Role of Family Caregivers' Expressed Emotion on Recovery of Patients with Bipolar Disorders

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Abstract

Background: Bipolar disorder is a chronic condition that disturbs the patient's life and family stability, making the work of caregivers more demanding and stressful. Family caregivers are crucial to the support and rehabilitation of people with bipolar illnesses. An expanding body of evidence indicates that expressed emotion (EE) significantly influences the progression of bipolar disorder. **Aim:** assess the role of family caregivers' expressed emotion on recovery of patients with bipolar disorders. **Design:** A descriptive correlational design. **Setting:** The inpatient psychiatric department of Tanta University Hospital. **Subjects:** A Convenience sampling of 110 family caregivers and their patients diagnosed with bipolar disorder. **Tools: Tool I: Part 1:** Patient's and family caregivers bio-sociodemographic data, **Part 2:** Level of Expressed Emotions scale. **Tool II:** Recovery Assessment Scale Domains and Stages (RAS-DS). **Results:** The study found that there was a statistically significant negative correlation between total expressed emotion of family caregivers and total recovery of patients with bipolar disorders. **Conclusion:** Enhancing family expressed emotion by reducing criticism, hostility toward patients, over-involvement, and providing emotional support can improve communication and interrelationship within the family leading to improved overall recovery prospects. **Recommendation:** Family expressed emotion intervention emphasizing the enhancement of communication patterns and caregiver attitudes toward patients with bipolar disorder is necessary.

Key words: bipolar disorder, expressed emotion, family caregivers, mental health recovery.

Introduction

Bipolar disorder (BD) is a chronic, severe, and cyclical affective illness marked by fluctuating mood disturbances. It is regarded a major public health issue that leads to dysfunction in everyday activities, elevated incidence of chronic mood disorders, psychosis, and both attempted and completed suicides. Consequently, BD incurs elevated behavioral health expenses and exhibits increased use of medical services **(Hower, Lee, Jones, et. al. 2019).**

Bipolar illness ranks as the sixth major cause of disability globally, mostly due to its early start and chronic nature throughout life. It significantly impacts the lives of patients and their families **(Muneer, 2016).** An expanding body of data indicates that familial stress significantly influences the development of bipolar disorder. An established measure of familial stress is expressed emotion (EE). Expressed emotions serve as an index that indicates the emotional environment of the family and the overall attitudes of family members towards patients with bipolar disorder in their everyday interactions **(Alenezi, 2020).**

Expressed emotion (EE) quantifies the familial atmosphere, including the attitudes, feelings, and behaviors of family carers, as shown in their spontaneous communication and responses towards patients with bipolar illness. Family expressed emotion may be categorized as high and low expressed emotion. High Expressed Emotion is the manifestation of extreme feelings, including hatred, criticism, and excessive emotional engagement directed towards individuals with bipolar disorder **(Moawad, Elmalky, & Barakat, 2023).** Families characterized by high expressed emotion undergo fluctuating feelings, alternating between hope and disappointment. The expressed emotion level is directly related to the severity of the illness, its progression, and prognosis. Additionally, it impacts patients' self-esteem, quality of life, and adherence to medication **(Mohammed, Abd El-Latief, Zaki, & Mahmoud, 2021)**.

On the other hand, **Low expressed emotion** characterized by exhibiting reduced criticism or hostility, not overly involved, and demonstrating warmth and positive regard towards the patient. Facilitating family expression of warmth towards patients with bipolar disorder is linked to improved outcomes and enhanced recovery **(Ong, Fernandez, & Lim, 2021).**

Recovery encompasses the progression beyond the detrimental impacts of mental illness, which includes the alleviation of symptoms and the establishment of new meaning and purpose in an individual's life. Recovery refers to the capacity to lead a fulfilling, hopeful, and productive life despite the limitations imposed by illness **(Sánchez-Guarnido, Ruiz-**

Granados, Herruzo-Cabrera, Herruzo-Pino, 2023).

Recovery encompasses a four-dimensional framework: symptomatic, functional, societal, and personal recovery. The dimensions of recovery are considered interrelated, yet they may also be attained independently. *Symptomatic recovery*, represents a biomedical framework for evaluating the outcomes of mental illness treatment, focusing on the objective alleviation of symptoms and the averting the relapse symptoms. *Societal recovery* aims to mitigate public stigma associated with mental illness and enhance the rights and status of clients within society **(van Aken, et al., 2021).** *Functional recovery* examines an individual's ability to regain or adapt to the loss of skills. While, *Personal recovery* referred as an individual process of adaptation and growth in which one transcends the premorbid self rather than merely returning to it. Personal recovery pertains to an individual's perceived ability to manage mental illness, their sense of purpose, and their confidence in leading a fulfilling life, regardless of the severity of the disorder **(Skar-Fröding et al., 2021)**.

