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Received: 11.08.2023
Accepted: 23.11.2023
Published: 24.07.2024

Levels of expressed emotions and life satisfaction in patients with bipolar affective disorder

Poziom ujawnianych uczuć a satysfakcja z życia u pacjentów z zaburzeniami afektywnymi dwubiegunowymi

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 <https://doi.org/10.15557/PIPK.2024.0008>

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Abstract

Introduction and objective: Many factors are responsible for the development of various psychological and psychiatric disorders. One of them is the degree of how relatives express their attitude towards psychological patients (i.e. expressed emotions). Therefore, the present paper aimed to explore the nature of the relationship between the perceived levels of expressed emotions among family members and the life satisfaction of patients with bipolar affective disorder (BPAD). Furthermore, the study examined gender differences regarding expressed emotions and life satisfaction among BPAD patients. **Materials and methods:** For the purpose of the study, a sample of 100 diagnosed BPAD patients was selected from the Shri Maharaja Hari Singh (SMHS) Hospital and from various registered psychiatric clinics. To measure the levels of expressed emotions and life satisfaction, two emotional assessment instruments, namely the Levels of Expressed Emotions (LEE) scale developed by Chien and Chan (2009) and the Satisfaction with Life Scale, were used. **Results:** The results of the study revealed that among the dimensions of expressed emotions the attitude toward the illness and emotional involvement, along with their composite score, were significantly and negatively correlated with life satisfaction in BPAD patients. The findings also showed that female BPAD patients perceived more emotional involvement of family members than male BPAD patients. In addition, unmarried BPAD patients reported more attitudes toward the illness ($M = 2.783$, $SD = 0.5095$) than married BPAD patients ($M = 2.510$, $SD = 0.5708$).

Keywords: expressed emotions, life satisfaction, BPAD, family involvement, Kashmir

Streszczenie

Wprowadzenie i cel pracy: Przebieg zaburzeń psychicznych jest uzależniony od szeregu czynników. Jednym z nich jest nastawienie otoczenia, m.in. osób bliskich, do pacjentów z rozpoznanymi zaburzeniami psychicznymi, czyli poziomem tzw. ujawnianych uczuć (*expressed emotions*, EE). Celem pracy była analiza zależności między postrzeganym stopniem ujawnianych uczuć u członków rodziny a poziomem satysfakcji z życia w grupie pacjentów z zaburzeniami afektywnymi dwubiegunowymi (*bipolar affective disorder*, BPAD). Kolejnym badanym aspektem były różnice w zakresie ujawnianych uczuć i satysfakcji z życia u pacjentów z BPAD w zależności od płci. **Materiał i metody:** Na potrzeby badania, przy wykorzystaniu baz danych w Shri Maharaja Hari Singh (SMHS) Hospital oraz zarejestrowanych klinikach psychiatrycznych, opracowano próbę badawczą obejmującą 100 pacjentów z rozpoznaniem BPAD. Pomiary EE oraz satysfakcji z życia przeprowadzono przy wykorzystaniu dwóch narzędzi przeznaczonych do oceny emocji, tj. skali ujawnianych uczuć (Levels of Expressed Emotions, LEE) opracowanej przez Chiena i Chan (2009) oraz skali satysfakcji z życia (Satisfaction with Life Scale). **Wyniki:** Z przeprowadzonego badania wynika, że dwa spośród zdefiniowanych wymiarów oceny ujawnianych uczuć, tj. nastawienie do choroby i zaangażowanie emocjonalne, a także ich złożony wynik wykazują znamiennej ujemną zależność z poziomem satysfakcji z życia u pacjentów z BPAD. Kobiety z BPAD dostrzegały większe zaangażowanie emocjonalne wśród członków rodziny niż mężczyźni z tym schorzeniem. Ponadto pacjenci z BPAD niepozostający w związku małżeńskim zgłaszali bardziej nasilone postawy względem choroby ($M = 2.783$; $SD = 0.5095$) w porównaniu z uczestnikami badania pozostającymi w związku małżeńskim ($M = 2,510$; $SD = 0,5708$).

