Comparison of impact of family stigma on quality of life among caregivers of male inpatients with alcohol and opioid use disorder

Background: Caregivers of patients with alcohol and opioid use disorder (OUD) have low quality of life (QoL) and suffer from family stigma. However, impact of family stigma on QoL has not been studied in this population. Materials and Methods: One hundred primary caregivers of male inpatients with severe alcohol use disorder (AUD) (n = 47) and OUD (n = 53) as per the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition were enrolled into the cross-sectional, descriptive study. Participants were assessed using sociodemographic and clinical proforma, World Health Organization QoL-BREF Hindi, and Hindi family stigma scale. Kolmogorov–Smirnov tests and Pearson’s correlation were used for statistical analysis. Results: Majority of caregivers were females (64%), homemakers (48%), and married (80%). More than 50% of caregivers resided in rural areas and nuclear families. 46%, 30%, and 24% of caregivers were parents, wives, and siblings and children. Males, caregivers between 31 and 45 years of age, and married caregivers had significantly higher QoL. Parents had significantly lower QoL. Caregivers of patients with AUD had significantly lower overall QoL than that of OUD. Wives faced higher discrimination and overall stigma. Overall QoL, satisfaction with physical health, and environment were significantly negatively correlated with discrimination. Total stigma was negatively correlated with satisfaction with environment. Conclusion: Stigma and discrimination have negative impact on QoL of caregivers. Stigma reduction and QoL enhancement should be integral part of psychosocial interventions for caregivers of patients with AUD and OUD.

Keywords: Alcohol use disorder, caregivers, discrimination, family stigma, opioid use disorder, quality of life

The World Health Organization defines quality of life (WHO QoL) as “individuals’ perception of their position in life in the context of the culture and the value system in which they live and in relation to their goals, expectations, standards, and concerns.” QoL is affected by multiple factors such as physical and psychological illness, medications, income, housing, employment, and socioeconomic status. One of the important factors that affect QoL adversely is stigma. Family members of patients with stigmatizing disorders suffer from stigma.

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and discrimination, called as courtesy, associative, family, or family stigma. This holds true for caregivers of patients with SUD also. The stereotypes related to family stigma are blame, shame, and contamination. Family is blamed for poor household environment leading to or maintaining the condition, leading to shame. Contamination is the process in which diminished worth is attributed to a family member because of association with a stigmatized persons. Internalization of these feelings leads to family stigma, which causes avoidance, reduced life opportunities, guilt, social exclusion, reduced self-esteem, hopelessness, huge treatment gap, and poor compliance.

An Indian narrative review on SUD and family found that substance use affects the family in diverse ways. However, to the knowledge of the authors, no Indian study has assessed the impact of substance use on QoL of family members. From elsewhere, caregivers of patients with SUD were found to have lower QoL than general population. One study found that QoL of caregivers in the domains such as functional capacity, physical aspect, pain, and vitality was more affected than even alcohol users. Although family stigma has been extensively studied in mental illness, HIV, disability, and some other illnesses, there is conspicuous absence of research on stigma among caregivers of patients with SUD. A previous Indian study found that caregivers of patients with SUD had higher stigma than caregivers of patients with schizophrenia, depression, and obsessive-compulsive disorder.

The impact of family stigma on QoL of caregivers has not been studied in India. Two studies from elsewhere have reported that family stigma reduced QoL among caregivers and anticipated stigma had direct negative impact on psychological and physical health. A few studies among patients have reported that stigma reduced QoL among patients with opioid use disorder (OUD) and severe mental illness. The present study was aimed to assess the impact of family stigma on QoL among caregivers of patients with alcohol use disorder (AUD) and OUD. The study also aimed to find the sociodemographic and clinical factors affecting stigma and QoL in this population.

**MATERIALS AND METHODS**

It was a cross-sectional, descriptive study conducted at 50-bedded model deaddiction center of department of psychiatry at a tertiary care government medical college and hospital in North India from May to October 2018.

**Study population**

The sample consisted of 100 caregivers of male inpatients with severe AUD and OUD diagnosed as per the Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM 5).

**Inclusion criteria**

Primary caregivers between 18 and 65 years and of both genders who gave written informed consent were included. The caregivers of only those male patients were included who fulfilled the criteria for severe AUD and OUD and required admission.