Significance of study:

Bipolar disorder exhibits a high recurrence rate, with estimated over 90% experienced at least two lifetime acute affective episodes and most have multiple recurrences **(Hällgren, Ösby, Westman, & Gissler, 2019).** Researchers estimate that between 25% and 60% of individuals with bipolar disorder will attempt suicide at least once in their lives and between 4% and 19% will complete suicide. The contemporary understanding of the relapse and remission trajectory of bipolar disorder highlights a biopsychosocial model, which integrates the interactive influences of genetic susceptibility, biological factors, stress from familial or life events, and psychological vulnerability **(Miklowitz & Chung, 2016).**

The concept of recovery in psychiatric disorders, especially bipolar disorder, has garnered increasing attention **(Van Weeghel, van Zelst, Boertien, Hasson-Ohayon, 2019).** Patients residing in a high-EE family environment exhibit a markedly increased risk of early relapse in comparison to those not living in such conditions. The role of psychiatric mental health nurse is essential in equipping family carers with fundamental information that enhances their ability to manage the patient and diminishes negative expressed emotions **(Mohammed, et al., 2021)**. This research assessment aims to assist psychiatric nurses in identifying the level of expressed emotion within patients' most significant relationships. This identification is crucial for preventing relapses, reducing re-hospitalization, and enhancing the recovery process in clinical

practice for individuals with bipolar disorder.

Aims of the Study:

To assess the role of family caregivers' expressed emotion on recovery of patients with bipolar disorders.

Research Questions

1. What are the levels of expressed emotion among family caregivers of patients with bipolar disorders?
2. What are the levels of recovery among patients with bipolar disorders?
3. What is the relation between family expressed emotion and recovery among patients with bipolar disorders?

Subjects and Method

Research Design:

The present study used a descriptive correlational research approach.

Setting:

The inpatient psychiatric unit of Tanta University Hospital was the setting of this study. This hospital is linked with the Ministry of Higher Education and Scientific Research and operates 24 hours a day, 7 days a week.

Subjects:

A convenience sample of 110 patients diagnosed with bipolar illness and their family caregivers. The sample size and analytical power were computed using the Epi-Info software statistical tool. The subjects were chosen from the prior setting based on the following criteria.

Inclusion criteria:

- Adult patients & their family caregivers.
- Patients diagnosed with bipolar I and bipolar II disorders as per DSM-5 criteria.
- Patients accompanied by a family caregiver who is willing to participate in the research.

Exclusion criteria:

- Acute phase of illness.
- Any evidence of organic brain disease, intellectual disability, substance use disorder and other psychiatric comorbidities.

Tools for data collection:

The data was collected by using the following two tools:

Tool I: Level of Expressed Emotions scale: It consists of two parts:

Part 1: Bio-sociodemographic data for patient's and family caregivers: It was be developed by the researcher based on reviewing patients' records and includes:(**Socio-demographic data of patients includes:** patient's age, sex, marital status, level of education, place of residence, occupation, religion); (**Clinical characteristics of patients includes:** age of onset of illness, duration of illness, number of previous psychiatric hospitalization, and mode of current admission) and **(Socio–demographic data of caregivers:** it includes: age, sex, level of education, working status, family size, family income).

Part 2: Level of Expressed Emotions scale: it was developed by **(Cole & Kazarian, 1988)** and then modified by **(Hooly's 1998)**, and was adopted by the researcher. This is a self-report tool designed to evaluate the emotional context within the patient's primary relationships. It consists of **(28 items)**, categorized into 4 subscales, namely: **Emotional support** (13 items), **Criticism** (4 items), **Irritability** (6 items), & **Intrusiveness** (5 items). Each item rated on 3-point Likert scale with responses categorized as disagree (3), neutral (2), and agree (1). The total score on this scale ranged from 28 to 84. Higher scores indicate a high level of Expressed Emotions, while lower scores indicate a low level of Expressed Emotions.

Tool II: Recovery Assessment Scale Domains and Stages (RAS-DS): It was developed by **Corrigan & et. al., 2004)** and was adopted by the researcher. It is a self-report instrument measuring recovery from severe mental illness. The scale consists of **(38-items)** categorized into 4 recovery domains; namely, **Functional recovery** (6 items) that assess **"Doing Things I Value"**, **Personal recovery** that assess (18 items) **"Looking Forward"**, **Clinical recovery** (7 items) that assess **"Mastering My Illness"**, and **social recovery** (7 items) that assess **Connecting & Belonging**.

Each item rated on four points Likert scale that ranging from "completely true (4)", "mostly true (3), "a bit true (2) and "untrue (1)". The total score of this scale ranged from (38 to 152). The higher scores indicate high level of recovery and the lower scores indicate reduced level of recovery.

Methods

1- An official letter was sent by the dean of the nursing faculty to the director of the study settings, requesting their assistance and consent for data collection.

