



Quality of Life and Expressed Emotion in Caregivers of Patients with Psychiatric Disorders

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Abstract

Background Caregivers form an integral part of the psychosocial management of patients with psychiatric conditions. Caregivers of patients with major psychiatric disorders feel burdened, as these disorders are unpredictable and long lasting. The study was aimed to assess the quality of life (QOL) and expressed emotion among caregivers of patient's with psychiatric disorders.

Materials and Methods A cross-sectional descriptive design was adopted for the study. The sample consisted of 300 caregivers of psychiatric patients who visited psychiatric outpatient department and inpatient department of selected hospital. The caregivers were selected by using convenient sampling technique. Baseline proforma, the World Health Organization Quality of Life Scale (WHO QOL BREF), and Family Attitude Scale were used to collect the data.

Results Descriptive and inferential statistics were used to analyze the data. The analysis revealed that there was a weak negative correlation between QOL and expressed emotions. The obtained “*r*” value (−0.14) was statistically not significant at 0.05 level of significance. Hence, the research hypothesis was rejected and the null hypothesis was accepted.

Conclusion The study concluded that there was a low negative correlation between QOL and expressed emotions. The obtained “*r*” value (−0.14) is statistically not significant at 0.05 level of significance. But there was association between QOL and income and occupation of the caregiver.

Keywords

- ▶ assess
- ▶ quality of life
- ▶ expressed emotion
- ▶ psychiatric disorder

Introduction

A mental disorder is a behavioral 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. Mental illness symptoms can affect emotions, thoughts, and behaviors.¹ The consequences will differ according to the severity. Chronic mentally ill patients lack insight toward the condition and they may show ill behavior to self and to others. Indian studies show that majority of the people with schizophrenia or depression stay with their families.²

Families play an important role in supporting people with long-term mental illness such as schizophrenia and bipolar affective disorder (BPAD) that are severe and disabling. The quality of interaction patterns and the form of family ties between family carers and patients with schizophrenia and other mental disorders are thought to be components of the expressed emotion (EE), which is seen as an unfavorable home environment. One of the most reliable indicators of schizophrenia relapse has been discovered to be the influence of EE. Many variables affect the EE, some of which include a patient's susceptibility to stress, a particular personality profile, and elements that carers attribute to the patient's symptoms.³

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Quality of life (QOL) is the general well-being of individuals and societies, outlining negative and positive features of life. It observes life satisfaction, including everything from physical health, family, education, employment, wealth, religious beliefs, finance, and the environment. QOL has a wide range of contexts, including the fields of international development, healthcare, politics, and employment.⁴ Most of the studies have evaluated the QOL of mentally ill patients, but there are only a few that have evaluated QOL of apparently healthy caregivers of mentally ill patients.² Caregivers with high burden reported significantly reduced QOL.⁵

EE refers to the hostile, critical, and emotional overinvolvement attitudes of caregivers toward a person with a mental disorder. It is reflected by comments about the patient made to an interviewer or by the caregivers' behavior toward the patient. It is a significant characteristic of the family milieu that has been found to predict symptom relapse in a wide range of mental disorders. The empirical data show that EE is one of the major psychosocial stressor and it has direct association with recurrence of illness.⁶

Need for the Study

The role of caregivers has expanded a greater role, as a result of increasing move of psychiatric care to the community. One of the most prevalent severe mental diseases, schizophrenia alters perception, emotion, cognition, thinking, and behavior. Because of the disorder's widespread misunderstanding, patients and their families frequently receive subpar care and experience social isolation. The likelihood of a schizophrenia relapse is higher in households where there is a high level of EE.⁷

Phillips and Xiong used the cognitive flexibility inventory scale in China and found that 42.1% of the family members of schizophrenia patients had high EE.⁸ Very few Indian studies have explored EEs in predicting relapse in schizophrenia.⁸ The importance of EE depends on research that has consistently established that persons with mental illness, such as schizophrenia, who live with close relatives who have negative attitudes, are significantly more likely to relapse. The negatives attitudes in the form of actions or words add up stress on the patient that can lead to relapse of illness and rehospitalization.⁶

Families often bear substantial amount of burden while taking care of their relatives with chronic psychiatric illnesses. So, the assessment of EE and QOL of caregivers of mentally ill is very important. The proper assessment and resolution of the same can lead to positive outcomes in the patients too.

