

Experience of Domestic Violence and Psychological Morbidity in Spouses of Alcohol-Dependent Males

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ABSTRACT

Background: Prevalence of both domestic violence (DV) and alcohol use is reported to be high in Kerala. The prevalence of DV and psychological morbidity in spouses of alcohol-dependent males has not been studied objectively. **Methods:** This cross-sectional study was undertaken to study the occurrence of DV and psychological morbidity—major depressive disorder (MDD), anxiety disorders, and adjustment disorders—in spouses of alcohol-dependent males attending the de-addiction center of a tertiary care hospital in South India. Sixty consecutive cases, aged 18–55 years, were recruited after getting informed consent. They were assessed using Domestic Violence Questionnaire (DVQ), Mini International Neuropsychiatric Interview Schedule, and a questionnaire to assess adjustment disorder. The association of DV with psychological morbidities was also studied. **Results:** DV was reported by 41 (68.3%, 95% confidence interval [CI] = 55.0–79.7) cases. At least one psychiatric morbidity was observed in 51 (85.0%, 95% CI = 72.9–92.5) cases—MDD in 15 (25.0%, 95% CI = 15.1–38.1), anxiety disorders in 6 (10%, 95% CI = 4.1–21.2), and adjustment disorder in 32 (53.3%, 95% CI = 40.1–66.1) cases each. No statistically significant association was observed between DV and any of the psychiatric disorders. However, DVQ scores showed significant correlation with years of marriage (Pearson's $r = 0.268$, $P < 0.05$) and with stressful life events over the past 1 year (Pearson's $r = 0.424$, $P < 0.05$). **Conclusions:** High rates of DV and psychological morbidity were seen in spouses of alcohol-dependent males.

Key words: Alcohol use disorder, battered women, family violence, intimate partner violence, psychological distress, substance use disorder

INTRODUCTION


Violence against women is a major human rights abuse and an important public health concern. The World Health Organization (WHO) Multi-country Study on

Women's Health and Domestic Violence found the lifetime prevalence of physical and/or sexual partner violence among ever-partnered women in 15 countries

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to range from 15% to 71% and it was found to be 4%–54% in the past year.^[1] A multisite household survey conducted in India found that about 26% of women reported physical violence in the past 12 months.^[2] In this study, among urban nonslum sites, the highest prevalence rates for physical and psychological violence (43.1% and 61.6%, respectively) were reported from Thiruvananthapuram, Kerala.^[2] Various studies have found that partner alcohol abuse was associated with an increased risk of intimate partner violence (IPV) in women.^[3-5] A study conducted in Pune, India, had assessed IPV using a 4-item questionnaire which assessed physical and emotional abuse, but not sexual violence.^[5]

Spousal domestic violence (DV) against women is reported to have far-reaching mental health implications in the victims. Depression, posttraumatic stress disorder (PTSD), anxiety, self-harm, and sleep disorders are well documented to be mental health sequelae of IPV.^[6,7] The Study of Abuse in the Family Environment (India-SAFE) reported that alcohol consumption by husband and exposure to physical violence were significantly associated with an increased risk of poor mental health in women. Psychological morbidity was not evaluated objectively, but assessed using a self-reported questionnaire in this study.^[8] A study done in Palakkad, Kerala, found that DV was reported by almost two-thirds of spouses of alcohol-dependent males attending a tertiary care center, but the questionnaire used to assess DV was not validated in the local language. On clinical evaluation, two-thirds of these spouses had clinical depression and 11% had suicidal thoughts.^[9] In another study, sixty spouses of men with alcohol dependence (AD) were assessed using a structured clinical interview schedule. They found that 65% of the participants had a psychiatric disorder; mood and anxiety disorders were the most common problems reported.^[10] A population-based survey done in northern part of Goa assessed women aged 18–49 years using General Health Questionnaire and reported that excessive partner alcohol use led to a two- to three-fold increase in risk for common mental disorders. On logistic regression, they concluded that partner violence had a mediating effect on the association between partner's excessive alcohol use and women's common mental disorders. Increasing age, poor education, and lack of paid employment were also found to increase the risk for common mental disorders in this population.^[11] A community-based study conducted in a slum in Kolkata found that alcohol addiction of husband, below poverty line (BPL) status, lack of social support, and property in women were significantly associated with DV in ever-married women of reproductive age group.^[12] Of the women attending the adult outpatient

unit of a national institute, 56% reported a history of IPV, out of whom, 99% met the criteria for depression and 12% for PTSD. In this study, alcohol use in spouse, harmful use, and lower education of spouse were found to be associated with IPV.^[13]