2- The approval of The Scientific Research Ethical Committee of Faculty of Nursing was obtained to conduct the study, code 2024 – 2 - 379.

- Informed consent was secured from participants following an explanation of the study's purpose.
- The study's nature did not inflict any harm or pain on the subjects involved.
- The participants were assured of the confidentiality and privacy of their collected information.
- Participants have the right to withdraw at any time during the data collection period.

3. The researcher translated the study tool into Arabic and assessed its internal validity with the input of five experts in the field of psychiatric nursing, making necessary modifications based on their revisions.

4**.** A pilot study was conducted on 10% of the sample to evaluate the feasibility and applicability of the tools. No modifications were made, and the subjects

were subsequently excluded from the actual study.

5. The reliability of the study tools was assessed using Cronbach's Alpha test. The tools demonstrated high reliability, with a correlation coefficient of 0.857 for the Level of Expressed Emotion scale and 0.834 for the (RAS-DS).

6. The actual study:

- The records of the patients were reviewed, and the subjects for the study were selected based on the established inclusion criteria.

- The study's purpose was explained to the patients and their family caregivers, who were then invited to participate.

- Data was collected through face-to-face interviews with each patient on an individual basis.

-The researcher met with the patients and their family caregivers 4 days a week. The duration of interviews with patients varied between 30 to 45 minutes, while interviews with family caregivers lasted between 15 to 30 minutes.

- The entire data collection process lasted over the initial six months of the study, commencing in April and concluding in September 2024.

Statistical analysis:

The collected data underwent systematic organization, tabulation, and statistical analysis using SPSS version 23. For quantitative data, the mean, standard deviation, and range were calculated. Categorical data were summarized using numbers and percentages. The chi-square test ($\chi 2$) was used for comparisons. Pearson's correlation coefficient (r) was employed to evaluate the relationships between variables. A significance threshold of P<0.05 was used to determine statistical significance (*), and a further level of significance at P<0.01 was also considered (**).

Results:

Table (1) Show the distribution of the studied family caregivers according to their socio-demographic characteristics. Two third of the studied family caregivers belonged to the adult category (60%), between the age group (46 – 66) years with a mean age of 45.66 ± 14.016. An even distribution of sex was observed with an inclination towards female 64.5% and male 35.5%. The largest portion of studied caregivers (70.9%), reported being married. It was found that multiple educated levels were represent; illiterate (11.8%), read or write (12.7%), intermediate education (31.8%), university education (36.4%) and postgraduate education (7.3%). Urban living was common for family caregivers' residence (52.7%) and a large number around (67.2%) mentioned their income enough. (60.9%) of family caregivers were working. Regarding family size; more than half of family caregivers (59.1%) had 4-5 family members with mean 4.27 ± 1.299.

Table (2) presents the distribution of the studied patients according to their socio-demographic characteristics. Regarding the age, around half of participants (50.9%) fall within the 19 –30 years- old with a mean age of 31.63 ± 8.032. It is interesting to note that within this age group, the largest portion of studied patients (40%), reported being single and married. The studied subjects were predominantly female 62.7%. In relation to the educational level, more than half of them have university education (51.8%) and only (5.5%) were illiterate. Rural living was common for patients' residence (50.9%) and a significant portion (62.7%) mentioned that their income enough. Half of studied patients were working represent (50%). It was observed that; mother considered as a main primary family caregiver for patients with bipolar disorder (36.4%), followed by husband or wife (23.6%), the same percentage (15.5%) for both father and brothers, then daughters 6.4%, uncle and niece 1.8% and 0.9% respectively.

Table (3) Illustrates the distribution of the studied patients according to their clinical data. Clinically, the onset of bipolar disorders in the current sample occurred primarily before the age of 20 years old represents (40.9%), emphasizing its early onset nature. Hospital admissions for treatment were frequent, with (94.5%) have been admitting for 1- 5 times with (67.3%) had

duration of illness ranged from (1- 10) years, indicative of the disorder chronicity and recurrent course. Two third of the studied patients (65.5%) were admitted involuntarily.

Figure (1) shows levels of expressed emotions among the studied family caregivers. A significant portion of the studied family caregivers exhibited predominantly low level of overall expressed emotion (67.3%) as well as in specific dimensions of emotional support (86.4 %), criticism (64.5%) and irritability (53.6%). However, a distinct pattern emerged in intrusiveness, with a substantial proportion of participants (66.3%) displaying high level and only a small group 15.5% scoring low level on intrusiveness. This finding suggests that lack of emotional support and high intrusiveness may be prominent characteristics among these population.

