



**DEPRESSION AND ANXIETY IN CAREGIVERS OF SUBSTANCE USERS**

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## ABSTRACT

**OBJECTIVE**

To determine the frequency of depression and anxiety incaregiversof substance users.

## STUDY DESIGN

Cross-sectional study

## PLACE AND DURATION OF STUDY

The study was conducted in the department of Psychiatry,Dr Ruth K.M.Pfau Civil Hospital Karachi in a duration of six months i.e. 14th Sep 2015- 14th March 2016.

## SUBJECTS AND METHODS

The total175 Caregiversof the patientswithsubstance use disorder who visited the Psychiatry department, civil hospital Karachi during study period were approached and enrolled after fulfilling the selection criteria. The semi structured proforma was used for demographic details while Patient Health Questionnaire (PHQ-9) and Generalized Anxiety Disorder (GAD-7) were administered for evaluation of Depressionandanxiety respectively.

## RESULTS

Among 175 caregivers, majority were females (70.2%), married (54%), illiterate or poorly educated (55%), employed (60%) and of low to middle socioeconomic class (93%). The frequency of depression and anxiety was found to be 65% and 46.2% respectively among caregiversof substanceusedisorder.

## CONCLUSION

This study reveals the significant presence of 'depression and anxiety' among 'caregivers' of substance use disorder. The strategies should be implemented for the wellbeing of caregivers as well in order to improvetheoverallprocessof recovery.

## KEYWORDS

Caregivers, Depression, Anxiety, Substance use, PHQ-9, GAD-7

## INTRODUCTION

Thesubstanceuse disordercan be considered as a"Family Disease"' because it not only affects the substance user's life but also that of its intimate family members. They suffer financially, psychologically and socially. This suffering lead to the occurrence of various mental health issues. Negative impact of patient'sbehavior leadsto emergence of depressive symptoms in caregivers.'

The Substance use is increasing with time and stressors, according to BBC worldwide, theUN estimates that there are morethan50 millionregular users of morphine diacetate (heroin), cocaine and synthetic drugs. This is seen as over 50% of individuals with substance related disorder willoften have a dual diagnosis, the most common being is major depressive disorder, anxiety disorder and dysthymia.' A study with family members of drug dependent peopleshowed an increase in the risk of the emergence of mentaldisorderin 58.0% of spouses.' It is usually the irresponsible and violent behavior of the patient towards thefamily members thatmakethem frustratedand helpless.It may result in anxiety and depression among them...• Alcoholics are the one with increased risk of stressful life events for their families. They not only hamper personal life by direct drug effects but also of their family by incapacitating their physical, emotional and social needs1·'·11.'Substance use disorder' is a condition in which the use of one or more substances cannabis, opioids or alcohol leads to a clinically significant impairment or distress to oneself or others.' In Diagnostic and statistical manual DSM 5 substance use disorder replaced substance abuse and substance dependence." *'5* In 2013 mental and substance use disorders resulted in 282.4k deaths. Among substance use disorder, the highest number of deaths were from alcohol, followed by 'opioid' and 'Cocaine use disorder\_,..,. According to International Classification ofDiseasesICD1 9 dependence is only considered if 3or more of the following symptoms have been present at some time during the previous year.; Strong desire to take substance, Difficulties in controlling substance taking behaviour in termsofits onset or level of use, Physiological withdrawal state, Evidence of tolerance, such that increased doses of psychoactive substance are required in order to achieve the effects originally produced by lower doses, Increased amount of time necessary to obtain or take the substance or to recover from itseffects, Persisting withsubstance use despite clear evidence of overtly harmfulconsequences.

'

The extensive search in local perspective revealed limited work among caregivers of mentally ill person and that Is even deficient in area of substance usedisorder.Sothisstudyisnotonly expected to expand thelocal data but also thefindings obtained wouldbehelpful formentalhealthprofessionalsto make appropriate interventions accordingly in order **to** improve functionality and qualityoflifeofcaregiversand ultimaterecovery ofthepatient.