Kerala has one of the highest rates of alcohol consumption in India. In a recent survey, high prevalence of alcohol use disorders in males was reported in Kerala.^[14] The India-SAFE study had reported high rates of DV from Thiruvananthapuram.^[2] In a case–control study done in Government Medical College, Thiruvananthapuram, to assess DV as a risk factor for attempted suicide in married women, it was found that irrespective of the case/control status, DV was reported to be high (almost 65%) in spouses of alcohol-dependent males.^[15] None of the studies done in Kerala had assessed DV using a questionnaire validated in the local language. Psychological morbidity was also not evaluated objectively using structured interview schedules in these studies. In this context, this study was undertaken with the primary objective of assessing the occurrence of DV in spouses of alcohol-dependent males attending the de-addiction center of a tertiary care hospital in South Kerala. The secondary objectives were to assess the psychological morbidity in this population—depressive disorders, anxiety disorders, and adjustment disorders—and to study the association of DV and other sociodemographic and clinical variables with these psychiatric disorders.

MATERIALS AND METHODS

A cross-sectional study was undertaken in the de-addiction center of a teaching hospital in South Kerala for 9 months. Approval was obtained from the Human Ethics Committee of the institution. Participants were spouses of alcohol-dependent males attending the de-addiction center and belonged to the age group of 18–55 years. Those with psychotic disorders, as diagnosed with the Diagnostic and Statistical Manual of Mental Disorders-IV Edition-Text Revision (DSM-IV-TR) criteria,^[16] using Mini International Neuropsychiatric Interview Schedule (MINI)-Malayalam Version,^[17,18] and those who refused or were unable to give informed consent were excluded from the study.

Sample size was calculated using the following formula:

$$\text{Sample size, } N = (Z_{1-\alpha/2})^2 \times P [100 - P] \div d^2$$

Where $Z_{1-\alpha/2}$ = the standard normal variate at a Type I error of 5% and is 1.96

P = the expected prevalence of DV in similar studies, taken as 65%^[15]

d = relative precision, taken as 20% of P .

It was calculated to be 52, and rounded off as 60. Consecutive individuals who satisfied the inclusion criteria were recruited for the study after obtaining informed consent. Three cases were excluded from the study as they were psychotic and three cases refused to give consent. Confidentiality and privacy were ensured during the interview. Those who reported DV were sensitized regarding the legal provisions available for help and given necessary guidance to seek such aids. This issue was also addressed in the therapy of alcohol-dependent males. Those who were detected to have psychiatric morbidity were referred for appropriate care.

Using a pretested pro forma, sociodemographic variables of the participants were assessed. DV was defined as any act of physical, psychological, or sexual abuse by a husband toward his spouse over the past 12 months; measured by a cutoff score of 5 or more using the Domestic Violence Questionnaire (DVQ). This is a 20-item questionnaire which has been validated in the local language. It has 12 items to assess psychological violence (including social and economic restriction, insulting in public, neglecting, expressing suspicions regarding fidelity, and being unfaithful toward spouse); six items to assess physical violence (threatening to harm physically, slapping, beating, twisting arm or pulling hair, kicking or dragging, and choking or inflicting burns); and two items to assess sexual violence (ignoring by not having sexual intercourse and having forcible sexual intercourse). Scoring is done from 0 to 4 based on the frequency of exposure to the act over the past 12 months (0 – never, 1 – once/twice, 2 – three to five times, 3 – six to ten times, and 4 – 11 times or more). At a cutoff score of 5, sensitivity was 89.5% and specificity was 87.2%. Cronbach's alpha was 0.92.^[19] Depressive and anxiety disorders were diagnosed as per the DSM-IV-TR criteria,^[16] using MINI Malayalam Version.^[17,18] Adjustment disorder was diagnosed as per the DSM-IV TR criteria, using a questionnaire validated in the local language for another study.^[20]

