Journal of Population Therapeutics & Clinical Pharmacology

RESEARCH ARTICLE
DOI: 10.53555/6cd3ww78

DEPRESSION AND ANXIETY IN PRIMARY CAREGIVERS OF PATIENTS WITH SUBSTANCE ABUSE

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Abstract

Introduction: Primary caregivers of people with substance abuse problems often suffer major psychological burdens, which can include depression and anxiety. Deepening the challenge is that in Pakistan, caregivers are stigmatized, face limited support, and experience emotional strain, all under the additional pressure of cultural expectations. Caregivers of substance users are being highlighted for the high rates of psychological distress, against a backdrop of societal pressure, with limited mental health services.

Objective: To study the commonness and intensity of depression and anxiety in those caring for patients with substance use disorders and discover factors related to their psychosocial health.

Materials and Method: A cross-sectional survey was carried out at Department of Psychiatry, Hayatabad Medical Complex Peshawar, Pakistan, from February, 2024 to July, 2024 and 150 caregivers took part. The PHQ-9 and GAD-7 tests measured how much the subjects were depressed or anxious. SPSS version 25 was used to analyze the information, and chi-square tests were performed to find relationships.

Results: Of 150 caregivers, 68% reported depression (27% mild, 25% moderate, 16% severe) and 60% experienced anxiety (21% mild, 24% moderate, 15% severe). Female gender, older age, low education, unemployment, prolonged caregiving, and cohabitation were linked to higher distress.

Conclusion: Caregivers face significant mental health challenges, necessitating targeted interventions like counseling and support programs.

Keywords: *Depression, Anxiety, Caregivers, Substance Abuse, Pakistan, Mental Health.*

INTRODUCTION

Substance abuse is a fast-growing public health problem worldwide, and Pakistan is not an exception. In addition to making an impact on those involved, it takes a serious toll on the main caregivers of these children. Primary caregivers, who may include a family member, are often responsible for providing consistent support, knowing how to manage a crisis, and finding treatment resources. The responsibilities that come with these can leave workers so stressed that they get depressed or suffer from anxiety. A plethora of current literature in Pakistan suggests that a significant prevalence of psychological distress exists among caregivers of individuals with substance use disorders. For example, Ali et al. (1) reported a significant prevalence of depressive symptoms among such caregivers, arguing that urgent needs for all possible means to address their mental health needs should be addressed. These demands of caregiving are compounded by the emotional load of caregiving, societal stigma, poor support systems, and the chronicity of substance dependence, which ultimately diminishes mental well-being.

The cultural expectation in Pakistan is that other family members should also take care of their sick loved ones, which at times leads family members in the role of caregiver to neglect their own needs. Then these forces of society make us helpless and more and more connected to feelings of loneliness. Mufti et al. (2) report that caregivers of psychoactive substance users are more likely to have depression than the general population. In addition, the absence of accessible mental health care services reflects the problem that caregivers do not have access to quality mental health support. Marri et al. (3) reviewed that many caregivers in Pakistan are depressed and anxious about each other, intertwined together, experiencing a bundle of emotions. Together, these findings suggest that the role of caregiving to substance users is psychological rather than physical or logistical.

Caregivers are subjected to the psychological burden, which in large part shows up as severe emotional and physical symptoms. Additionally, Idrees et al. (4) indicated that not only is depression common, but its severity can include moderate to severe depression, and that the length and quantity of caregiving were related to worsening mental health outcomes. These findings are supported by international research. Goit et al. (5) found in Nepal that caregivers of patients with alcohol dependence syndrome have poor quality of life and have a greater burden compared with literature from South Asia. Emotional strain, financial burden, and social isolation have disturbingly overlapped in caregiver wellbeing. However, depression in caregivers is not an isolated outcome – rather, it is part of a much larger systematic failure in the realm of mental health caregiving that deserves recognition.

Caregivers also have to deal with challenges other than substance abuse. Caregivers of adult cancer patients have high rates of depression, with similar psychological consequences of caregiving in the long term across different illnesses, as shown by Wassie et al. (6). This underscore caring for substance abuse patients with the strong and universal impact of caregiver distress, as well as the necessity for a more intense concentrate on the specific concern of caregivers of patients with substance abuse, who could similarly have extra stigma and blame. In the study of Tang et al (7), who studied caregivers of patients with ALS, they stressed that caregiving for an individual with ALS in the home environment further accentuates stress due to social isolation and paucity of support by trained intervention, which is a major problem in the Pakistani context because of the lack of institutional support.