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# SUBJECTS AND METHODS

**Participants**

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**Table 1**

Demographic details of care givers

|  |  |  |  |
| --- | --- | --- | --- |
| **DEMOGRAPRrC VARIABLES** | | **COUNT(n)** | **PERCE:\T("lo)** |
| AGE  (42.1±7.3yrs) | 20-30 | *26* | 14.9% |
| 31-40 | 35 | 20.0% |
| 41-50 | 83 | 47.4% |
| 51-60 | 21 | 12.0% |
| 61-70 | 9 | 5.1% |
| 71-80 | I | 0.6% |
| GENDER | MALE | 52 | 29.7% |
| FEMALE | 123 | 70.3% |
| MARITAL STATUS | MARRIED | 121 | 69.1% |
| SINGLE | 43 | 24.6% |
| WIDOW | II | 6.3% |
| EDUCATION | ILLITERATE | 63 | 36.0% |
| PRIMARY | 34 | 19.4% |
| SECONDARY/MATRIC | 36 | 20.6% |
| INTERMEDIATE | 20 | 11.4% |
| GllADUATrON | 15 | 8.6% |
| POSTGRADUATION | 7 | 4.0% |
| OCCUPAllON | EMPLOYED | 105 | 60.0% |
| UNEMPLOYED | 70 | 40.0% |
| SCIOECO, OMJC STATUS | POOR | 80 | 45.7% |
| MIDDLECLASS | 85 | **48.6 {,** |
| UPPERCLASS | 10 | 5.7% |
| RELATIONSHIP WITH PATl:ENT | PARENT | *)*-*'* | 13.14% |
| SIBLING | 69 | 39.43% |
| SPOUSE | 75 | 42.86% |
| CHILDREN | 08 | 4.57% |

175 caregivers of substance users who visitedpsychiatry department of civil hospital Karachi during September 2015 to February 2016 were selected. Only those caregivers were enrolled who gave informed consent, were proficient in communicating Urdu language, were between 20-80 yrs of age, of either male or female gender, who were living with thepatient diagnosed with substance dependence for a minimum of 3 years according to ICD-10 and attended psychiatric facility for treatment. Caregivers who had chronic medical or psychiatric illness in either themselves or their patients wereexcluded.

**Instruments**

TheDemographic data of the participants was collected by principal investigator on semi-structured Performa. In this study "Caregivers are the one in family member who have been looking after the substance users for at least 2 years duration in areas including medical and psychiatric consultations and responsible for giving medications."Depression will be assessed by using PHQ-9 scale (patient health questionnaire-9).2M It is 9 item, Self-reported 4 point likert type questionnaire with cut off score of 10, while anxiety was measured by Generalized Anxiety Disorder (GAD-7). GAD-7 is a self­ report 4 point likert typequestionnaire, comprising of? items,8 isthe cutoffscore abovewhichanxietyisto be considered.13·"

**Procedure**

After taking ethical approval from the Psychiatry department, participants wereapproached andtheirinformed consent was taken. Data were entered and analyzed through SPSS v 16.Mean standard deviation was calculated for the quantitative variables like age, anxiety scores and depression scores. Frequency and percentage calculated from qualitative variables like gender, marital status, education and socioeconomic status. Effect modifiers like age, gender, marital status, education and socioeconomic status will be controlled through Stratification. Post stratification, Chi-square test willbeapplied.

## RESULTS

Among the studied caregivers, majority were females 123 (70.2%) with a mean age of 42.1 ± 7.3 years. Most of the caregivers were married 43(24.57%), illiterate 63(36%), employed 105 (60%) and of middle to low socioeconomic status165 (94.28%) see table 1.

In this study, the frequency of depression and anxiety was found to be 115 (65%) and 81 (46.2%) respectively. 83 out of 115 depressed participants were females while among participants with anxiety 43/81(53.08%) were males.Patients had a mean duration ofillness of 8.50±5.13 years. The caregivers were living with the patient for a mean of 9.42±5.65 years. Most of them were spouses 75 (42.86%) and siblings 69 (39.43%) of the patients.The factor that significantly contributed to anxiety in caregivers (i.e.p<0.05) wasgender.While In case of depression it appeared to be not significant (p=0.4520) see table 2.