Table (4) Presents the mean scores and standard deviation for expressed emotion subscales among family caregivers. The table showed that there was a statistically significant differences between the subscales of expressed emotion. The highest mean score was found in emotional support 19.56 ± 6.402, followed by intrusiveness 13.79 ± 3.846, then irritability 11.60 ± 2.887 and lastly criticism 7.53 ± 1.952.

Figure (2) Demonstrates distribution of the studied patients with bipolar disorders according to levels of

recovery assessment scale. More than half of the studied patients (50.9%) had moderate overall mental health recovery. A closer examination of specific domains of recovery revealed marked discrepancy. The majority of patients had high level of personal recovery (39.1%) and moderate level of functional recovery (38.2%). Moreover, (57.3%) of patients had poor level in clinical recovery as well as in social recovery (52.7%). This finding suggests that high level of personal recovery may be prominent characteristics among these population.

Table (5) Presents the mean scores and standard deviation for recovery subscales in the studied patients. The table shows that there is a statistically significant differences between the subscales of recovery. The highest mean score was found in personal recovery 51.54 ± 11.797, followed by social recovery 17.96 ± 4.525, then functional recovery 16.71 ± 4.584 and lastly clinical recovery 16.43 ± 5.696.

Table (6) presents correlation coefficients and corresponding p-values, examining the interrelationships among expressed emotion and recovery in the study subjects.
Regarding the correlation between expressed emotion and recovery, the matrix shows that a highly statistically significant negative correlation between total expressed emotion and total

recovery as well as in its all subscale functional, personal, clinical, and social recovery domains (r= -0.377, p =0.000**; r= -0.243, p =0.010*; r= -0.263, p =0.005**; r= -0.294, p =0.002**; r= -0.350, p =0.000**; respectively). This indicating that, the lower the levels of EE among family caregivers, the higher the recovery among patients with bipolar disorders.

In according to correlation between emotional support and total recovery and its subscale. Emotional support positively associated with total recovery (r= 0.425, p < 0.000**) as well as functional, personal and social recovery (r= 0.326, p < 0.001**; r= 0.375, p < 0.000** and r= 0.334, p < 0.000** respectively), but there is no significance correlation with clinical recovery. These results suggest that high levels of emotional support among family caregivers exhibit better functional, personal and social recovery.

With respect to criticism and social recovery, there is a highly statistically significant negative correlation between criticism and social recovery (r= -0.200, p =0.036*), but there is no statistical significance correlation with functional, personal and clinical recovery. This result suggests high levels of criticism among family caregivers leads deteriorating social recovery to their patients.

Concerning the correlation between irritability and recovery subscales, the matrix shows that a highly statistically

significant negative correlation exists between irritability and total recovery (r= -0.278, p =0.003**), extending to negative association with clinical recovery (r= -0.299, p =0.016*), and social recovery (r= -0.470, p =0.000**); indicating that irritability among family caregivers negatively affect clinical and social recovery.

As for the correlation between intrusiveness subscale and recovery subscales, there is a highly statistically significant negative correlation between intrusiveness and clinical recovery (r= -0.299, p =0.002**), but there is no statistical significance correlation with functional, personal and social recovery.

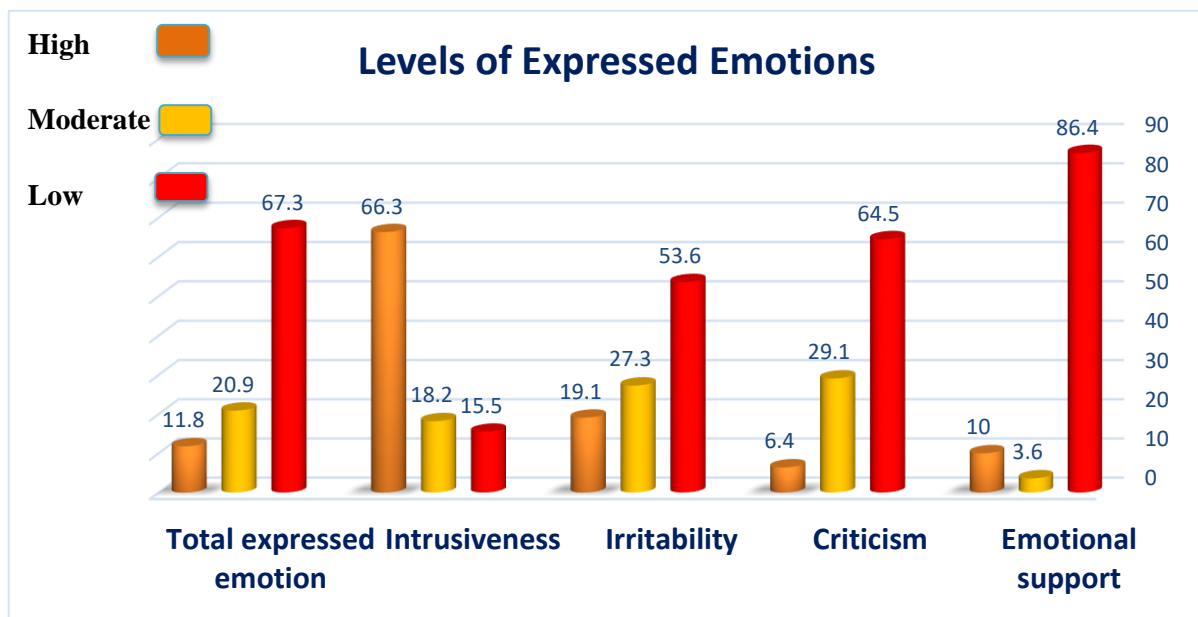## Table (1): Distribution of the studied family caregivers according to their socio-demographic characteristics