**Exclusion criteria**

Caregivers who were suffering from SUD or psychiatric illness or refused to participate were excluded. Caregivers were excluded if they or their patient suffered from any other medical or surgical disorder which would lead to a reduction in QoL. They were excluded if caregiver or patient suffered from stigmatizing illness, i.e., mental illness (dual diagnosis) HIV, hepatitis, leprosy, tuberculosis, physical handicaps, etc.

All the patients and their caregivers who fulfilled the inclusion and exclusion criteria and gave informed consent to participate were then assessed using the following tools.

**Sociodemographic and clinical pro forma**

A semistructured pro forma was prepared to record the sociodemographic and clinical variables including caregiver’s age, gender, education, occupation, marital status, and relation to patient. Monthly family income, family type, locality, diagnosis of patient as per DSM 5, total duration of SUD and previous hospitalization were also recorded.

**World Health Organization quality of life-BREF Hindi version**

WHO QoL-BREF Hindi version was used to measure subjective health-related QoL. The 26 items are further divided into four domains (satisfaction with physical health, psychological health, social relations, and environment) and two general questions related to satisfaction with overall QoL and overall health. This is one of the most commonly used scales to measure QoL and has excellent reliability and validity.

**Stigma scale**

The Hindi family stigma scale, which has been previously standardized in India was used for the study. It is a 28-item self-rated instrument with a Likert type scoring (agree, neither agree nor disagree, and disagree). Each item is rated from 0 to 2. The 28 items are divided into three domains, namely, discrimination (13 items), disclosure (ten items), and positive aspects of stigma (five items). Higher score on each domain and the total scale score denotes higher stigma. Negatively worded items are reverse scored. The
scale has been previously standardized in India on a variety of patients with mental illnesses and was found to have good internal consistency and test–retest reliability.\cite{19}

**Ethical considerations**

Ethical clearance was obtained from the institutional ethics committee. Written informed consent was obtained from the caregivers and assent was obtained from the patients. The Indian Council of Medical Research ethical guidelines on biomedical research on human participants were adhered to.

**Statistical analyses**

The statistical analysis was carried out using Statistical Package for the Social Sciences (SPSS Inc., Chicago, IL, USA, version 25.0 for Windows). All quantitative variables were estimated using measures of central location (mean and median) and measures of dispersion (standard deviation and standard error). Normality of data was checked by measures of skewness and Kolmogorov–Smirnov tests of normality. For skewed data or scores, Mann–Whitney test was applied for two groups. For more than two groups, Kruskal–Wallis test was applied. Qualitative or categorical variables were described as frequencies and proportions. Proportions were compared using Chi-square or Fisher’s exact test which ever was applicable. To see the relationship between two variables, Pearson’s correlation coefficient was calculated. All statistical tests were two-sided and performed at a significance level of $\alpha = 0.05$.

**RESULTS**

A total of 129 male patients aged 18–65 years with severe AUD and OUD as per the DSM 5 were admitted during the study period. Caregivers of 29 patients were excluded (10 because of dual diagnosis, 6 because of multiple SUD, 6 because of comorbid HIV or HCV, and 7 refused consent). The final sample for the study comprised 100 caregivers of male patients with severe AUD and OUD diagnosed according to DSM 5.

Table 1 shows the sociodemographic and clinical data of caregivers and their correlation with QoL. The caregivers were equally divided into three age groups. Majority of the caregivers were female (64%), had $<12$ years of formal education (66%), and married (80%). 48% of caregivers were homemakers. 59% of caregivers resided in rural areas and 53% in nuclear families. 46% of caregivers were parents (32 mothers and 14 fathers), 30% were wives, and 24% were siblings ($n = 18$) and children ($n = 6$). 53% of patients had OUD and 47% had AUD. 58% of patients had no history of hospitalization prior to the current admission.

QoL in social relationship domain was higher in the age group of 31–45 years as compared to age extremes. Females had significantly lower QoL on satisfaction with environment. Persons in office jobs had significantly lower satisfaction with psychological health. Cohabiting caregivers had better satisfaction with physical health, psychological health, as well as social relationship than noncohabiting caregivers.