**Table 2**

Association of anxiety with demographic factors

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **VARIABLES** | | **ANXIETY** | |  |  |
| YES NO  Coum Count | | Total(N) | p Value |
| AGE | 20-30 | 10 | 16 | 26 | •0.002 |
| 31-40 | II | 24 | 35 |
| 41-50 | 43 | 40 | 83 |
| 51-60 | 8 | 13 | 21 |
| 61-70 | 9 | 0 | *9* |
| 71-80 | 0 | I | I |
| GENDER | MALE | 43 | 9 | 52 | 0.0005 |
| FEMALE | 38 | 85 | 123 |
| MARJTAL STATUS | MARRIED | 75 | 46 | 121 | 0.0003 |
| SINGLE | 6 | 37 | 43 |
| WIDOW | 0 | II | II | \*<0.001 |
| EDUCATION | ILLITERATE | 4 | 59 | 63 |
| PRIMARY | 14 | 20 | 34 |
| SECONDARY/MATRJC | 23 | 13 | 36 |
| INTERMEDJ.ATE | 20 | 0 | 20 |
| GRADUATION | 14 | I | 15 |
| POSTGRADUATION | 6 | I | 7 | 0.0004 |
| OCCUPATION | EMPLOYED | 80 | 25 | 105 |
| UNEMPLOYED | I | 69 | 70 |
| SOCIO- ECO OMIC STATUS | POOR | 28 | 52 | 80 | * 0.006 |
| MIDDLECLASS | 45 | 40 | 85 |
| UPPERCLASS | 8 | 2 | JO |
| RELATIONSHIP  WITH  THE PATfENT | PARENT | 13 | 10 | 23 | * 0.003 |
| SIBLING | 26 | 43 | 69 |
| SPOUSE | 42 | 33 | 75 |
| CHILDREN | 0 | 8 | 8 |

*P- Value is considered sig11/ficcm1if¾ 0.05. \*p values calculated through Fisher Emel test.*



Table 3

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these results reaffirm the findings of the literature and reflect the

Association of depression with demographic factors

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **VARIABU:S** | | **DEPPRESSlON** | | | |
| YES | **NO** | Total **(N** | **p** Value |
| AGE | 20-30 | 22 | 4 | 26 | * <0.001 |
| 31-40 | 33 | 2 | 35 |
| 41-50 | 48 | 35 | 83 |
| 51-60 | 12 | 9 | 21 |
| 61-70 | 0 | 9 | 9 |
| 71-80 | 0 | I | I |
| GENDER | MALE | 32 | 20 | 52 | 0.4520 |
| FEMALE | 83 | 40 | 123 |
| MARJTAL STATUS | MARRIED | 61 | 60 | 121 | \*<0.001 |
| SINGLE | 43 | 0 | 43 |
| WINDOW | II | 0 | ll |
| EDUCATION | ILLITERATE | 63 | 0 | 63 | \*<0.001 |
| PRIMARY | 34 | 0 | 34 |
| SECONDARY/MATR.lC | 18 | 18 | 36 |
| INTERMEDIATE | 0 | 20 | 20 |
| GRADUATION | 0 | 15 | I 5 |
| POSTGRADUATION | 0 | 7 | 7 |
| OCCUPATION | EMPLOYED | 45 | 60 | 105 | 0.0003 |
| UNEMPLOYED | 70 | 0 | 70 |
| SCIO- ECONOMIC STATUS | POOR | 75 | s | 80 | \*<0,001 |
| MIDDLECLASS | 40 | 45 | 85 |
| UPPERCLASS | 0 | 10 | 10 |
| RELATIONSHIP WITii HIE PATIENT | PARENT | & | 15 | 23 | \*<0.001 |
| SIBLING | *56* | 13 | 69 |
| SPOUSE | 43 | 32 | 75 |
| CJ-TTLDREN | 8 | 0 | 8 |