Objectives

1. To assess the QOL among caregivers of patients with psychiatric disorders.
2. To assess the EE among caregivers of patients with psychiatric disorders.
3. To assess the correlation between QOL and EE of caregivers of patients with psychiatric disorders

Hypothesis

H₁: There will be significant correlation between QOL and EE of caregivers of patients with psychiatric disorders

Materials and Methods

A cross-sectional correlational descriptive research design was adopted for the study. The study sample consisted of 300 caregivers of psychiatric patients who visited psychiatric outpatient department (OPD) and inpatient department (IPD) of selected hospital. The caregivers were selected by convenient sampling technique. Baseline proforma, the World Health Organization Quality of Life Scale (WHO QOL BREF), and Family Attitude Scale were used to collect the data. To establish the content validity of the tool (baseline proforma), the tools with objectives, operational definitions and blue print were submitted to five experts. No modifications were made in the tool as there was no major corrections suggested by experts. Reliability of the tools was checked (using split half method) by the investigators by administering the tools and baseline proforma for 10 caregivers. And the value was 0.8. that was reliable. The pilot study was done in the same setting on 30 caregivers and was found feasible and practicable. Institutional permission was obtained. Ethical clearance was obtained from Father Muller Institutional Ethics Committee and the number is FMIEC/CCM/1061/2020. The investigator explained the need and importance of conducting the study to the participants. Informed consent was taken from the participants and confidentiality was assured. The investigators introduced themselves and the purpose of the study was explained to the subjects and the baseline information, data about EE, and QOL were obtained. Final data was collected in the month of May 2022. Data was analyzed using descriptive and inferential statistics. Baseline information was analyzed using frequency, mean, and standard deviation (SD). Correlation between QOL and EE was analyzed using Karl Pearson correlation coefficient.

Inclusion and exclusion criteria considered while selecting the samples were as follows:

Inclusion Criteria

1. Caregivers in the age group of 21 to 60 years.
2. Caregivers of patients with the diagnosis of BPAD or schizophrenia.
3. Caregivers who are residing with the patient for the last 1 year.
4. Caregivers of patients who had at least one hospitalization and with a duration of at least 1 year of illness.
5. Caregivers who can speak and write English, Malayalam, or Kannada.
6. Caregivers of patients with the diagnosis of mood disorders, schizophrenia, schizoaffective disorder, unspecified nonorganic psychosis.

Exclusion Criteria

1. Caregivers with physical disability.

2. Caregivers with any medical surgical illness or substance abuse.
3. Caregivers who were diagnosed with a psychiatric disorder.
4. Caregivers of patients with any physical disability.

Instruments Used

1. Baseline proforma

The baseline proforma consists of 18 items. The items in the baseline proforma of caregivers are age, gender, education, occupation, family income, religion, marital status, type of family, relationship with patient, state, place of residence, duration of stay with the patient, time spent with the patient in hours (per week), age of patient, education and occupation of patient, diagnosis of patient, duration of illness, number of hospitalizations of patient

2. Family Attitude Scale⁹

The Family Attitude Scale comprises 30-item self-report questionnaire that allows a report of current attitudes of relatives toward a patient. Respondents identify how often each statement is true, on a 5-point scale from "never" to "everyday," and responses are summed to give a 0 to 120 score.

3. The World Health Organization Quality of Life Scale (WHO QOL BREF)

The WHO QOL-BREF instrument comprises 26 items and it is a 5-point scale scoring from 1 to 5, which measures the following broad domains: physical health, psychological health, social relationships, environment and personal QOL. It is a 5-point rating scale.

Results

Section I: Baseline Characteristics of Patient and Caregiver

Part A: Distribution of Subjects according to Baseline Characteristics (Patient)

The results of the study showed that majority of the patients belong to age group of 39 to 48 years (32.6%). Half of them were females (53.7%). Data presented reveals that 47.7% of the sample had up to primary and middle school education. With regard to the employment, most of the patients (59%) were unemployed. About marital status 50.3% of patients were married and most of them (41%) belonged to Hindu religion. Majority of the patients were diagnosed with BPAD (55.7%) and the duration of the illness was 10 to 15 years. Majority (99.9%) of the patients were hospitalized for less than 10 years.

Part B: Distribution of Subjects according to Baseline Characteristics (Caregiver)

Majority of the caregivers (40.3%) belonged to the age group of 31 to 40 years, and half of them (51%) were

females. With regard to religion, most of the caregivers (41%) belonged to Hindu religion. Majority of the subjects (87.3) were married and among half of them (50.7%) lived in a nuclear family and were spouse of the patients. About educational status, most of the caregivers (56%) were studied up to high school and PU education. With regard to the monthly income, most of the caregivers (45%) were having the income of 10,000 to 20,000 rupees per month. About duration of stay and time spent with patients, majority of the caregivers (75.7) were staying less than 10 years and spending time than 10 hours per week with patients.

