

Stressful and Traumatic Experiences among Women with Alcohol Use Disorders in India

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ABSTRACT

Aim: The aim of the present study was to examine lifetime stressful and traumatic experiences among women with alcohol use disorders (AUDs). **Methods:** The sample comprised of two groups: a clinical group of 35 women with a diagnosis of AUD and a comparison group of 60 women drawn from the community. After screening out, the participants were administered Life Stressor Checklist-Revised. **Results:** On an average, clinical group was exposed to 7.57 (standard deviation [SD] = 4.14) stressful events and comparison group was exposed to 4.03 (SD = 2.80) stressful events across the lifespan ($t = 4.976$; $P < 0.001$). Clinical group reported a high number of childhood abuse and interpersonal traumas across lifespan than comparison group. The relationship between adverse life experiences and alcohol abuse among women was bidirectional. **Conclusion:** Understanding the nature and experiences of trauma in this group has implications for planning gender-sensitive treatment programs for women seeking help for AUDs in India

Key words: Alcohol use disorders, India, stressful experiences, trauma, women

INTRODUCTION

A number of epidemiological studies from the West have indicated that alcohol use disorders (AUDs) are gradually increasing among women.^[1,2] The national surveys from India have also indicated similar trends. Around 2%–3% of the women in India are at risk for AUDs.^[3,4] Although the prevalence rate of AUDs among women is lower than men, the greater risk for various adverse bio-psycho-social consequences among women with AUDs^[5-7] makes it an important public health issue


that deserves significant attention at assessment and intervention level.

Despite being at high risk for adverse consequences, women continue to be the “second sex” in the field of addiction research. The empirical studies that have attempted to understand risk factors among women with AUDs are a few. The existing literature, although limited, indicates that women with history of adverse childhood experiences are at an increasing risk for

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developing AUDs later in life.^[8,9] Traumatic experiences later in life such as intimate partner violence (IPV)^[10,11] and relational problems such as marital disruptions and dissolutions further increases the risk for AUDs among women.^[6,12] Research has indicated higher probability of earlier initiation of alcohol, greater severity of addiction, and more psychopathology among women with history of exposure to traumatic life events than those without any history of trauma exposure.^[13-15]

Most of these studies have been carried out in the western developed countries. In South-East Asian Region countries, including India, the little research that has been carried out in the last one and half decades is largely restricted to epidemiological studies. The data on psychosocial profiles of women with AUDs are limited. It cannot be assumed that the research findings from North America and Europe will be similar among women with AUDs in India as there are significant differences in social and economic conditions in these regions. Further, in these studies, estimates of trauma have varied dramatically. Some of these differences were due to the varying definitions of abuse and the substance abusing populations being described (for example, problematic use versus abuse and dependence, alcohol versus other drugs). However, these differences also stemmed from another methodological issue, that is, the expertise of the interviewer, the timing and manner in which the abuse-related questions were asked, which may have determined what was reported. In many of the community-based studies, data were collected by research associates with only a minimal level of training using telephonic interviews or other methods that may not be conducive to explore sensitive topics such as childhood abuse. Thus, future research needs to adopt more appropriate and sensitive data collection procedure. Moreover, most of the existing studies have either examined trauma in childhood or in adulthood. Only a few studies have examined traumatic experience across life span and drinking among women. The present study attempted to address some of these lacunae by examining the stressful and traumatic experiences across lifespan among women seeking treatment for AUDs in a tertiary care center.

SUBJECTS AND METHODS

Sample

The present study was part of a larger cross-sectional study titled “Life Adversities, Relational Experiences, and Self-Esteem among Women with Alcohol Use Disorders (AUDs),” carried out in Department of Clinical Psychology, National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru, Karnataka, India. The study was carried out over a period of 3 years, i.e., November 2012 to October 2015.

The sample for the present study comprised two groups: (i) Clinical group and (ii) Comparison group. Clinical group comprised of 35 women with a diagnosis of AUD, drawn from the inpatient and outpatient settings of Centre for Addiction Medicine and Adult Mental Health Units in NIMHANS, over a period of 1 year 5 months, i.e., March 2014 to August 2015. The sample size for the clinical group was selected considering that (1) it focuses on a specific gender, age group, and only alcohol dependence, (2) it included only those with working knowledge of English/Kannada, (3) the existent literature from India reveals that this is a hidden population, who is less likely to seek and access treatment,^[16] (4) when in treatment this group is likely to have poor follow-up rates,^[17,18] and (5) it is a time-limited study. Based on these factors, a sample size of 35 was considered as appropriate for a time-limited current study.