Socio-demographic characteristics	The studied family caregivers (n=110)	
	No	**%**
Age		
15-<30	21	19.1
30-<45	23	20.9
45-< 66	66	**60.0**
Range	15 – 66	
Mean ± SD	45.66 ± 14.016	
Sex		
Male	39	35.5
Female	71	**64.5**
Marital status		
Single	18	16.4
Married	78	70.9
Divorced	5	4.5
Widowed	9	8.2
Level of education		
Illiterate	13	11.8
Read or write	14	12.7
Intermediate education	35	31.8
University education	40	**36.4**
Postgraduate education	8	7.3
Residence		
Rural	52	47.3
Urban	58	**52.7**
Income		
Enough	74	**67.3**
Not enough	36	32.7
Occupation		
Working	67	**60.9**
Not working	43	39.1
Family size		
2 – 3	29	26.4
4 – 5	65	**59.1**
6 -7	16	14.5
Range	2 – 7	
Mean ± SD	4.27 ± 1.299	

Table (2): Distribution of the studied patients according to their socio-demographic characteristics

Socio-demographic characteristics	The studied family caregivers (n=110)	
	No	%
Age		
19- < 30	56	**50.9**
30 – < 40	35	31.8
40 – < 50	19	17.3
Range	19 – 50	
Mean ± SD	31.63 ± 8.032	
Sex		
Male	41	37.3
Female	69	**62.7**
Marital status		
Single	44	**40.0**
Married	44	**40.0**
Divorced	13	11.8
Separated	9	8.2
Level of education		
Illiterate	6	5.5
Read or write	7	6.4
Intermediate education	34	30.9
University education	57	**51.8**
Postgraduate education	6	5.5
Residence		
Rural	56	**50.9**
Urban	54	49.1
Income		
Enough	69	62.7
Not enough	41	37.3
Occupation		
Working	55	50.0
Not working	55	50.0
Main family caregivers caring for patient		
Father	17	15.5
Mother	40	36.4
Brothers	17	15.5
Husband or wife	26	23.6
Daughter	7	6.4
Uncle	2	1.8
My niece	1	0.9

Table (3): Distribution of the studied patients according to their clinical data

Clinical data	The studied patients with bipolar disorders (n=110)	
	No	**%**
Age of patient at the onset of illness		
15- <20 years	45	40.9
20- <25 years	28	25.5
25- <30 years	20	18.2
30- <35 years	12	10.9
35- <41	5	4.5
Range	15 – 41	
Mean ± SD	23.25 ± 6.449	
Duration of illness		
From 1- 10 years	74	67.3
From 11-20 years	34	30.9
From 21- 32	2	1.8
Range	1 – 32	
Mean ± SD	8.39 ± 6.012	
Number of hospitalizations		
1 - 5 times	104	94.5
6 - 10 times	4	3.6
More than 10 times	2	1.8
Range	1 – 18	
Mean ± SD	2.16 ± 2.576	
Patient mode of admission		
Voluntary admission	38	34.5
In voluntary admission	72	65.5

Figures (1): Levels of expressed emotions among the studied family caregivers'

Table (4): Mean scores and standard deviation for expressed emotion subscales among the studied family caregivers.

Expressed emotions scale	Range	Mean ± SD	X^2 P
Emotional support	13 – 39	19.56 ± 6.402	323.451 0.001[**]
Criticism	4 – 12	7.53 ± 1.952	
Irritability	7 – 18	11.60 ± 2.887	
Intrusiveness	6 – 18	13.79 ± 3.846	
Total scale sore	34 – 81	52.48 ± 11.082	