Section II: Analysis of Quality of Life of Caregivers

► **Table 1** shows that the QOL of caregivers ranged between 43 and 103 with mean \pm SD 86.9 ± 12.6 . Mean score of the subjects to the QOL showed very low mean which interprets that the subjects have low QOL.

► **Table 2** presents the domains of QOL, where the mean and SD of physical health were 22.66 ± 2.71 with the minimum score being 14, maximum score 23. The mean and SD of psychological health 19.28 ± 3.50 are with the minimum score being 10, maximum score 27. The mean and SD of social relationships are 11.01 ± 2.61 with the minimum score being 3, the maximum score 14. The environment has 11 as the minimum score, 33 as the maximum, with mean and SD being 27.40 ± 4.19 . Personal QOL has a minimum score 2 and maximum score of 9, with mean and SD being 6.53 ± 1.19 . The table reveals that the personal domain has lower mean score compared with the other domains.

Table 1 Mean and standard deviation of quality of life of caregivers, $n = 300$

| Component | Minimum obtained score | Maximum obtained score | Mean \pm SD |
|-------------------------------|------------------------|------------------------|-----------------|
| Quality of life of caregivers | 43 | 103 | 86.9 ± 12.6 |

Abbreviation: SD, standard deviation.
The maximum total score = 130.

Table 2 Domain wise mean, median, and SD of quality-of-life scores

| | | | $n = 300$ |
|---------------|---------------|---------------|------------------|
| Domain | Minimum score | Maximum score | Mean \pm SD |
| Physical | 14 | 23 | 22.66 ± 2.71 |
| Psychological | 10 | 27 | 19.28 ± 3.50 |
| Social | 3 | 14 | 11.01 ± 2.61 |
| Environment | 11 | 33 | 27.40 ± 4.19 |
| Personal | 2 | 9 | 6.53 ± 1.19 |

Abbreviation: SD, standard deviation.

Section III: Analysis of Expressed Emotion of Caregivers

► **Table 3** shows that the mean and SD of EEs were 51.18 and 17.24, respectively. Mean score of the FAS scale indicates that caregivers moderate less stress and EE in caring for patients with psychiatric illness.

Section IV: Association between Quality of Life and Baseline Proforma of Caregivers

The data in the ► **Table 4** shows that there was no a significant association between QOL and selected demographic variables at 0.05 level of significance. Hence, the research hypothesis was rejected and the null hypothesis is accepted.

Section V: Association between Expressed Emotion and Baseline Proforma of Caregivers

The data in the ► **Table 5** shows that there was no significant association between EE and the selected baseline variables at

Table 3 Mean and standard deviation of expressed emotion, $n = 300$

| Component | Minimum obtained score | Maximum obtained score | Mean \pm SD |
|---------------------------------|------------------------|------------------------|-------------------|
| Expressed emotion of caregivers | 0 | 83 | 51.18 \pm 17.24 |

Abbreviation: SD, standard deviation.
The maximum total score =120.

Table 4 Association between quality of life and baseline proforma of caregivers

| Sl. no. | Variables | Chi-square / Fisher exact test | p-Value |
|---------|--|--------------------------------|---------|
| 1 | Age of the caregiver (in years) | 1.545 | 0.672 |
| 2 | Gender | 0.000 | 0.998 |
| 3 | Religion | 5.993 | 0.050 |
| 4 | Educational status | 6.485 (Fisher's exact) | 0.077 |
| 5 | Marital status | 1.931 (Fisher's exact) | 0.862 |
| 6 | Occupational status | 0.986 | 0.321 |
| 7 | Monthly family income (in rupees) | 2.533 | 0.282 |
| 8 | Type of family | 1.223 (Fisher's exact) | 0.604 |
| 9 | Type of relationship with the patient | 2.464 | 0.651 |
| 10 | Duration of stay with the patient (in years) | 1.752 | 0.503 |
| 11 | Time spent with the patient (in hours/week) | 0.025 | 0.875 |

H₀₁: There is no significant association between quality of life and expressed emotion of caregivers of psychiatric patients. $n = 300$.
* $p < 0.05$ (significant).

0.05 level of significance. Hence, the research hypothesis was rejected and the null hypothesis was accepted.

Section VI: Correlation between Quality of Life and Expressed Emotion

► **Table 6** shows that there was a negative correlation between QOL and EEs. The obtained "r" value (-0.14) was statistically not significant at 0.05 level of significance. So, the research hypothesis was rejected and the null hypothesis was accepted.