Similarly, Tsehay et al. (8) raised the number of depression and anxiety confronting caregivers of children with epilepsy on the grounds that taking care of a chronic condition can lead to emotional exhaustion. Epilepsy and substance use are very different medical conditions, but the psychological outcomes for caregivers aren't much different. This suggests that the burden of caring goes well beyond simply the manner of illness and is squarely grounded in the perpetual financial, physical, and emotional involvements experienced by caregivers. Additionally, Mazza et al. (9) considered the potential of intimate partner violence to generate a loop of depressive victimization, which can be applied metaphorically to caregivers who may find their emotional turmoil to be ongoing if the substance user is abusive and manipulative.

Stigma is another overlooked factor that contributes to caregiver distress. According to Nigussie et al. (10), stigma perceived by caregivers of mentally ill patients has a statistically significant correlation with treatment-seeking behavior for common mental disorders, which is an important point in the Pakistani context, where substance abuse and mental illness are highly stigmatized. The stigma means caregivers don't feel free to reach out and become that much more psychologically vulnerable. Digital interventions such as app-based mindfulness and self-compassion programs, as illustrated by Goodridge et al (11), provide innovative mechanisms that could help alleviate caregivers when usual support is unavailable or inaccessible. However, even in more developed health care systems, there are support networks and structured interventions that help caregivers, and that is still not enough. Finally, Steinsheim et al. (12) point out subjective burden as the pivotal metric to measure caregiver well-being, and Zhou et al. (13) show that caregivers with better knowledge and coping skills have less psychological distress. Caregiver education and psychological training are demonstrated to be important by these studies.

Lastly, Taylor et al. (14) noted that internet-based interventions for depression and anxiety have been demonstrated to be effective and may, in fact, have the potential to be integrated into caregiver support strategies in Pakistan as a future intervention. The key message from this body of literature is the pressing need to address mental health outcomes in primary caregiver patients of people with a substance use disorder. The group's high prevalence of depression and anxiety remains high in Pakistan as well as internationally. Stigma in the culture, lack of institutional support, and the chronic nature of the problem itself add further to caregiver distress. Consequently, any broad approach to treating substance use disorders must also consider psychological support systems for caregivers such that the loop of mental health deterioration can be broken and overall outcomes for patients and their families can be improved.

Objective: The objective is to determine the prevalence and severity of depression and anxiety amongst primary caregivers of substance abuse patients and to identify psychosocial factors responsible for their depression and anxiety burden.

MATERIALS AND METHODS

Design: Descriptive Cross-sectional Design.

Study setting: The research was conducted at Department of Psychiatry, Hayatabad Medical Complex Peshawar, Pakistan.

Duration: The study was carried out over a six-month period, from February 2024 to July 2024.

Inclusion Criteria: Participants in the study were primary caregivers aged 18 years or more, who had been taking care of patients who were diagnosed with substance use disorder for at least three months. Family members who provided day-to-day care and support for the patient and agreed to participate could take part in the study.

Exclusion Criteria: Excluded were caregivers with a prior clinical diagnosis of psychiatric illness, cognitive impairment, or who were currently undergoing psychiatric treatment. Additionally, non-family caregivers and paid healthcare workers were not considered.

Methods

The structured questionnaire, which elicited demographic information and standard depression and anxiety assessment tools, was used to collect data. Depressive symptoms were measured by the Patient Health Questionnaire 9 (PHQ-9) and anxiety levels using the Generalized Anxiety Disorder 7 (GAD-7) scale. The two instruments have been demonstrated to be used in clinical and community settings as appropriate for the Pakistani population. The purposive sampling was used to select participants from the outpatient and inpatient Department of Psychiatry, Sahara Medical College Narowal, Pakistan, from February, 2024 to July, 2024. After receiving informed consent, face-to-face interviews were conducted in a private, quiet room to ensure confidentiality and comfort. Data collection was prior to ethical approval from the hospital's ethical review board. Data were analyzed using SPSS version 25. Demographic variables were summarized using descriptive statistics, and chi-square tests examined caregiver characteristics in relation to depression and anxiety levels.