Słowa kluczowe: ujawniane uczucia, satysfakcja z życia, BPAD, zaangażowanie rodziny, Kaszmir

INTRODUCTION

Many factors are responsible for the development of various psychological and psychiatric disorders (i.e. mental disorders), one of them being the degree of how relatives express their attitude towards those psychological patients who are suffering from such disorders along with related emotions (Asarnow et al., 2001).

A mental disorder is a syndrome characterised by clinically significant disturbances in an individual's cognition, emotional regulation, or behaviour that reflects a dysfunction in the psychological, biological, or development processes underlying mental functioning (American Psychiatric Association, 2013). It is a behavioural or mental pattern that causes significant distress or impairment of personal functioning. Signs and symptoms of mental illness can vary, depending on the disorder, circumstances, and other factors. Symptoms of mental disorders can affect emotions, thoughts, and behaviours (American Psychiatric Association, 2013; Mayo Clinic, 2022).

In 2019, one in every eight people, or 970 million people around the world, were found to be living with a mental disorder, with anxiety and depressive disorders being the most common (Institute of Health Metrics and Evaluation, 2022). In 2020, the number of people living with such disorders (i.e. anxiety and depression) rose significantly because of the COVID-19 pandemic. The initial estimates show a 26% and 28% increase of anxiety and major depressive disorders respectively in just one year (World Health Organization, 2022).

Referring to bipolar disorder specifically, in 2019, 40 million people were reported to be affected (Institute of Health Metrics and Evaluation, 2022).

In the US, the lifetime prevalence of bipolar disorder in community samples is 1.0% for bipolar I disorder, and 1.1% for bipolar II disorder, and 2.4% for sub-threshold bipolar disorder symptoms (Merikangas et al., 2007). As per the report in the "Archives of General Psychiatry" (2011), the worldwide prevalence of bipolar disorders type I and II is estimated to be 0.6% and 0.4%, respectively, and for sub-threshold bipolar disorder it is 1.4%; yielding a total prevalence of bipolar disorder spectrum of 2.4% (Merikangas et al., 2011).

When it comes to India, studies on epidemiology, course and outcomes of bipolar disorder are scarce (Subramanian et al., 2017). In some epidemiological studies, the lifetime prevalence rates are 0.1% for bipolar spectrum disorders and 0.5% for bipolar disorder (Gautham et al., 2020). According to the study entitled "A Community-based Prevalence Study of Mental Health Issues in Kashmir" [Action-Aid Association, Institute of Mental Health & Neurosciences (IMHANS), Government Medical College, 2016], many people are suffering from various mental disorders due to the ongoing political and social conflict. According to the study, mood disorders are among the common disorders

occurring in Kashmir. They include bipolar disorders, major depressive disorder, and dysthymia disorders. Major depressive disorders or simply depression was the most common, affecting at least 6.9% of participants. Dysthymia was found in 1.5% of study participants, while bipolar affective disorder (BPAD) or manic episodes were found in 0.9% of participants. Another large sample-based study (with a total of 2,728 subjects selected from different areas of Kashmir; both urban and rural) conducted in Kashmir by Amin and Khan (2009) found that, due to continuing conflict in the state during the last 18 years, there had been a phenomenal increase in psychiatric morbidity. The results of the study have also revealed that the prevalence of depression is 55.72%. It is the highest (66.67%) in the 15 to 25 years age group, followed by 65.33% in the 26 to 35 years age group. The difference in the prevalence of depression among males and females is significant.