Discussion

1. Baseline characteristics of patient and caregiver

The findings of this study showed that majority (32.6%) of the patients belonged to age group of 39 to 48 years. Half of them

Table 5 Association between expressed emotion and baseline proforma of caregivers

| Sl. no. | Variables | Chi-square / Fisher's value | p-Value |
|---------|--|-----------------------------|---------|
| 1 | Age of the caregiver (in years) | 2.601 | 0.672 |
| 2 | Gender | 1.592 | 1.00 |
| 3 | Religion | 4.725 | 0.50 |
| 4 | Educational status | 2.537 (Fisher's exact) | 0.90 |
| 5 | Marital status | 4.683 (Fisher's exact) | 0.562 |
| 6 | Occupational status | 3.906 | 0.321 |
| 7 | Monthly income (in rupees) | 0.225 | 0.282 |
| 8 | Type of family | 0.894 (Fisher's exact) | 0.526 |
| 9 | Type of relationship with the patient | 2.616 | 0.651 |
| 10 | Duration of stay with the patient (in years) | 1.969 (Fisher's exact) | 0.347 |
| 11 | Time spent with the patient (in hours/week) | 0.120 | 0.875 |

H₀₂: There is no significant association between quality of life of caregivers of psychiatric patients and baseline variables, $n = 300$.
* $p < 0.05$ (significant).

Table 6 Karl Pearson correlation coefficient to find out the correlation between quality of life and expressed emotion

| Variables | Mean score | SD | "r" value | Inference |
|-------------------|------------|-------|-----------|----------------------|
| Quality of life | 86.9 | 10.16 | -0.14 | Negative correlation |
| Expressed emotion | 51.18 | 17.24 | | |

Abbreviation: SD, standard deviation.

H₀₃: There is no significant correlation between quality of life and expressed emotion of caregivers of patients with psychiatric disorder, $n = 300$.

(53.7%) were females, and 47.7% of the samples had up to primary and middle school education. Most of the patients (59%) were unemployed, 50.3% of patients were married, and most of them (41%) belongs to Hindu religion. Majority of the patients were diagnosed with BPAD (55.7%) and the duration of the illness was 10 to 15 years. Highest number (99.9%) of the patients were being hospitalized less than 10 years.

The demographic findings of the caregivers showed that majority of them (40.3%) belonged to the age group of 31 to 40 years, and half of them (51%) were females. Most of the caregivers (41%) belonged to Hindu religion, 87.3% were married, and among half of them (50.7%) lived in a nuclear family. Most of the caregivers (56%) were studied up to high school and PU education.

The findings were congruent with the study on EE and caregiver burden in patients with schizophrenia depicted that the mean age of the patients was 33.5 ± 8.5 years. About 54.3% were females and 45.7% were males. Majority (80%) of the patients belonged to Hindu religion, and 51.4% were married. The mean duration of illness was 5.8 ± 3.6 years. The mean age of the caregivers was 47.3 ± 13.2 years and duration of caregiving was 5.9 ± 3.6 . About 48.6% of the caregivers were mothers.⁹

2. Analysis of quality of life of caregivers

This study results showed that the QOL of caregivers ranged between 43 and 103 with mean \pm SD is 86.9 ± 12.6 , respectively. A similar study was conducted on QOL of caregivers of patients with severe mental illness in Uganda, which shows that out of the 300 caregivers, 172 (57.30%) had a poor QOL, while 18 (42.70%) had good QOL and the mean scores for each domain were as follows: physical health 52.20 (SD \pm 15.90), psychological well-being 55.97 (SD \pm 15.94), social relationships 51.64 (SD \pm 21.08), and environment 50.9 (SD \pm 17.35).¹⁰

3. Analysis of expressed emotion of caregivers

This study results depicted that the mean and SD of EEs were 51.18 and 17.24, respectively.

The results of the presents study were incongruent with the data of a study conducted on EE in family members of patients with schizophrenia; the results showed that the mean score of EE of family members ($n=100$) was 39.59 (median = 34, mode = 23) with SD = 20.43. Seventy nine percent family members had low EE. Only 21% had high level of EE.¹¹

4. Association between QOL, EE, and baseline proforma of caregivers

This study results showed there was no significant association between QOL and selected baseline variables; also, there was no significant association found between EE and selected baseline variables at 0.05 level of significance.

In contrast, the findings of a similar study conducted on EE among caregivers of person with schizophrenia and obsessive compulsive disorder showed that there was no significant association found between EE and selected baseline variables.¹²

Limitations

The study was limited to caregivers of mentally ill who are attending the psychiatric OPD and IP in a selected hospital. It may limit its generalizability.

Conclusion

The study concluded that there was a negative correlation between QOL and EEs. The obtained “*r*” value (-0.14) is statistically not significant at 0.05 level of significance. There was no association between QOL and income and occupation of the caregiver.

Conflict of Interest

None declared.

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