RESULTS

A total of 150 primary caregivers of patients with substance abuse disorders participated in the study. The majority of caregivers were female (64%), while 36% were male. Most respondents were between

31–50 years of age (54%), followed by 24% under 30 years and 22% above 50 years. Regarding educational background, 45% of caregivers had completed secondary education, 30% were graduates, and 25% were either uneducated or had only primary-level education. The majority were spouses (38%) or parents (34%) of the patients, while siblings (18%) and other relatives (10%) made up the rest.

Table 1: Socio-demographic Characteristics of Caregivers (n = 150)

Variable	Frequency (n)	Percentage (%)
Gender		
Male	54	36%
Female	96	64%
Age Group		
<30 years	36	24%
31–50 years	81	54%
>50 years	33	22%
Relationship to Patient		
Spouse	57	38%
Parent	51	34%
Sibling	27	18%
Other	15	10%

The assessment using the PHQ-9 showed that 68% of caregivers experienced some level of depression. Among them, 27% had mild depression, 25% had moderate depression, and 16% showed symptoms of moderately severe to severe depression. Similarly, GAD-7 results revealed that 60% of the caregivers experienced anxiety symptoms, with 21% experiencing mild anxiety, 24% moderate, and 15% severe anxiety.

Table 2: Prevalence and Severity of Depression and Anxiety Among Caregivers

Severity Level	Depression (%)	Anxiety (%)
None	32%	40%
Mild	27%	21%
Moderate	25%	24%
Moderately Severe/Severe	16%	15%

Analysis showed a strong association between caregiver age and psychological distress. Caregivers above 50 years reported higher levels of depression (75%) and anxiety (70%) compared to younger caregivers. Female caregivers were more likely to experience both depression (73%) and anxiety (68%) than their male counterparts. Furthermore, low educational levels and being unemployed were also significantly associated with higher depression and anxiety scores.

Table 3: Association of Demographic Variables with Depression and Anxiety

Demographic Variable	Depression (%)	Anxiety (%)
Age > 50 years	75%	70%
Female	73%	68%
Unemployed	71%	67%
Low Education	69%	63%

The duration of caregiving was another significant factor. Caregivers who had been supporting their patients for more than one year reported more severe symptoms. Among those caregiving for over 12 months, 74% had depression and 66% had anxiety, compared to 52% and 45% respectively for those providing care for less than six months. In addition, those living in the same household as the patient experienced greater psychological stress compared to those living separately.

Table 4: Duration and Living Status in Relation to Depression and Anxiety

Variable	Depression (%)	Anxiety (%)
Caregiving < 6 months	52%	45%
Caregiving 6–12 months	63%	58%
Caregiving > 12 months	74%	66%
Living with patient	70%	65%
Living separately from patient	48%	40%

Specifically, the findings reveal a very high psychological burden on primary caregivers across the board, but particularly for women, for older individuals, and for those with longer caregiving durations. The findings emphasize the need for psychological support, specially designed interventions, and mental health services tailored for this high-risk group of caregivers, among whom emotional distress is acute.

DISCUSSION

The present study focuses on psychological burden, manifested by levels of depression and anxiety, of primary caregivers of patients with substance abuse disorders. Psychological distress is at epidemic levels, with 68 percent of caregivers screening positive for depression and 60 percent to various degrees of anxiety. These results are in keeping with global research showing that providing care for people with chronic mental health or substance use conditions is extremely demanding at a psychological, emotional, and physical level. Among caregivers in this study, depression and anxiety were prominent, which not only reflects the serious risks associated with careers but also the more serious mental health risks involved in careers. Caregiving for patients with substance abuse often disrupts personal, social, and occupational domains and is fraught with unpredictable, aggressive, and manipulative behaviors of the patient.

The reality is that caregivers can end up in cycles of emotional burnout, financial stress, facing stigma, and lack of formal support, which then contribute to the onset or worsening of mental health. The disproportionate psychological burden borne by female caregivers was a key finding of the study. Caregiver females reported higher overall rates of both depression (73%) and anxiety (68%) than did males. This result aligns with previous literature, which indicates a gendered society of South Asians where women are supposed to perform all the tasks of providing services of care to their members, even at the sacrifice of their own well-being. The problem is further compounded when female caregivers are denied familial support and are sent the message that their emotional toll is unacceptable and that they should not ask for help.