Parents had lower satisfaction with overall health and physical and psychological health compared to wives and other caregivers, whereas wives scored significantly lowers in terms of satisfaction with environment. Families whose income was $>$ Rs. 5000 fared psychologically. Rural caregivers had better social relationships. Education, type of family, and history of past admission had no significant impact on QoL. Caregivers of patients with AUD had significantly lower overall QoL than caregivers of patients with OUD.

Table 2 shows the sociodemographic data of caregivers and its correlation with family stigma. Most of the sociodemographic and clinical variables such as caregiver’s gender, education, occupation, family income, family type, and patient’s diagnosis and previous hospitalization did not significantly affect stigma. Wives of patients experienced significantly higher discrimination and total stigma than parents, siblings, and children. Married caregivers had significantly higher total stigma than single caregivers. The stigma was lowest among siblings and children. Caregivers in the youngest age group (18–30 years) had significantly lower stigma than other age groups. Total stigma among caregivers was significantly higher when the total duration of SUD exceeded 10 years.

It was found that overall QoL, satisfaction with physical health, and environment were significantly negatively correlated with discrimination. Total stigma score was negatively correlated with satisfaction with environment [Table 3].

**DISCUSSION**

This is the first study to our knowledge that assesses the impact of family stigma on QoL among caregivers of male inpatients with AUD and OUD. In the present study, majority of the primary caregivers were female (30 wives and 32 mothers) and homemakers ($n = 48$). The predominance of female caregivers has been reported in previous studies of SUD,\cite{8} psychiatric disorders,\cite{10} and chronic medical illness.\cite{17,18} These findings reflect the societal tradition, where the role of caregiver is mostly given to women.\cite{9} In the present study, QoL was lower among
Table 1: Sociodemographic and clinical data and their correlation with quality of life

| Category (n)                      | WHO QoL BREF Q1 | WHO QoL BREF Q2 | WHO QoL Domain 1 | WHO QoL Domain 2 | WHO QoL Domain 3 | WHO QoL Domain 4 |
|----------------------------------|-----------------|-----------------|-------------------|-------------------|------------------|-----------------|
|                                  | Mean±SD         | Mean±SD         | Mean±SD           | Mean±SD           | Mean±SD          | Mean±SD         |
| Age                              |                 |                 |                   |                   |                  |                 |
| 18-30 (27)                       | 2.63±1.24       | 0.899           | 2.89±1.25         | 0.093             | 55±22.72         | 0.067           |
| 31-45 (35)                       | 2.57±1.07       | 3.03±10.95      | 54.9±17.18        | 0.043             | 50.4±20.48       | 0.202           |
| >45 (38)                         | 2.5±1.25        | 2.53±1.27       | 45.8±12.8         | 0.067             | 42.4±16.81       | 0.025           |
| Gender                           |                 |                 |                   |                   |                  |                 |
| Male (36)                        | 2.61±1.32       | 0.964           | 2.75±1.22         | 0.065             | 56.2±11.22       | 0.072           |
| Female (64)                      | 2.53±1.1        | 2.83±1.16       | 50.8±15.76        | 0.222             | 46.2±17.24       | 0.025           |
| Education                        |                 |                 |                   |                   |                  |                 |
| Illiterate (19)                  | 2.11±0.99       | 0.135           | 2.68±1.11         | 0.064             | 48.1±19.49       | 0.033           |
| <12 years (47)                   | 2.66±1.13       | 2.74±1.12       | 54.0±16.62        | 0.087             | 51.8±11.9        | 0.087           |
| >12 years (34)                   | 2.68±1.3        | 2.94±1.15       | 49.8±18.63        | 0.087             | 42.4±12.11       | 0.087           |
| Occupation                       |                 |                 |                   |                   |                  |                 |
| Agriculture laborers (23)        | 2.65±1.34       | 0.216           | 2.78±1.13         | 0.089             | 54.3±19.78       | 0.054           |
| House wife (48)                  | 2.73±1.07       | 2.88±1.16       | 52.0±17.16        | 0.054             | 48.6±18.09       | 0.054           |
| Office job (16)                  | 2.06±1.1        | 2.63±1.31       | 48.8±18.03        | 0.054             | 33.2±22.99       | 0.054           |
| Unemployed (13)                  | 2.38±1.39       | 2.77±1.24       | 48.8±17.46        | 0.054             | 45.3±19.77       | 0.054           |
| Marital status                   |                 |                 |                   |                   |                  |                 |
| Noncohabiting (20)               | 2.35±0.93       | 0.424           | 2.31±0.8          | 0.031*            | 43.7±12.9        | 0.031*          |
| Cohabiting (80)                  | 2.61±1.23       | 2.93±1.17       | 53.4±16.24        | 0.031*            | 48.8±18.9        | 0.031*          |
| Relationship to patients         |                 |                 |                   |                   |                  |                 |
| Parents (46)                     | 2.33±1.14       | 0.072           | 2.46±1.04         | 0.021*            | 45.5±11.62       | 0.021*          |
| Wives (30)                       | 2.47±1.86       | 3.2±1.16        | 56.8±15.07        | 0.021*            | 53.1±14.5         | 0.021*          |
| Other (24)                       | 3.13±1.42       | 2.96±1.43       | 56.2±12.6         | 0.021*            | 51.0±12.67       | 0.021*          |
| Family income                    |                 |                 |                   |                   |                  |                 |
| <5000 (21)                       | 2±0.8           | 0.064           | 2.52±1.08         | 0.52              | 44.3±13.34       | 0.071           |
| 5001-10,000 (31)                 | 2.7±1.11        | 2.8±1.11        | 51.6±17.48        | 0.071             | 35.2±19.64       | 0.071           |
| >10,000 (48)                     | 2.7±1.12        | 2.9±1.16        | 54.5±16.8         | 0.071             | 47.7±12.42       | 0.071           |
| Family type                      |                 |                 |                   |                   |                  |                 |
| Nuclear (53)                     | 2.38±1.04       | 0.168           | 2.8±1.09          | 0.436             | 48.2±16.84       | 0.158           |
| Joint (47)                       | 2.77±1.29       | 2.72±1.26       | 55.2±18.7         | 0.158             | 43.6±10.83       | 0.158           |
| Locality                         |                 |                 |                   |                   |                  |                 |
| Rural (59)                       | 2.64±1.2        | 0.457/−0.74     | 2.76±1.18         | 0.646/−0.459      | 53.7±18.59       | 0.209/−1.255    |
| Urban (41)                       | 2.44±1.14       | 2.85±1.17       | 48.27±16.35       | 0.209/−1.255      | 49.97±19.9       | 0.065/−1.847    |
| Admitted in past for treatment   |                 |                 |                   |                   |                  |                 |
| Yes (42)                         | 2.55±1.02       | 0.753           | 2.57±1.31         | 0.085             | 48.3±18.96       | 0.139           |
| No (58)                          | 2.57±1.29       | 2.97±1.04       | 53.8±16.75        | 0.139             | 48.0±20.79       | 0.38            |