According to the DSM-5, bipolar and related disorders are now separate chapters between depressive disorders and schizophrenia spectrum disorders. Bipolar disorder is characterised by drastic mood swings with more intense periods of mania and depression. When the episodes of mania and depression occur simultaneously, it is known as a mixed episode. According to the DSM-4, criteria for a mixed episode of bipolar disorder include the simultaneous presence of a fully manic and fully depressive episode nearly every day for at least one week. However, that criterion was too restrictive and often not present, resulting in the misdiagnosis of mixed episodes, wrong treatment of bipolar disorder and misjudgement of the patient's risk of suicide. The DSM-5 brings a change in the criteria for mixed episodes of bipolar disorder. These changes allow the clinicians to indicate the presence of two to three manic or hypomanic symptoms occurring for at least two to three days simultaneously with a full episode of depression. According to the DSM-5, a mixed episode of bipolar disorder can be diagnosed if full criteria for a manic or hypomanic episode are met with at least three depressive symptoms simultaneously occurring every day during the episode. The symptoms of depression that are essential to occur include hopelessness, negative self-esteem, fatigue, guilt, worry, and suicidal ideation or behaviour. A mixed episode of bipolar disorder can be diagnosed if the full criteria for a major depressive episode are met along with at least three symptoms of hypomania occurring simultaneously, including an increase in energy, greater hyperactivity, accelerated speech, racing thoughts, elevated mood, decreased need for sleep, and grandiosity. Furthermore, symptoms that are characteristic of both mania and depression, like irritability, insomnia, and indecisiveness, are not included in the mixed episode criteria (American Psychiatric Association, 1994, 2013).

Expressed emotion (EE) is a psychological term specifically applied to psychiatric patients and differing greatly from the daily use of the phrase "emotion expression" or another psychological concept of "family expressiveness". EE is a construct that has been used for the past three decades

to describe family members' criticism, hostility, and emotional involvement with a mentally ill relative within the context of family interactions and caregiving (Chien and Chan, 2010). Theoretically, a high level of EE among relatives can worsen the prognosis in patients having mental illnesses such as schizophrenia, BPAD, etc. (Brown et al., 1972; Garcia-Lopez et al., 2009). In other terms, EE acts as a risk factor for the development of various psychiatric disorders (Asarnow et al., 2001). The EE focuses on three attitudes: hostile, critical, and emotional over-involvement. The hostile component of EE is a negative attitude directed at the patient because the family feels that the disorder is controllable and that the patient is choosing not to get better (Brewin et al., 1991; Ng et al., 2020, 2022).

The critical component is amalgamation of hostile attitude and emotional over-involvement. It involves awareness that the disorder is not entirely in the patient's control but there is still negative criticism. Critical or serious EE from relatives and parents is the reason for future and growing problems for the patient (Bullock et al., 2002). Emotional over-involvement means that the relative is open-minded but that at the same time over-involved; they feel that everything is their fault. Because of the overbearing feelings of relatives, the patient can no longer tolerate this kind of stress and pity, and ultimately falls back into their illness (López et al., 2004). Such attitudes of the relatives may determine the path of the patient's illness after treatment. The interaction of family members with the patient having mental illness influences recovery and relapse.

Life satisfaction is the way in which people show their emotions and feelings (moods), reflecting how they feel about their directions and options for the future (Anand, 2016). Others see it as an overall assessment of feelings and attitudes about one's own life at a particular point in time, ranging from negative to positive (Buetell, 2006). In previous research studies, it was shown that life satisfaction was strongly connected to emotions, with emotional expression being one of the important aspects of interpersonal relationships and contributing significantly to life satisfaction. In earlier studies carried out by Lucas et al. (1996), greater correlations were found between positive affect and life satisfaction than between negative affect and life satisfaction. Similar findings were reported more recently by Jovanović and Joshanloo (2022). However, other studies found that long-term negative attitudes of the family members might cause deterioration of the quality of life and life satisfaction of patients (Cholewa et al., 2016).