The double burden of both household work and caring for someone else makes them prone to burnout and psychological disorders. The mental health of caregivers was also an age-related factor. Depression and anxiety were the highest among caregivers above 50. Moreover, older caregivers are at greater risk for stress-related disorders due to greater physical exhaustion and fewer coping resources. Furthermore, caregivers who are older may be taking care of their adult children or their spouse, who is struggling with substance use disorders, a failure of familial and parental roles that add to emotional distress. These cases, too, can hold psychological impact, save caregiving duties as such, but besides, the unbearable emotional pain of seeing a loved one struggle with addiction.

The study further revealed a strong association between low educational status and psychological distress. There was a higher level of depression and anxiety reported among caregivers with only primary level education or no formal education than among those with higher levels of education. It may be because of a lack of knowledge about substance abuse and what help is available, or how to cope, which makes the guilt of being a caretaker much more stressful. Additionally, less educated caregivers might have fewer chances to secure a job and have less financial independence, and may be more likely to depend on the patient or family for support. The dependency on financial support, combined with the caregiving task, can worsen the sense of helplessness, frustration, and aggravation. Psychological distress was also another contributor to unemployment. Those caregivers without employment or stable income sources were more likely to be depressed and anxious. Unemployment causes not only financial instability, but also social and functional instability, which are protective factors against mental illness.

The high cost of treatment for substance abuse, which usually means repeated hospitalizations, therapy sessions, medications, and even legal help, adds financial stress for the caregiver. The economic pressures only exacerbate the situation, and caregivers have little time or frame of mind to focus on their health, making them more prone to emotional breakdowns. Duration of caregiving was also found to significantly impact the mental well-being of caregivers. The caregivers who had been providing care for at least a year evaluated their psychological stress at the highest level. However, long-term mental and physical fatigue ensues from chronic caregiving when there is no adequate relief or support. Caregivers may, over time, begin to feel isolated, ignored, or even resentful if they feel that they are not being rewarded with an improvement in the patient's condition for all of their efforts. Such perception in turn leads to hopelessness and indeed helplessness, which are two cornerstones of the major depressive disorders.

The psychological outcomes of caregivers were important to living arrangements. Those who lived in the same household as the individuals who had been observed reported higher distress levels than those who saw them in the former category. It is probably because of prolonged exposure to the patient's behaviour, the absence of personal space, sleep disturbance, and overall disruption of one's daily routine. In most cases, the caregivers are also afraid for their safety if substance abuse results in aggressive or criminal behaviors. Maintaining vigilance at all times causes chronic anxiety and sleep disorders, which worsen their mental health. This research confirms the pressing need for systemic programs to assist caregivers of persons with substance use disorders. Although caregivers play a central role in the patient recovery process, they are a neglected group by the healthcare system. Caregivers rarely receive resources from mental health services, rehabilitation programs, or support groups.

Hospital, NGOs, and policymakers have a critical role in developing strategies that provides caregiver-inclusive services, including psychometric counselling, stress management workshops, financial aid, respite care, etc. Secondly, caregivers need not feel alone and stigmatized about their sinkages because ultimately, everyone affected by substance use needs support from someone to stand on their toes when on the road to recovery. Mental illness is yet to make its mark like others in Pakistan, where it is still considered an outrageous concept, and where many caregivers do not receive professional help out of fear of being judged by society. Average healthcare professional training programs should also include caregiver assessment and support so that each of these caregiver interactions with the health system becomes an opportunity for outreach. Finally, this study addresses the serious psychological burden that caregivers of patients with substance abuse disorders face. Mental health outcomes are highly determined by gender, age, education, employment status, caregiving duration, and living arrangements.

CONCLUSION

The primary caregivers of substance abuse patients suffer from a severe psychological burden, especially depression and anxiety, which is brought to light in this study. The results also show that caregiving can have a very negative effect on caregivers' mental health, especially in resource-limited contexts such as Pakistan. Severity of psychological distress was associated with being female, being older, having lower education, as well as with unemployment, longer duration of caregiving, and cohabiting with the patient. These results highlight the vital need for caregiver-driven interventions such as mental health support services, psycho education, financial support, and free counseling programs. The caregivers are at risk of emotional exhaustion unless they have appropriate support, for they may not get better if these are not provided, and can't help the patient achieve the full recovery he expects. Therefore, identifying and responding to caregiver mental health needs must become an integral part of effective substance abuse treatment strategies. This will lead to better outcomes for those treated and for those who care for them.