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Females as compared to males on 5 of 6 domains of WHO QoL-BREF, though it reached statistical significance only on satisfaction with environment. The female caregivers are required to manage the household, children, and many times financial needs also because of the substance use of the patient. Female caregivers, especially wives, are also prone to domestic violence at the hands of the patient. The family environment becomes unstable, conflicting, threatening, and characterized by disharmony, distrust, and aggression. These factors may lead to lower QoL among female caregivers as compared to male caregivers.

| Table 1: Contd... |
|-------------------|
| Category (n) | WHO QoL BREF Q1 Mean±SD | WHO QoL BREF Q2 Mean±SD | WHO QoL Domain 1 Mean±SD | WHO QoL Domain 2 Mean±SD | WHO QoL Domain 3 Mean±SD | WHO QoL Domain 4 Mean±SD |
| Diagnosis |
| Alcohol use disorder (47) | 2.21±1.06 | 0.004** | 2.7±1.2 | 0.44 | 51.21±19.16 | 0.613 | 44.5±32.25 | 0.24 | 57.32±20.45 | 0.564 | 45.4±17.53 | 0.398 |
| Opioid use disorder (53) | 2.87±1.19 | 0.004** | 2.89±1.15 | 0.44 | 57.15±16.74 | 0.613 | 48.79±18.54 | 0.24 | 55.72±22.36 | 0.564 | 49.6±20.11 |
| Total duration of substance use in months |
| 1-30 (24) | 2.79±1.61 | 0.567 | 3.17±1.09 | 0.009** | 52.08±18.78 | 0.43 | 4.17±19.23 | 0.108 | 54.92±20.27 | 0.261 | 43.29±20.84 | 0.185 |
| 31-60 (28) | 2.57±1.07 | 1.6±1.16 | 1.6±1.05 | 0.55 | 49.17±16.24 | 0.43 | 48.32±19.16 | 0.108 | 54.7±21.39 | 0.261 | 52.36±20.29 |
| 61-84 (5) | 21.0±7.1 | 1.6±1.1 | 1.6±1.05 | 0.55 | 41.2±16.15 | 0.43 | 29±10.89 | 0.108 | 36.2±23.88 | 0.261 | 46.4±13.05 |
| 85-120 (21) | 2.52±0.93 | 2.7±1.1 | 1.6±1.1 | 0.55 | 55.14±18.91 | 0.43 | 53.62±19.39 | 0.108 | 59.52±20.81 | 0.261 | 53.24±18.83 |
| >120 (22) | 2.45±1.06 | 2.9±1.1 | 2.9±1.1 | 0.55 | 52.68±18.31 | 0.43 | 47.82±19.25 | 0.108 | 62.12±14.45 | 0.261 | 41.7±14.88 |
| Total (100) | 2.56±1.17 | 2.8±1.1 | 2.8±1.1 | 0.55 | 51.51±17.83 | 0.43 | 46.79±20.38 | 0.108 | 56.46±21.39 | 0.261 | 47.63±18.96 |

*means significant. ** means highly significant. WHO-QoL - World Health Organization quality of life; SD - Standard deviation
Indian research has consistently shown that spouses face domestic violence due to alcohol use of the husbands[22] and domestic violence is much more common in AUD than on other drugs.[23] It was found that overall QoL, satisfaction with physical health, and environment were significantly negatively correlated with discrimination. Total stigma score was negatively correlated with satisfaction with environment.

Table 2: Sociodemographic and clinical data and their correlation with stigma

| Category (n)                        | Discrimination total | Disclosure total | Positive aspects total | Total stigma scale score |
|------------------------------------|----------------------|------------------|------------------------|--------------------------|
|                                    | Means±SD             | P                | Means±SD               | P                        |
| Age                                |                      |                  |                        |                          |
| 18-30 (27)                         | 12.37±4.22           | 0.029*           | 12.31±6.33             | 0.703                    |
| 31-45 (35)                         | 13.09±4.9            |                  | 13.37±4.83             | 0.292±2.27               |
| >45 (38)                           | 13.97±3.55           |                  | 12.66±4.43             | 4.53±1.81                |
| Gender                             |                      |                  |                        |                          |
| Male (36)                           | 12.03±4.18           | 0.116            | 12.83±4.42             | 0.762                    |
| Female (64)                         | 13.91±4.17           |                  | 12.81±3.39             | 4.54±1.81                |
| Education                          |                      |                  |                        |                          |
| Illiterate (19)                    | 13.47±5.1            | 0.729            | 14.21±7.68             | 0.714                    |
| <12 years (47)                     | 13.51±4.33           |                  | 12.62±4.02             | 4.98±2.23                |
| >12 years (34)                     | 12.73±3.66           |                  | 12.79±4.48             | 4.03±2.15                |
