ghadirian, F., Nasiri, M., & Karami, K. (2009): Family education: an adjunctive intervention for mood disorder patients. *Iran Journal of*

- Nursing and Midwifery Research. 14 (1): 35-40.
- Hendrick, V., Altshuler, L.L., Gitlin, M.J., Delrahim, S., & Hammen, C. (2011): Gender and bipolar illness. *J Clin Psychiatry* 2000; 61:393–396.
- Javadpour, A., Hedayati, A., Dehbozorgi, G., & Azizi, A. (2015): The impact of a simple individual psycho-education program on quality of life, rate of relapse and medication adherence in bipolar disorder patients. *Asian Journal of Psychiatry* (6) 208–213. Retrieved from journal home page: www.elsevier.com/locate/jad.
- Jönsson, P.D., Wijk, H., Danielson, E. (2011): Outcomes of an educational intervention for the family of a person with bipolar disorder: a 2-year follow-up study. *J Psychiatr Ment. Health Nurs*; 18:333-41
- Linu, S.G., Sharma, P., Nair, S. (2015): Effect of psycho-education on Knowledge, Attitude and Burden among caregivers of persons with Bipolar Disorder – Randomized Controlled Trial. *International Journal of Advanced Research*, 3, (7):199-208.
- Miklowitz, D., & Hooley, M. (2012): Developing family psychoeducational treatments for patients with bipolar and other severe psychiatric disorders. A pathway from basic research to clinical trials. *J Marital FamTher*; 24: 419–435
- Murray, S., Boyd, A. M., & Canfield, R. (2011): *Psychiatric nursing contemporary practice*, 4th edition, Philadelphia, wolters kluwer health,
- Lippincott Williams & Wilkins, Pp.280- 290.
- Ogilvie, A.D., Morant, M., Goodwin, G.M. (2006): The burden on informal caregivers of people with Bipolar Disorder. *Bipolar Disorder.*; 7 (1): 25-32
<http://www.ncbi.nlm.nih.gov/pubmed/15762886>
- Omranifard, V., Esmailinejad, Y., Maracy, M.R., & Jazi, A.H., (2010): Effects of modified family psycho-education on the relatives' quality of life and family burden in patients with Bipolar Type I Disorder. *Journal of Isfahan Medical School*. 27 (100): 563-574
- Perlick, D.A., Miklowitz, D.J., & Lopez, N. (2010): Family-focused treatment for caregivers of patients with bipolar disorder *Bipolar Disord*;12:627-37
- Perlick, D.A., Rosenheck, R.A., Miklowitz, D.J., Chessick, C., Kaczynski, R., Ostacher, M., Patel, J., & Desai, R. (2007): Prevalence and correlates of burden among caregivers of patients with bipolar disorder enrolled in the Systematic Treatment Enhancement Program for Bipolar Disorder. 9: 262–273. ^a Blackwell Munksgaard,
- Reinares, M., Colom, F., & Rosa, A.R. (2010): The impact of staging bipolar disorder on treatment outcome of family psychoeducation *J Affect Disord* 2010; 123:81-6.
- Rowe, L. S., & Morris, A. M. (2012): Patient and partner correlates of couple relationship functioning in bipolar disorder. *Journal of Family Psychology*, 26(3): 328-337.
-

- Varcarolis, M. E. (2016): Essentials of psychiatric mental health nursing "A communication Approach to Evidence- Based care". 3th edition. USA. pp. 279-300. available at <http://evolve.elsevier.com>.
- Vecchio, V., Luciano, M., & Malangone, C. (2011): Implementing family psychoeducational intervention for bipolar I disorder in 11 Italian mental health centres. *Ital J Psychopathol.* 17:277-82
- Vian, M.C., Gruber, M.J., Shahly, V., Alhamzawi, A., Alonso, J., & Andrade, L.H. (2013): Family burden related to mental and physical disorders in the world: results from the WHO World Mental Health (WMH) surveys. *Rev Bras Psiquiatr;* 35: 115–25
- Wingo, A., Harvey, P., & Baldessarini, R. (2009): Neurocognitive Impairment in Bipolar Disorder Patients “Functional Implications”. *Bipolar Disorder.* 11 (2):113-125.
- World Health Organization. (2014): bipolar disorder, available at http://www.who.int/mental_health/management/ bipolar.
- Zarit, S. H., Reever, K. E., & Back-Peterson, J. (1980): Relatives of the impaired elderly: correlates of feelings of burden. *The Gerontologist,* 20, 649-655.