Patients with current diagnosis of any other substance use disorders except nicotine dependence syndrome and psychotic disorders, as assessed using Mini-International Neuropsychiatric Interview (MINI), were excluded from the present study. Patients with sub-normal intelligence, severe organic and severe neurological disorders, as per the clinical record, were also excluded from the study. The final sample comprised of 35 patients in the clinical group, who were in the age range of 22–50 years, with a mean age of 38.51 years (standard deviation [SD] = 7.42). The majority of them were educated and one-fourths were illiterate. The majority of the patients were married or living with a partner and the remaining one-fourths were separated/widowed. Most of them belonged to nuclear families of low-income and middle-income urban households. The majority of the patients initiated alcohol use in their young adulthood (mean age = 23.94 years, SD = 7.44) and by their late twenties engaged in the regular consumption of alcohol (mean age = 29.66 years, SD = 7.6). Patients on an average had 8.88 years (SD = 6.18) of alcohol dependence.

Comparison group comprised of sixty women drawn from the community settings using the snowball sampling technique. In the present study, the allocation ratio of Group I: Group II of 1:2 was chosen based on the previous studies which suggest that when the number of cases is small, the ratio of controls to cases can be raised to improve the ability to find important differences.^[19]

For the comparison group, participants with a score of more than 15 on Kessler Psychological Distress Scale (K10) and a score of greater than 11 for alcohol and 4 for any psychoactive substance on Alcohol, Smoking and Substance Involvement

Screening Test (ASSIST) were excluded from the study. Participants with subnormal intelligence, severe organic, and severe neurological disorders, as per the clinical impression, were also excluded from the study. The final sample comprised of participants in the age range of 22–50 years, with a mean age of 37.13 years (SD = 7.88). The majority of them were educated. The majority of the participants were married and living with their partner. Most of them belonged to nuclear families of low-income and middle-income urban households. The two groups were matched on age and socioeconomic status.

Measures

The following tools were used in the present study.

Mini-International Neuropsychiatric Interview (MINI)

MINI^[20] 6.0 is a clinician-administered, structured diagnostic interview and has 16 modules, which can be used to diagnose Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, and International Classification of Diseases 10 (ICD-10)-based psychiatric disorders. For the present study, only three modules of the MINI were used: Alcohol dependence and abuse, substance dependence and abuse, and psychotic disorders.

Kessler Psychological Distress Scale (K10)

K10^[21] is a screening tool for identifying those with psychological distress and in need of further assessment of anxiety and depression. In the current study, a cutoff score of 15 was used to screen out participants in the comparison group for any ICD-10 diagnosis of mental disorders.

Alcohol, Smoking and Substance Involvement Screening Test (ASSIST)

The World Health Organization's (WHO) ASSIST^[22] was used to screen respondents for all levels of problematic or risky substance use. For the current study, as recommended in the manual, a cutoff score of 11 or more for alcohol and 4 or more for other psychoactive substances was used to screen out participants from the comparison group.

Life Stressor Checklist-Revised

Life Stressor Checklist-Revised (LSC-R)^[23] was used to assess respondent's experience of traumatic or stressful events across the life span. The self-report questionnaire contains items that are especially sensitive to women.^[24] The questionnaire includes thirty interpersonal and noninterpersonal stressful life events such as experiencing a serious disaster, separation or divorce, serious financial problems, death of loved ones, witnessing family violence, physical abuse, neglect, and sexual abuse. For each of the positively endorsed event, the respondent was asked to provide the age when the event began, duration of the event, and the perceived

impact of the event. For the present study, lifetime exposure to stressful events score was calculated, which was the sum total of all the positively endorsed stressor. The internal consistency of LSC-R was assessed using Cronbach's alpha coefficient and was found to be sufficient ($\alpha = 0.753$).

Procedure

The ethical clearance for the study was obtained from the Institution Ethics Committee. After obtaining the necessary permission, the study was initiated. To recruit patients, the clinical status of 165 patients was reviewed. Out of whom, 59 patients met the inclusion and exclusion criteria laid down for the study. Those who met the inclusion criteria laid down for the study were approached individually for the written informed consent. Of them, forty patients (67.8%) gave written informed consent to participate in the study. These patients were screened using MINI. Three patients were screened out since they were positive for psychotic disorders on MINI. Two patients dropped out. The remaining 35 patients were administered LSC-R. The assessments were administered individually and privacy and confidentiality were ensured.

Women in the community were approached individually for participation in the study. Those who gave written informed consent for participation in the study were screened using K10 and ASSIST. Two women were not included in the study after initial screening, as they were found to be psychologically distressed. They were informed about the appropriate treatment facilities after taking their consent for the same. A total of sixty participants meeting the criteria for the study were administered LSC-R. All the assessments were administered individually and privacy and confidentiality were ensured.

Analysis of data

The data obtained from assessment tools were tabulated and analyzed using the IBM SPSS Statistics for Windows, Version 22.0 (IBM Corp., Armonk, New York, USA). Descriptive statistics such as mean, SD, frequency, and percentages were calculated. Two-tailed independent sample *t*-test was used to compare scores of clinical and comparison groups.