X^2= chi-square test   p<0.05* significant p<0.01** highly significant
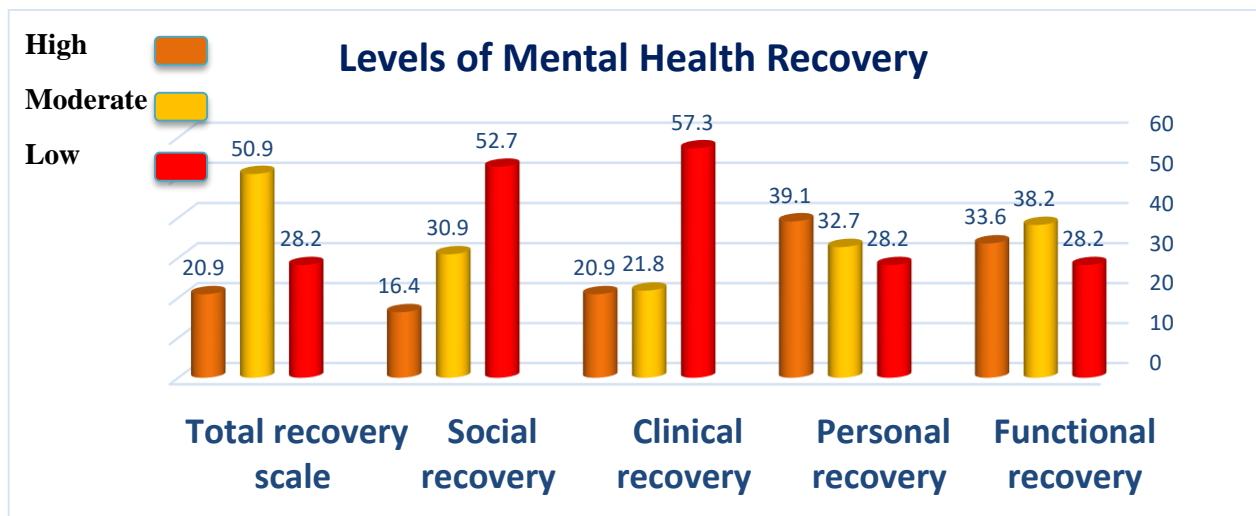
Figure (2): Distribution of the studied patients with bipolar disorders according to levels of recovery assessment scale

Table (5): Mean scores of recovery subscales among the studied patients

Recovery assessment scale domains	Range	Mean ± SD	X^2 P
Functional recovery domain (Doing things I value)	6 – 24	16.71 ± 4.584	202.972 0.001**
Personal recovery domain (Looking forward)	19 – 70	51.54 ± 11.797	
Clinical recovery domain (Mastering my illness)	7 – 25	16.43 ± 5.696	
Social recovery domains (connecting and belonging)	7 – 28	17.96 ± 4.525	
Total recovery assessment scale sore	54 – 140	102.64 ± 19.853	

X^2= chi-square test   p<0.05* significant p<0.01** highly significant

Table (6): Correlation matrix between expressed emotion sub-scales and recovery assessment sub-scales

Variables	Functional recovery	Personal recovery	Clinical recovery	Social recovery	Total recovery assessment sub-scales
Emotional support	0.326 0.001**	0.357 0.000**	0.176 0.066	0.334 0.000**	0.425 0.000**
Criticism	-0.006 0.948	-0.015 0.875	0.162 0.090	-0.200 0.036*	-0.103 0.286
Irritability	-0.128 0.182-	0.127 0.185	-0.229 0.016	-0.470 0.000**	-0.278 0.003**
Intrusiveness	-0.059 0.539	-0.030 0.754	-0.299 0.002**	0.002 0.986	-0.117 0.223
Total expressed emotion scale	-0.243 0.010*	-0.263 0.005*	-0.294 0.002*	-0.350 0.000*	**-0.377 0.000***

Discussion

The main results of this study revealed that two third of the studied caregivers showed low levels of expressed emotion. This lower level of expressed emotion is characterized by family caregivers who are less critical or hostile and not excessively involved. This is evident in the present study, as the majority of the caregivers had low levels in subscales, namely criticism and irritability. This finding may be attributed the nature of our culture which can significantly impact expressed emotion levels in these population. It's widely recognized that Egyptian families tend to exhibit greater tolerance, demonstrating acceptance and a strong sense of commitment to unalterable situation **(Mohamed, et al, 2021).**

Alongside this explanation, **Bishop & Greeff, (2015)** has shown that when families accept, acknowledge and comprehend the features of bipolar disorder, it can foster unity, even when the patient's illness leads to challenging behaviors. When family caregivers come to terms with the diagnosis and approach difficult situations with a positive outlook, they may discover different strategies for managing their circumstances. **(Harfush & Elsawi, 2018; Bishop & Greeff, 2015).**

Another factor that can be attributed to this finding is family psychoeducation. Patients with bipolar disorder may

exhibit symptoms that cause discomfort to their families, resulting in crises, uncertainty, and excessive burden. This is often linked with a lack of sympathy, judgment, and seeing the patient's unusual acts as intentional as shown by caregivers. Therefore, families may exhibit elevated expressed emotion which may precede family caregivers' education regarding the illness.