Other variables such as the number of years after marriage, duration of onset of AD in husband, duration of treatment for AD, period of abstinence, family history of psychiatric illness in spouses, stressful life events over the past 1 year, social support, and religious beliefs were also assessed. Stressful life events were assessed using Presumptive Stressful Life Events Scale (PSLES) which has been validated for the Indian population. Each life event is given a score. The total score is taken as a measure of the stressful life events that the person is exposed to over the past 12 months. Those with scores above the median cutoff were taken

to have greater stressful life events. This questionnaire had been translated into the local language and used for other studies.^[21] Perceived social support and religious beliefs were assessed using questions designed to assess the same, which had been used in a previous study.^[15,22] Four questions in the local language were used to assess perceived social support. These items inquire about having neighbors/friends to seek help from, having relatives to support, getting support from organizations/agencies, and being a member of organizations. Each item is scored from 0 (no) to 1 (yes). The median cutoff score was taken to dichotomize the variable as having good/poor social support.^[22] Religious beliefs were assessed using three questions prepared in the local language. The questions were the following: “Do you believe in God?” “Do you engage in prayers regularly?” and “Do you go to temple/mosque/church regularly?” The first question was scored as 0 for no and 2 for yes. The other two questions were scored from 0 to 2 based on the frequency. The median score was taken as the cutoff and the variable was dichotomized as good religious beliefs for scores above the cutoff and poor for those below.^[22]

Statistical analysis

The data were entered in MS Excel Version 7.0 (Microsoft Corp., USA), cleaned, and edited. Analysis was done using R version 2.13.1.^[23] Mean and standard deviation (SD) are provided for continuous variables and proportion and 95% confidence interval (CI) for categorical variables. Association was assessed using odds ratio (OR) and significance was tested using Chi-square test or Fisher's exact test as appropriate. Pearson's product moment correlation coefficient or point bi-serial correlation coefficient was used to assess the correlation between different variables depending on whether the variables were continuous or dichotomous, respectively.

RESULTS

The mean age of the study sample was 38.7 years (SD = 8.85, range = 22–55). Majority of the participants belonged to the age group of 36–45 years (22 of 60, 36.7%), were Hindus (45 of 60, 75.0%), had studied up to high school (26 of 60, 43.3%), and were homemakers (35 of 60, 58.3%) [Table 1]. One half of the sample belonged to BPL and the other half to above poverty line group. Almost two-thirds of them (37 of 60, 61.7%) had monthly income below the mean value, Rs. 5613.00 (SD = 5173.67), of the sample. The average number of years after marriage was 17.4 years (SD = 9.36, range = 5–42), while the average duration of alcohol use in husbands was 15.1 years (SD = 10.31, range = 3–50). The mean duration of treatment for AD was 32.4 days (SD = 57.81,

range = 0–365) and the mean period of abstinence was 40.8 days (SD = 58.68, range = 0–240). Almost two-thirds of the AD cases (38 of 60, 63.3%) were being treated for a period of <30 days and more than half (31 of 60, 51.7%) were abstinent for <30 days. Family history of psychiatric disorder was reported by 16 (26.7%) spouses. The mean score of PSLES was 381.3 (SD = 200.21; median = 352.5, interquartile range [IQR] = 237.5–487.5). Fifty percent of the sample had scores above the median cutoff. The average score for social support was 2.35 (SD = 0.94;

median = 2.0, IQR = 2.0–3.00) and for religious belief it was 5.2 (SD = 0.70; median = 5.0, IQR = 5.0–6.0). Below the median cutoff score, poor social support was reported by 10 (16.7%) and poor religious beliefs were observed in 8 (13.3%) cases [Table 1].