References

1. Ali, F., Baig, W., Saad, M., Tabassum, S., Aslam, M.S., Zahra, F. and Choudhary, A.K., 2022. Depression in the primary caregivers of patients with substance use disorder. Pakistan Journal of Medical & Health Sciences, 16(05), pp.913-913.
2. Mufti, A.A., Khan, Z., Marri, M.U., Kamal, A., Gul, E.J.A.Z. and Tareen, Z.A.R.M.I.N.A., 2021. Depression in Primary Caregivers of Patients of Psychoactive Substance Use. Pakistan Journal of Medical and Health Sciences, 15(6), pp.1240-1242.
3. Marri, M.U., Khan, Z., Mufti, A.A., Tareen, Z., Kamal, A. and Gul, E., 2022. Primary Caregivers of Patients with Psychoactive Substance Use Often Suffer from Depression & Anxiety. Pakistan Journal of Medical & Health Sciences, 16(12), pp.292-292.
4. Idrees, M., Iqbal, H.I. and Gill, I.A., 2022. Frequency of Depression and its Severity Among Primary Caregivers of Psychoactive Substance use Patients. Pakistan Journal of Medical & Health Sciences, 16(04), pp.1174-1174.
5. Goit, B.K., Acharya, B., Khattri, J.B. and Sharma, R., 2021. Burden and quality of life among primary caregiver of alcohol dependence syndrome. Am J Psychiatry Neurosci, 9, pp.1-6.
6. Wassie, L.A., Azagew, A.W. and Bifftu, B.B., 2022. Depression and its associated factors among primary caregivers of adult cancer patients at Northwest Amhara Regional States Referrals Hospitals oncology treatment units, Northwest Ethiopia, 2021. BMC psychiatry, 22(1), p.533.
7. Tang, S., Li, L., Xue, H., Cao, S., Li, C., Han, K. and Wang, B., 2021. Caregiver burden and associated factors among primary caregivers of patients with ALS in home care: a cross-sectional survey study. BMJ open, 11(9), p.e050185.
8. Tsehay, M., Necho, M., Belete, A. and Srahbzu, M., 2022. Depression and anxiety and their associated factors among caregivers of children and adolescents with epilepsy in three selected hospitals in Amhara region, Ethiopia: a cross-sectional study. PloS one, 17(7), p.e0271885.
9. Mazza, M., Marano, G., Del Castillo, A.G., Chieffo, D., Monti, L., Janiri, D., Moccia, L. and Sani, G., 2021. Intimate partner violence: A loop of abuse, depression and victimization. World journal of psychiatry, 11(6), p.215.
10. Nigussie, K., Tesfaye, D., Bete, T. and Asfaw, H., 2023. Perceived stigma, common mental disorders and associated factors among primary caregivers of adult patients with mental illness attending at public hospitals, Harari regional state, Eastern Ethiopia: a multicenter cross-sectional study. Frontiers in Public Health, 11, p.1024228.
11. Goodridge, D., Reis, N., Neiser, J., Haubrich, T., Westberg, B., Erickson-Lumb, L., Storozinski, J., Gonzales, C., Michael, J., Cammer, A. and Osgood, N., 2021. An app-based mindfulness-based self-compassion program to support caregivers of people with dementia: participatory feasibility study. JMIR aging, 4(4), p.e28652.
12. Steinsheim, G., Malmedal, W., Follestad, T., Olsen, B. and Saga, S., 2023. Factors associated with subjective burden among informal caregivers of home-dwelling people with dementia: a cross-sectional study. BMC geriatrics, 23(1), p.644.
13. Zhou, Z., Wang, Y., Feng, P., Li, T., Tebes, J.K., Luan, R. and Yu, Y., 2021. Associations of caregiving knowledge and skills with caregiver burden, psychological well-being, and coping styles among primary family caregivers of people living with schizophrenia in China. Frontiers in psychiatry, 12, p.631420.
14. Taylor, C.B., Graham, A.K., Flatt, R.E., Waldherr, K. and Fitzsimmons-Craft, E.E., 2021. Current state of scientific evidence on Internet-based interventions for the treatment of depression, anxiety, eating disorders and substance abuse: an overview of systematic reviews and meta-analyses. European journal of public health, 31(Supplement_1), pp.i3-i10.