AIM OF THE STUDY

Continuing sociopolitical conflict in Kashmir not only damages property and infrastructure but also affects the mental health of people in general. Due to this conflict, there was a dramatic increase in psychiatric morbidity in the general population of Kashmir. In this context, the present study, addressing EE and life satisfaction in BPAD patients, was

carried out with a rationale to explore the nature of the relationship between EE and life satisfaction among BPAD patients. The results of the study will not only add to the literature on the stated construct but also help social workers and clinicians to develop strategies for the prevention and treatment of BPAD via implementing the findings not merely in Kashmir but also in other similar conditions and situations. The results of the study may also prove beneficial and helpful to the clinicians and caregivers of psychiatric patients in the development of effective strategies to reduce the EE perceived by patients, which in turn may help improve family interpersonal relationships as well as family harmony and functioning, allowing family caregivers to cope more effectively with problems and difficulties in caring for both the patient and the whole family.

Objectives:

1. to determine the levels of EE and life satisfaction in BPAD patients;
2. to explore the nature of the relationship between EE and life satisfaction in BPAD patients;
3. to identify significant differences in EE and life satisfaction among BPAD patients with respect to various socio-personal demographics.

MATERIALS AND METHODS

Design: To achieve the goals set for the present study, a descriptive-inferential research design was adopted, in addition to the correlation approach.

Sample: For the current study, the sample comprised BPAD patients. The sample size was 100 diagnosed BPAD patients, collected purposively from the Shri Maharaja Hari Singh (SMHS) Hospital and from various registered psychiatry clinics.

Inclusion criteria:

- The patient's primary diagnosis had to be BPAD according to the criteria in the DSM-5.
- The patient must be living with a family caregiver.
- The patient had to be at least 18 years old.

Exclusion criteria: Suicidal risk, presence of any psychotic disorders like schizophrenia and substance abuse related disorders.

Research instruments/tools: The following research instruments were used for data collection.

- For the assessment of EE, the Levels of Expressed Emotions (LEE) tool developed by Chien and Chan (2009) was used. It is a self-reported measure of the patient's perceptions of the amount of EE in family interactions during the past three months. It is a 50-item instrument on a four-point Likert scale (1 – not true; 2 – more or less untrue; 3 – more or less true, and 4 – true) having four domains including: attitude toward the illness, intrusiveness, tolerance/expectancy, and emotional response to illness (caregiver expectations and emotional involvement). The calculated Cronbach's alpha (α) coefficients were found to be 0.88 for the overall scale and from 0.80 to 0.90 for its subscales, respectively.

- Satisfaction With Life Scale (SWLS) developed by Diener et al. (1985) was used for the assessment of life satisfaction. It is a five-item scale designed to measure global cognitive judgments of life satisfaction using a seven-point scale that ranges from 7 – strongly agree to 1 – strongly disagree. The SWLS has shown strong internal reliability and moderate temporal stability. The alpha coefficient was found to be 0.87 (Diener et al., 1985).

Data analysis: The responses obtained from the participants were subjected to different statistical procedures. Using SPSS 24.0, the study data was subjected to descriptive (frequencies, percentages, mean, standard deviation), and inferential analyses like correlation, and *t*-test to meet the objectives of the study.

RESULTS AND DISCUSSIONS

Tab. 1 reveals that the internal consistency of the measuring tools is satisfactory, as indicated by the respective Cronbach's α values.

As per the Tab. 2 applying the criteria of Garson (2013) the sample distribution in the present study is normal, as no skewness and kurtosis value falls beyond the Garson's range of -2.00 to $+2.00$. The values of standard deviation are also very small as compared to the mean, thereby further improving the scope of data for subsequent analysis.

The categories mentioned in Tab. 3 have been formulated on the basis of upper- and lower-class limits. Any score up to the order of the lower-class limit was classified in the low category, scores beyond the lower-class limit and up to the order of the upper-class limit were classified as average, and the remaining scores were clustered in the high category.