RESULTS

All the patients met the criteria for alcohol dependence on MINI. On LSC-R, patients' mean lifetime exposure to stressful events score was 7.57 (SD = 4.139). This indicates that they were exposed to, on an average, more than seven stressful events across the lifespan. For participants in comparison group, the mean lifetime exposure to stressful events score was 4.03

(SD = 2.798). This shows that clinical group had significantly higher exposure to stressful life events as compared to comparison group participants ($t = 4.976$; $p < 0.001$). Table 1 depicts the various items of LSC-R and the number of participants in the two groups who had experienced those life adversities.

As indicated in Table 1, among patients in clinical group, the most frequently reported stressful life experiences were those involving interpersonal traumas such as death of loved ones, physical assault, sexual abuse, and separation/divorce. In most cases of physical and sexual assault, the perpetrator was a spouse/partner, indicating significantly high rates of both physical and sexual IPV among women with AUDs. Patients in the clinical group also reported adverse experiences in childhood such as physical abuse, emotional abuse, sexual abuse, and family violence. Among participants in comparison group, deaths of close ones were the most frequently reported stressful event. Compared to clinical group, childhood adverse events were reported by a few participants in comparison group. Non-interpersonal trauma such as not having money for basic needs was reported by one-third of the participants in both the groups.

For item number 29, which required respondents to disclose any other distressing events not already listed in the inventory, 24 patients in clinical group (68.57%), and 27 participants in comparison group (45%) reported they had experienced additional distressing events. These responses are shown in Table 2.

As indicated in Table 2, more than one-third of the patients in clinical group reported distress due to marital conflicts, a much higher number than the comparison group. Non-interpersonal trauma such as work-related stress and financial difficulties were reported by some of the participants in both the groups.

For item number thirty, which required respondents to disclose any traumatic events that happened to another person but were distressing to them, five patients (14.28%) in clinical group reported they had such experiences. Two patients (5.71%) reported being significantly distressed by the sexual abuse of a Family significant others (FSOs) such as daughter or sister. Two others (5.71%) reported distress due to divorce/separation of a family member and one patient (2.85%) reported distress related to injuries suffered in an

Table 1: Frequency of traumatic events experienced by the participants on life stressor checklist-revised

Items	Clinical group (n=35), frequency (%)	Comparison group (n=60), frequency (%)
1. Serious disaster	8 (22.86)	0
2. Seen a serious accident	4 (11.43)	11 (18.33)
3. Had a serious accident	7 (20)	12 (20)
4. Close family member sent to jail	6 (17.14)	3 (5)
5. Them being sent to jail	2 (5.71)	0
6. Foster care or for adoption	0	0
7. Parents' separation or divorce	5 (14.29)	3 (5)
8. Own separation or divorce	11 (31.43)	7 (11.67)
9. Serious money problems	13 (37.14)	20 (33.33)
10. Serious physical or mental illness	14 (40)	6 (10)
11. Emotionally abused or neglected	12 (34.29)	6 (10)
12. Physically neglected	6 (17.14)	5 (8.33)
13. Abortion or miscarriage	14 (40)	18 (30)
14. Separated from child against will	4 (11.43)	2 (3.33)
15. Having child with severe physical or mental handicap	2 (5.71)	1 (1.67)
16. Responsible for taking care of someone with severe handicap	7 (20)	15 (25)
17. Sudden death of close ones	29 (82.86)	32 (53.33)
18. Death of close ones (not sudden/unexpected)	16 (45.71)	26 (43.33)
19. Before age 16, seen family violence	13 (37.14)	10 (16.67)
20. Seen a robbery, mugging, or attack taking place	1 (2.86)	1 (1.67)
21. Been robbed, mugged, or physically attacked by unknown person	1 (2.86)	2 (3.33)
22. Before age 16, physically abused	17 (48.57)	6 (10)
23. After age 16, physically abused	22 (62.86)	11 (18.33)
24. Sexual harassment at work or school	9 (25.71)	4 (6.67)
25. Before age 16, forcibly touched or made to touch someone in a sexual way	4 (11.43)	4 (6.67)
26. After age 16, forcibly touched or made to touch someone in a sexual way	7 (20)	0
27. Before age 16, sex without consent	2 (5.71)	2 (3.33)
28. After age 16, sex without consent	9 (25.71)	0
29. Additional stressors that happened to them	24 (68.57)	27 (45)
30. Additional stressors that happened to someone else	6 (17.14)	0

Table 2: Other types of traumatic events (item 29 of life stressor checklist-revised)

Type of direct trauma exposure	Clinical group (n=35), frequency (%)	Comparison group (n=60), frequency (%)
Family conflict/marital discord not amounting to physical and sexual violence	13 (37.14)	8 (13.3)
Work-related stress	6 (17.14)	2 (3.33)
Financial difficulties	6 (17.14)	11 (18.33)
Moved to another city due to safety concern following riots	2 (5.71)	1 (1.7)
Alcohol use consequences	3 (8.57)	-
FSO alcoholism	2 (5.71)	7 (11.7)
Witnessing traumatic death	1 (2.85)	-
Roles and responsibility in household	1 (4.17)	2 (3.3)
FSO illness	-	1 (1.67)
Childbearing difficulties	-	1 (1.67)

FSO – Family significant other

accident by family members. Participants in comparison group reported no such experiences.