Gabra et al., (2020) claimed that limited understanding about the disorder leads to negative attitudes and behaviors among caregivers, which has a negative influence on patients. Another investigation found that when caregivers lacked awareness about the illness, they tended to use fewer coping mechanisms and were more likely to feel defeated. Evidence indicates that more knowledge for family caregivers enhances their ability to contextualize the condition and encourages more supportive viewpoints and behaviors directed toward the individuals with bipolar disorder **(Nabi & Rizvi, 2022).** This line of reasoning aligns with a study by **Budiono et al. (2021)**, which indicated that providing education about the progression and impact of the illness, combined with behavioral therapies and communication skills training, can help families transition from high to low expressed emotion. Furthermore, **Ahmed et al. (2022)** demonstrated that the implementation

of the Psychoeducation program significantly reduced the level of expressed emotions among family caregivers.

This finding aligns with research by **Mohamed et al. (2021),** which showed that over half of caregivers displayed a mild reaction to patient behavior. Likewise, **Kaur (2020)** discovered that most caregivers of individuals with bipolar disorder showed low expressed emotion towards them. Conversely, a study by **Hamad (2017)** reported that family caregivers of patients with bipolar disorder exhibited higher levels of expressed emotion. Additionally, **Sharma et al. (2021)** found that the majority of family caregivers were highly critical of their patients.

Concerning caregivers' emotional support subscale level, the majority of them demonstrated low levels, which is considered a prominent characteristic among the current study population. This may be due to the burden of care. Caregiver burden encompasses a range of physical, psychological, social, and financial challenges faced by family caregivers tending to relatives with chronic or mental disorders **(Liu, Heffernan, & Tan, 2020).**

Moreover, patients with bipolar disorder can be incredibly demanding. Caregivers may experience high levels of stress, anxiety, and emotional exhaustion or burnout. These

circumstances can leave them with limited emotional resources to provide support to the patient **(Girdhar & Patil, 2023).** This explanation is consistent with **Schulz et al., (2003)** who found that caregivers experiencing subjective burden often felt isolated and less likely to seek help or to provide social support to their patients.

Another contributing factor is the stigma of mental illness. Societal attitudes toward individuals with mental illness are predominantly negative, resulting in the stigmatization of caregivers who have such individuals in their families. As a result, caregivers may utilize insufficient strategies for dealing with stressors. Perceived stigma can create psychological and social challenges for family members, potentially increasing the burden of care and the level of expressed emotion **(Ghosh & Ahmed, 2019).** Stigma surrounding mental illness can impact caregivers' ability to openly discuss the patient's condition and seek support for themselves. This isolation can lead to feelings of shame and guilt, making it difficult to provide emotional support to the patient **(Prizeman, Weinstein, & McCabe, 2023).**

Along with these results, a study by **Mazumdar et al. (2024)**, showed that caregivers exhibit low levels of tolerance and emotional support,

favoring high expressed emotion toward bipolar patients. Similarly, **Kaewchum et al. (2025)** clarified that the studied family caregivers exhibit low levels of emotional warmth and positive regard. Conversely, a study by **Sharma et. al (2020)** clarified that the highest domain was warmth, suggesting that caregivers provide high levels of emotional support.

Regarding the intrusiveness subscale, the last construct of expressed emotion, the current study found a significant high level of intrusiveness. Intrusiveness is considered a component of high expressed emotion where the family caregiver becomes excessively involved in the patient's personal life and decisions **(Nayak et al. 2023).** Caregivers become overly involved in the patient's daily life, neglecting their own needs and boundaries in the process. Lack of clear boundaries between the caregiver and the patient can contribute to overinvolvement. In addition, family caregivers may experience feelings of guilt or shame related to the patient's illness. They may believe that they could have prevented the illness or are somehow responsible for the patient's struggles. These emotions can drive overinvolvement as caregivers attempt to compensate for perceived failures or alleviate their own guilt **(Ntsayagae, Poggenpoel, & Myburgh, 2019).**

This finding is consistent with research by **Yadav et al. (2018),** which indicated that emotional over-involvement was significantly more pronounced in caregivers of patients with bipolar disorder. Similarly, **Endreddy et al. (2024)** found that the majority of family caregivers initially exhibited high levels of expressed emotion.

Speaking to the second main result, the current study represented that nearly two-thirds of the studied patients have a low level of clinical recovery. Clinical recovery denotes the alleviation of symptoms, typically achieved through the use of medications alongside behavioral therapies to diminish symptom severity **(Mezes et al. 2021).** This result may be due to the fact that inconsistent medication adherence to regimens and therapy appointments, along with a limited understanding of the illness, can significantly reduce treatment effectiveness and elevate the likelihood of relapse. Consistent with this justification, **Jawad et. al. (2018),** stated that no adherence to medication is a prevalent issue in bipolar disorder and is significantly linked to worse clinical outcomes.