Measures/ Scales	Items	Response range	N	M	SD	Cronbach's α
Levels of Expressed Emotions	48	1–4	100	127.0	19.63	0.810
Satisfaction with Life Scale	5	1–7	100	18.96	10.06	0.91

Tab. 1. Reliability analysis of the Levels of Expressed Emotions and Satisfaction with Life Scale

Constructs	Mean	SD	Skewness	Kurtosis	SE	LCL	UCL
Intrusiveness	2.22	0.389	-0.461	1.00	0.1377	1.83	2.61
Attitude towards illness	2.65	0.553	-0.695	-0.500	0.055	2.10	3.20
Caregiver expectations	2.53	0.405	0.094	0.707	0.0465	2.12	2.93
Emotional involvement	2.92	0.702	0.174	-1.492	0.0703	2.22	3.63
Life satisfaction	3.79	2.01	0.335	-1.537	0.2012	1.77	5.80

SD – standard deviation; SE – standard error; LCL – lower class limit; UCL – upper class limit.

Tab. 2. Descriptive statistics for the under-study constructs (N = 100)

Constructs	Levels					
	Low		Average		High	
	n	%	n	%	n	%
Intrusiveness	12	12%	70	70%	18	18%
Attitude toward the illness	20	20%	64	64%	16	16%
Caregiver expectations	22	22%	59	59%	19	19%
Emotional involvement	25	25%	46	46%	29	29%
Life satisfaction	32	32%	51	51%	17	17%

Tab. 3. Frequency distribution of the sample with respect to the under-study constructs

Expressed emotions	Satisfaction with life
Intrusiveness	-0.111
Attitude toward the illness	-0.658**
Caregiver expectations	-0.001
Emotional involvement	-0.954**

** $p \leq 0.01$.

Tab. 4. Relationships between the dimensions of Levels of Expressed Emotions and Satisfaction with Life Scale among BPAD patients

Constructs	Gender	n	Mean	SD	df	t-value	Sig
Intrusiveness	Male	42	2.304	0.3894	98	1.82	0.070
	Female	58	2.162	0.3819			
Attitude toward the illness	Male	42	2.538	0.5706	98	1.81	0.072
	Female	58	2.740	0.5299			
Caregiver expectations	Male	42	2.482	0.4131	98	0.930	0.355
	Female	58	2.570	0.5007			
Emotional involvement	Male	42	2.756	0.7265	98	2.10*	0.038
	Female	58	3.051	0.6644			
Life satisfaction	Male	42	3.357	2.036	98	1.86	0.066
	Female	58	4.106	1.952			

* $p \leq 0.05$.

Tab. 5. Mean differences in Levels of Expressed Emotions and Satisfaction with Life Scale of BPAD patients with respect to their gender

Accordingly, as per Tab. 3, 12% of BPAD patients perceived low levels of Intrusiveness, 70% perceived average levels, and 18% of BPAD patients perceived high level of Intrusiveness.

With regard to the attitude toward the illness, 20% of BPAD patients reported a low level, 64% reported an average level, and 16% of the respondents reported a high level of attitude toward the illness.

As far as the EE dimension of caregiver expectations is concerned, 22% report a low level, 59% an average level, and 19% report a high level of caregiver expectations. Also, 25% of BPAD patients perceive a low level of emotional involvement, while 46% perceive an average and 29% a high level of emotional involvement.

Regarding life satisfaction, 32% BPAD patients reported low levels, 51% average levels, and 17% high levels of life satisfaction.

Constructs	Marital status	n	Mean	SD	df	t-value	Sig
Intrusiveness	Married	47	2.193	0.3644	98	0.684	0.496
	Unmarried	53	2.247	0.4125			
Attitude toward the illness	Married	47	2.510	0.5708	98	2.52*	0.013
	Unmarried	53	2.783	0.5095			
Caregiver expectations	Married	47	2.516	0.5037	98	0.346	0.730
	Unmarried	53	2.548	0.4337			
Emotional involvement	Married	47	2.854	0.7172	98	0.988	0.326
	Unmarried	53	2.993	0.6902			
Life satisfaction	Married	47	2.045	2.045	98	1.13	0.257
	Unmarried	53	4.007	1.977			

* $p \leq 0.05$.

Tab. 6. Mean differences in Levels of Expressed Emotions and Satisfaction with Life Scale of BPAD patients with respect to their marital status

Tab. 4 reveals that the EE domain of intrusiveness and caregiver expectations dimension as perceived by BPAD patients shows an insignificant negative correlation with life satisfaction. Moreover, the attitude toward the illness and emotional involvement dimensions of EE along with their composite score are significantly and negatively correlated with life satisfaction.