Table 1: Distribution of sociodemographic and clinical variables

Variable	Frequency, n (%)
Age groups (years)	
≤25	5 (8.3)
26-35	19 (31.7)
36-45	22 (36.7)
46-55	14 (23.3)
Religion	
Hindu	45 (75.0)
Christian	11 (18.3)
Muslim	4 (6.7)
Educational status	
Illiterate	1 (1.7)
Primary school	14 (23.3)
High school	26 (43.3)
+2/PDC/VHSC	16 (26.7)
Professional	3 (5.0)
Occupational status	
Homemakers	35 (58.3)
Unskilled laborers	12 (20.0)
Skilled laborers	4 (6.7)
Salaried job	3 (5.0)
Professional	4 (6.7)
Others	2 (3.3)
Monthly income (Rs.)	
≤5613	37 (61.7)
>5613	23 (38.3)
Stressful life events	
High	30 (50.0)
Low	30 (50.0)
Social support	
Poor	10 (16.7)
Good	50 (83.3)
Religious beliefs	
Poor	8 (13.3)
Good	52 (86.7)
Family history of psychiatric illness	
Positive	16 (26.7)
Negative	44 (73.3)
Duration of treatment in husbands (days)	
≤30	38 (63.3)
>30	22 (36.7)
Period of abstinence in husbands (days)	
≤30	31 (51.7)
>30	29 (48.3)

PDC – Predegree course; VHSC – Vocational Higher Secondary Course

The mean score of DVQ of the sample was 17.8 (SD = 18.85; median = 10.0, IQR = 4.00–28.75; range = 0–77). DV was reported by 41 cases (68.3% [95% CI = 55.0–79.7]). Major depressive disorder (MDD) was observed in 15 participants—current in 5 (8.3%), past in 4 (6.7%), and recurrent in 6 (10.0%) participants each. Anxiety disorders were reported by six cases, of which one (1.7%) was panic disorder with agoraphobia, two (3.3%) were agoraphobia without panic disorder, and three (5.0%) were generalized anxiety disorder. Adjustment disorder was seen in 32 cases. Overall, any one of these psychiatric morbidities was reported by 51 cases [Table 2].

The association of DV as a risk factor for psychological morbidity in spouses of AD males was assessed. The OR of DV for MDD was 2.21 (95% CI = 0.54–8.99) and for any psychiatric disorders, it was 1.09 (95% CI = 0.24–4.94), but neither of these were statistically significant ($P > 0.05$). For adjustment disorder (OR = 0.76, 95% CI = 0.25–2.29) and anxiety disorders (OR = 0.92, 95% CI = 0.15–5.51) also, the association was not statistically significant ($P > 0.05$). None of the other sociodemographic or clinical variables had significant association with DV or psychiatric morbidities in spouses of alcohol-dependent males. Correlation of sociodemographic and clinical variables with DV and psychiatric morbidity was assessed. Years of marriage was found to have a significant positive correlation with DVQ scores (Pearson's $r = 0.268$, $P = 0.038$). PSLES scores also showed a significant positive correlation with DVQ scores (Pearson's $r = 0.424$, $P = 0.001$). None of the other variables showed significant correlation with DVQ scores or psychiatric morbidity.

DISCUSSION

This study assessed the occurrence of DV and psychological morbidity in spouses of alcohol-dependent males, belonging to reproductive age group, attending the de-addiction center of a tertiary care center in South Kerala. It was found that more than two-thirds of the sample (68.3%) had experienced DV over the past 1 year. The India-SAFE study had reported such high rates of DV from Thiruvananthapuram.^[2] A hospital-based study done in Palakkad, Kerala, had reported similar rates of DV in spouses of alcohol-dependent males.^[9] A community-based study done in Karnataka, in spouses of alcoholics, had found higher rates of 74%–92%.