| Occupation                         |                      |                  |                        |                          |
| Agriculture laborers (23)           | 13.52±5.29           | 0.244            | 12.65±4.39             | 0.155                    |
| House wife (48)                    | 13.47±4.39           |                  | 12.62±5.69             | 4.63±1.94                |
| Office job (16)                    | 13.25±3.38           |                  | 11.94±4.48             | 4.33±2.47                |
| Unemployed (13)                    | 12±2.45              |                  | 15.08±3.5              | 3.77±1.3                |
| Marital status                     |                      |                  |                        |                          |
| Noncohabiting (20)                 | 12.25±3.75           | 0.364            | 11±3.36                | 0.053                    |
| Cohabiting (80)                    | 13.48±4.35           |                  | 13.26±5.12             | 4.4±1.22                 |
| Relationship to patients           |                      |                  |                        |                          |
| Parents (46)                       | 13.73±3.7            | 0.039*           | 12.84±4.18             | 0.06                     |
| Wives (30)                         | 13.93±5.06           |                  | 14.23±6.37             | 4.3±1.98                 |
| Other (24)                         | 11.46±3.78           |                  | 10.88±4.19             | 5.21±2.54                |
| Family income                      |                      |                  |                        |                          |
| <5000 (21)                         | 13±3.7               | 0.996            | 13.29±6.06             | 0.853                    |
| 5001-10,000 (31)                   | 13.13±3.89           |                  | 13.19±5.36             | 4.32±2.33                |
| >10,000 (48)                       | 13.44±7.2            |                  | 12.35±4.38             | 4.65±2.26                |
| Family type                        |                      |                  |                        |                          |
| Nuclear (53)                       | 13.32±3.65           | 0.762            | 13.06±5.53             | 0.895                    |
| Joint (47)                         | 13.13±4.88           |                  | 12.53±4.47             | 4.64±2.39                |
| Locality                           |                      |                  |                        |                          |
| Rural (59)                         | 13.24±5.06           | 0.498            | 12.91±4.85             | 0.572                    |
| Urban (41)                         | 13.22±2.75           |                  | 12.68±5.37             | 4.32±2.31                |
| Admitted in past for treatment     |                      |                  |                        |                          |
| Yes (42)                           | 13.29±4.09           | 0.844            | 12.12±5.79             | 0.193                    |
| No (58)                            | 13.39±4.4            |                  | 13.31±4.41             | 4.26±2.2                |
| Diagnosis                          |                      |                  |                        |                          |
| Alcohol use disorder (47)          | 13.04±4.14           | 0.518            | 12.96±5.68             | 0.737                    |
| Opioid use disorder (53)           | 13.4±4.37            |                  | 12.68±4.46             | 4.43±1.82                |
| Total duration of substance use in months |          |                  |                        |                          |
| 1-30 (24)                          | 12.38±3.27           | 0.419            | 12.33±3.97             | 0.136                    |
| 31-60 (28)                         | 13.04±5.34           |                  | 13.54±3.82             | 4.54±2.04                |
| 61-84 (5)                          | 12±3.39              |                  | 8.8±4.27               | 4.3±2.08                 |
| 85-120 (21)                        | 13.14±3.44           |                  | 12.57±6.26             | 3.9±2.12                 |
| >120 (22)                          | 14.7±4.43            |                  | 13.5±6.13              | 5.3±1.19                 |
| Total                              | 13.22±4.25           |                  | 12.8±5.04              | 4.4±1.25                 |