Tab. 5 highlights that only the emotional involvement dimension of EE ($t = 2.10$) is significant at the 0.05 level. A comparison of means indicates that female BPAD patients perceive more emotional involvement of family members ($M = 3.051$, $SD = 0.6644$) than male BPAD patients ($M = 2.756$, $SD = 0.7265$).

Tab. 6 highlights that only the attitude towards the illness dimension of EE ($t = 2.52$) as perceived by BPAD patients is significant at the 0.05 level. A comparison of means indicates that unmarried BPAD patients score more on the attitude towards the illness scale ($M = 2.783$, $SD = 0.5095$) than married BPAD patients ($M = 2.510$, $SD = 0.5708$).

The results of the study revealed that the intrusiveness and caregiver expectations dimensions of EE as perceived by BPAD patients exhibited an insignificant negative correlation with life satisfaction. Moreover, the attitude toward the illness and emotional involvement dimensions of EE along with their composite score are significantly and negatively correlated with life satisfaction. The results are in line with the studies by Lucas et al. (1996), Jovanović and Joshanloo (2022), who found greater correlations between positive affect and life satisfaction than between negative affect and life satisfaction. Moreover, long-term negative attitudes of family members may cause deterioration of the quality of life and life satisfaction in patients (Cholewa et al., 2016).

However, such findings may be seen as related to a lower quality of life that come after accounting for the emotion perceived scores, whereas other researchers have attributed such consequences to the idea that well-being issues and quality of life are driven by a range of symptomatic and

neurocognitive factors in addition to emotion-relevant variables (Fulford et al., 2014; Martínez-Arán et al., 2004; Van Rheenen and Rossell, 2014).

The findings also revealed that only the emotional involvement dimension of EE is significant at the 0.05 level. A comparison of means indicates that female BPAD patients score more on emotional involvement of family members than male BPAD patients. The finding is in line with those reported by Chien and Chan (2010) who found that female patients had higher levels of the EE scale mean score ($M = 167.5$; $SD = 18.2$) than male patients ($M = 148.8$; $SD = 20.1$). The results also highlighted that unmarried BPAD patients report more attitude toward the illness ($M = 2.783$, $SD = 0.5095$) than married BPAD patients ($M = 2.510$, $SD = 0.5708$).

CONCLUSIONS

A high level of EE in relatives can worsen the well-being of patients and has a negative effect on the life satisfaction of patients having mental illness such as BPAD. This outcome suggests that it may also affect the quality of life in addition to life satisfaction.

When it comes to the limitations of the study, several important factors need to be highlighted. First, the sample size for conducting the analyses of the present study was small and limited to caregivers of mentally ill patients attending a particular psychiatric OPD and IPD (i.e., outpatient department/inpatient department) in a selected geography, which may restrict generalisability. Also, the feasibility of testing variances across different groups as due to the mentioned point is a concern. Second, the current study does not address any tendencies that make us think deeply about negative emotions which have been shown to be related to other psychological ailments and related psychological processes presenting as comorbidities with bipolar disorder (see: Thomas et al., 2007; Van der Gucht et al., 2009). Finally, if our study had integrated emotions with psychosocial and life related events and related variables that are related cognitively or perceptually to the developmental course of the investigated disorder, it would have contributed more to understanding BPAD.

Conflict of interest

The authors declare no conflict of interest.

Acknowledgements

This study was supported by the Shri Maharaja Hari Singh (SMHS) Hospital, and other psychiatric clinics of the Kashmir State of India, special thanks to all participated patients.

Author contribution

Original concept of study: RHUJ, SAS. Collection, recording and/or compilation of data: RHUJ. Analysis and interpretation of data: NAW. Writing of manuscript: RHUJ. Critical review of manuscript: AH, WMA. Final approval of manuscript: AH, WMA, SAS.

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