In regard to social recovery, the findings of this study indicated that approximately two-thirds of the patients examined showed a low level of recovery. The possible explanation of low social recovery among bipolar patients is the nature of the disease. Social functioning impairment is notably common in individuals diagnosed with bipolar disorder and may endure for extended periods, despite the sustained resolution of mood symptoms. They reported that disease symptoms significantly interfered with their social and interpersonal relationships. This observation aligns with a study by **Wingo et al. (2010),** which found that over half of the patients studied exhibited low levels of social recovery. Concerning functional recovery, this study found that most of the patients assessed demonstrated a moderate level in this domain. Functional recovery is defined as the restoration of an individual's premorbid psychosocial, residential, and occupational status. The attainment of a moderate level of functional recovery may be attributed to social integration. a component of community integration entails sustaining social relationships within the community and being aware of the support resources accessible in the local environment **(Terras, M., Hendry, G., & Jarret, D., 2019).**

Similar to this results a study by **Harfush et al., (2022)** concluded that social integration is a factor that predicts patients' recovery, surpassing

other forms of integration. This finding underscores the importance of building and maintaining social connections within the community, the need for a social network and support system for patients, and the value of promoting social interaction among individuals with psychosis. These elements can improve patients' involvement in social activities and support their recovery journey.

Concerning personal recovery, this research found that the majority of the studied patients demonstrated moderate to high levels of recovery in this domain. Personal recovery involves reclaiming autonomy over one's life while managing the challenges of mental illness; it is a distinctive and individualized journey **(Yu et al., 2020).** This is evident in the correlation matrix in the current research, which indicates a statistically significant association between personal recovery and clinical recovery as well as personal recovery and functional recovery. Similarly, **Dubreucq et al. (2022)** conducted longitudinal research examining the relationships and distinctions between clinical and personal recovery, revealing that, although these notions are distinct, they mutually enhance one another over time. Conversely, **Van Eck et al. (2018)** clarified a positive but weak

relation between personal and functional recovery.

The correlation matrix in this study reveals a strong, statistically significant inverse relationship between overall expressed emotion and overall recovery, as well as in all specific areas of recovery: functional, personal, clinical, and social. This evidence suggests that when family caregivers exhibit lower levels of expressed emotion, patients with bipolar disorders tend to experience better recovery outcomes.

Low expressed emotion can improve the recovery process in patients with bipolar disorder by creating a more supportive and stable environment **(Sam, Nisha & Varghese, 2019).** Additionally, a supportive environment plays a vital role in the recovery of individuals with mental health conditions. Those diagnosed with psychiatric disorders who have social support are more likely to seek help for their mental health issues during critical periods **(Harfush & Gemeay, 2018).** This is reflected in the findings of this study, which show a statistically significant positive association between the emotional support caregivers provide and the personal, social, and functional recovery of the patients. Similarly, research conducted by **El-Azzab et al. (2021) and Wehba**

et al. (2024) also found a statistically significant relationship between social support and recovery.

This result aligns with the findings of **Mohamed et al. (2021),** who evaluated the impact of caregivers expressed emotions on the clinical outcomes of individuals with bipolar disorder. The results indicate that more than half of family caregivers exhibited a mild reaction to patient illness, and it is confirmed that reduced expressed emotion among caregivers can improve clinical outcomes for individuals with bipolar disorder. Additionally, **Endreddy et al. (2024)** reported a significant relationship between EE and relapses. All these findings highlight that a low EE environment may promote an individual's progress in mental health recovery. Conversely, a study by **Batra et al. (2016)** reported no association between expressed emotion and relapse in bipolar disorder.

Conclusions:

The present study concluded that, Low family caregivers expressed emotion can significantly foster recovery among patients with bipolar patients. Enhancing family expressed emotion by reducing criticism, hostility toward patients, over-involvement, and providing emotional support can improve communication and interrelationship within the family

leading to improved overall recovery prospects.

Recommendations:

The current study findings propose the following recommendations:

- Implementing an effective educational program focused on bipolar disorder and the crucial role of family support could be beneficial for both family members and patients. This could improve their understanding of the condition and potentially lower levels of expressed emotion within the family.

- Family expressed emotion intervention emphasizing the enhancement of communication patterns and caregiver attitudes toward patients with bipolar disorder is necessary.

- Different types of intervention programs including supportive programs, family-centered initiatives, and psychological interventions, are essential for alleviating caregiver burden among those caring for patients with bipolar disorders, thereby reducing high levels of expressed emotion.

- Recovery from mental illness should be prioritized, necessitating the implementation of a hospital routine that incorporates diverse interventions aimed at facilitating patients' recovery.

- Implementation of a social skills training program for individuals with bipolar disorder is essential to enhance social interaction and interpersonal

relationships, thereby facilitating social recovery.

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