*P- Value is co11sidered . ig11ifica111if< 0.05, \*p vailles calculated through*

*Fisher E.rnCI test.*

# DISCUSSION

Substance use disorders have devastating physical, mental, and socio-economicconsequences not onlyfor patientsbut also for their caregivers. It is a critical public health concern for which the global burden far exceeds the difficulties experienced by many of the 250 million drug users", or the two billion alcohol drinkers worldwide26• Their illness substantially affects the quality of life of their caregivers, including financial security, mental health, social networks, and productivity. The cost approaches 2 percent of the gross domestic product of some index countries". In relation to the sociodemographic variables, amongst the caregivers there was a

greater predominance of females compared with the males. This finding isjustified because the role of caregiver is *ohen* delegated to women, specifically the spouse and/or family member. A study with caregivers of psychiatric patients evidenced 80.0% of women caregivers in its sample." Another study, which investigated the impact of alcohol abuse in the family, found a majority of females caregivers, and among these wives," these characteristics were also found in caregivers of people with chronic diseases"·". Evidently in

our study also,70.2%of the caregivers presentedto us were women,

traditionof caring,relegating the responsibilityfor the careof the sick family member to the woman"·". According to a prior study, In Pakistan, 40% caregivers are at risk of developing depression and anxiety4 while our study reported 65% of caregivers having depression on PHQ-9 Scale and almost 46.2% of caregivers having anxiety on GAD-7 Scale. The women were found to be 72% depressed and 46.9% anxious amongst the studied caregivers. This finding is however partially supports the established fact that depression and anxiety are more common in women due to certain genetic and hormonal predisposition'•. It might be due to unequal gender distribution of the sample, this finding is overestimated and unremarkable to be generalized. Unfortunately, In Pakistan not enough researchhas been conductedon thissubject, it canbe due to denial or guilt among Pakistani caregivers when unable to cope in handling the carefor the patientswithsubstanceuse.

In our study42.86% and 39.43%caregivers werespouses and siblings respectively. This is unlike to Imran et al's study where parents were reported as majority caregivers in Pakistani society"·"'. In our study, most of the caregivers were married and almost 69.1% of the caregivers were reportedly living with a partner and out of which 42.8% were diagnosed with anxiety disorder and 43.8% had depression. It can be assumed, for a caregiver living with a spouse with substance use disorder might the common inducer of anxiety and depression in a Pakistani society. The 36% of caregivers were illiterate and only 20.57% acquired secondary education, lack of education is one of the identifiedfactors behind poor coping beside unemployment. Discontinuation of work because of extra responsibilities, treatment and transportation to hospitalization away from home are major factors incurred by caregivers of substance abusers behind financial burden".Thus it'sveryimportant to assess the well-being of caregivers in order to prevent the burden of mental health issues and their consequences on long term.

This study has addressed a very important yet easily ignored issue in our society that has strong clinical implications because caregiver and patient's wellbeing are directly correlated. The results of this study can be forwarded to propose interventions for caregivers and plan further research in this domain. Among few important limitations of this study are the small sample size to generalize its findings, the disproportionate gender distribution of the subjects that might create bias in estimation of results and the association of patient related factors like age, gender, duration of illness were not studied.

# CONCLUSlON

This study reveals a remarkable rate of depression and anxiety among caregivers living with substance use disorder patients. Strategies like educational seminars and psychotherapy for the caregivers are also necessary to relieve their burden, as the overall health of the caregiver can directly affect the well-being and environment of the patient.

# LIMITATION ANDSUGGESTIONS

For assessment of personality pathology, present study used a self­ report measure.Furtherevidencecanbegainedby addinginformant





rated measures. It has been suggested that collateral information shouldbeincluded whenmakingdiagnosesforpersonality disorders ADP IV is based upon categorical approach which ignores the presence of symptoms that do not fully meet the criteria for a particular disorder. Future studies could take into account the empirical system of taxonomies for assessment of personality pathology.

# FUTURE SUGGESTIONS

On the basis of findings of the current research, large epidemiological studies can be carried out to determine the prevalence, psychosocial determinants and risk and protective factors of depressive symptoms in adolescents from diverse socio­ demographicvariables.

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