*means significant. **means highly significant. SD - Standard deviation
Previous studies have reported that family stigma reduced QoL among caregivers and anticipated stigma had direct negative impact on psychological and physical health. The negative impact of family stigma on QoL can be due to many reasons. Family stigma is related to social isolation, exclusion, reduced hope and self-esteem, reduced life opportunities, depressive symptoms, and psychological distress. All these factors may combine to produce a negative impact of family stigma on QoL.

Stigma increased significantly with increasing age. The same finding has been reported previously, which probably happens due to longer caregiving period. It is also evident from the fact that the total stigma increased to maximum among caregivers of patients who were using substance for the longest period.

Wives of patients experienced significantly higher discrimination and total stigma than parents, siblings, and children. There is no previous study comparing stigma among wives and parents. Wives have been reported to be blamed by the patient, parents of patient, or the society for the continued substance intake of their husbands. It has been reported previously that wives even start perceiving inability to prevent addiction as their own personal failure which could result in higher family stigma than parents.

The present study has many strengths such as sound research design, stringent inclusion and exclusion criteria, and use of standardized instruments in vernacular language. However, a few limitations should be kept in mind when interpreting the results. It was a cross-sectional study and does not assess the dynamic nature of stigma as well as QoL. It was a hospital-based study and outpatients were excluded, so the findings cannot be generalized. The sociodemographic data of patients have not been included because the study was carried out among caregivers. Many additional factors which have an impact on stigma and QoL are likely to have been missed. Major among them is the fact that females have a poorer QoL and higher rates of depression and majority of the caregivers in this population were female.

### CONCLUSION

Caregivers of patients with AUD and OUD have low QoL and high family stigma. Family stigma reduces QoL in multiple domains. Female caregivers, parents, unmarried caregivers, urban caregivers, and caregivers of patients with AUD are at particularly high risk of suffering from low QoL. Stigma increases with increasing age and longer duration of AUD and OUD. Efforts to reduce family stigma and enhance QoL of the caregivers should be an integral part of management plan for patients with AUD and OUD.

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### Conflicts of interest

There are no conflicts of interest.

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