Table 2: Distribution of study variables in the sample

Variable	Frequency (n) (n=60)	Percentage (95% CI)
Domestic violence	41	68.3 (55.0-79.7)
MDDs	15	25.0 (15.1-38.1)
Anxiety disorders	6	10.0 (4.1-21.2)
Adjustment disorders	32	53.3 (40.1-66.1)
Any psychiatric disorders	51	85.0 (72.9-92.5)

CI – Confidence interval; MDDs – Major depressive disorders

The instrument used for assessing DV was only face validated for this study.^[24] In our study, the questionnaire used to assess DV had been validated for the local population and had an optimum cutoff score with good sensitivity and specificity. That could be the reason for the difference in the rates reported.

At least one of the psychiatric disorders studied—MDD, anxiety disorders, or adjustment disorders—was observed in 85.0% of the participants. MDD—current, past, and recurrent—was seen in 25%, anxiety disorders in 10%, and adjustment disorders in 53.3% of the sample. The study done in Palakkad reported that two-thirds of the spouses of alcohol-dependent males had clinical depression. They had assessed clinical depression using a questionnaire,^[9] while in our study, the diagnosis of MDD was made using MINI. Hence, a modest rate of the diagnoses is observed. In 2013, Kishor *et al.* assessed sixty spouses of alcohol-dependent males and reported that 65% of them had a psychiatric disorder. Mood disorders and anxiety disorders were more common; MDD was reported by 43.3% and panic disorder in 15%. They had also used a structured clinical interview schedule for making the diagnosis.^[10]

In our study, no significant association was observed between DV and MDD, anxiety disorders, adjustment disorders, or any of these psychiatric morbidities. The OR for MDD was 2.21 and any psychiatric disorder was 1.09, but they were not statistically significant. This suggests that probably our study did not have adequate power to assess the association of DV with these variables. For anxiety disorder, the OR was 0.92 and for adjustment disorder, it was 0.76; both of which were not significant. The India-SAFE study had found AD and DV to be significant risk factors for poor mental health in women.^[8] In a population-based survey, Nayak *et al.* found that violence-related attitudes of the partner increased the odds of mental illness in women by almost three times, on multivariate analysis.^[11] In the Kolkata-based study, it was found that poor social support was associated with an increased risk of DV in ever-married women.^[12] None of the other variables showed significant association with either DV or psychological morbidity in spouses of AD males in our study. DVQ scores had shown positive correlation with

years of marriage and PSLES scores. This suggests that DV increased with increasing age in reproductive age group. With increasing age, women might either perceive DV to be more or have less inhibition in disclosing it. Stressful life events experienced by women over the past 1 year also increased with increasing DV over the same time period. Increased stress in women who experience DV might be the mediating factor that increases the psychological morbidity in this population. High rates of DV and psychological morbidity were observed in spouses of alcohol-dependent males, belonging to reproductive age group. Occurrence of psychological morbidity in those with exposure to DV might be mediated through increase in perceived stress in this population.

Strengths and limitations of the study

This study was done in a homogeneous group of spouses of alcohol-dependent males, of reproductive age group. The study variable, DV, was assessed using a validated questionnaire. Psychiatric diagnoses were also assessed by an interview schedule translated into the local language. Hence, valid measures of the study variables could be obtained. This being a hospital-based study, the findings cannot be generalized to the community. As there is no control group, comparison of the rates of DV and psychological morbidity with spouses of nonalcohol-dependent males could not be done.

CONCLUSIONS

More than two-thirds of the spouses of alcohol-dependent males, belonging to the reproductive age group, had experienced DV over the past 1 year. High rates of psychiatric morbidity were reported by these women. Adjustment disorder was reported by more than one half of them; a quarter of them had MDD and 10% had anxiety disorders, while 85.0% had any one of these psychiatric morbidities. Moreover, stressful life events over the past year were found to increase with increasing scores of DV, suggesting the former's role in mediating the effect of DV on the mental health of women. This study highlights the need for assessing the exposure to DV and the mental health of spouses of alcohol-dependent males. Addressing the mental health needs of this population could also improve the treatment outcomes of males with AD. Further community-based and case-control studies would help to delineate the causative role of DV in psychiatric morbidity in spouses of alcohol-dependent males.

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Conflicts of interest

There are no conflicts of interest.

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