Further, as per the inventory, the participants were asked to indicate three events that had the greatest emotional impact on them, from the list of all the events they had experienced. For clinical group, these are shown in Figure 1.

As shown in Figure 1, interpersonal traumas such as death of loved ones, physical assault, sexual assault, emotional abuse, and marital and family conflicts (additional stressors) were reported by 75% of the patients as having the greatest impact on them. One-fourth of the patients reported non-interpersonal traumas as among the three events that had the greatest impact on them. These included financial problem, physical or mental illness, and taking care of a seriously ill person.

Comparison group participants also indicated three events that had the greatest emotional impact on them. The most frequently reported events included interpersonal stressors such as marital discord (31.43%) and alcoholism among spouse (31.43%). Some of them also reported noninterpersonal stressors such as financial difficulties (17.14%) and their physical illness (14.29%).

For clinical group, the patients’ age at the time of onset of positively endorsed life stressors and its duration on LSC-R were compared against their age of onset of alcohol use. Figure 2 depicts the number of patients for whom these adverse events either preceded alcohol use or were experienced consequentially to it. It also indicates the events that preceded alcohol use but exacerbated following alcohol dependence.

As shown in Figure 2, patients experienced several life stressors before the onset of alcohol use. Among these, the most frequently reported stressors included adverse childhood experiences such as parental divorce/separation, family violence, childhood emotional

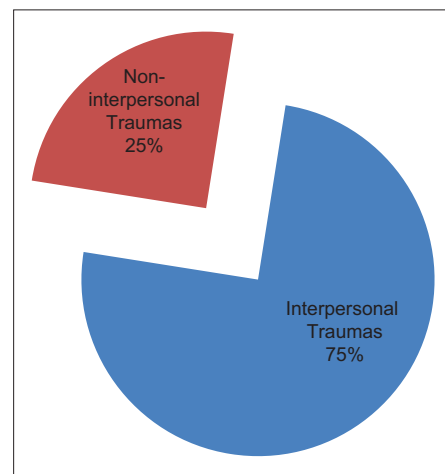


Figure 1: Events that had the greatest impact on patients

abuse, physical abuse, and sexual abuse. Some of them also experienced non-interpersonal traumas such as serious disaster, accidents, and miscarriages before the onset of AUDs. Consequent to alcohol use, majority of the patients experienced events such as separation or divorce, serious physical or mental illness, death of loved ones, physical assault, and marital discord. Physical assault after the age of 16 years, family discord and marital discord were reported by many patients as events that preceded their alcohol use and worsened during the course of their continued drinking.

DISCUSSION

Our findings indicated that women with AUDs had experienced several adverse events throughout their lifespan. In their childhood, nearly half of them had been victims of physical abuse, one-third had experienced emotional abuse, and one-tenth had experienced childhood sexual abuse. Some of the earlier studies from the west had similarly indicated that women with AUDs were more likely to have a history of childhood abuse as compared to the general population. The childhood abuse was associated with greater

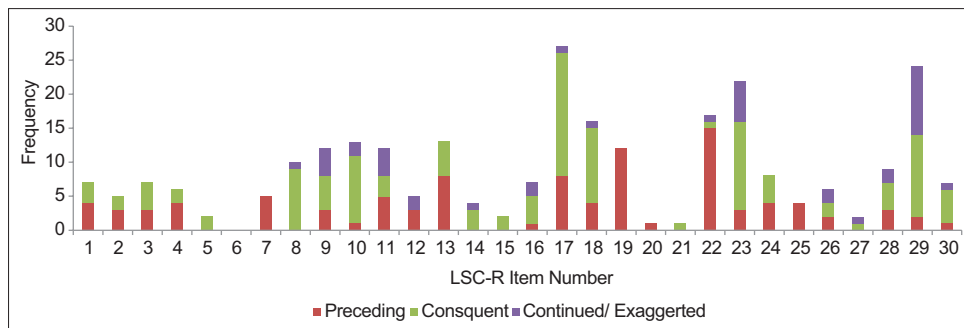


Figure 2: Profile of age at experiencing adverse life experiences and age of alcohol use

1. Serious disaster
2. Seen a serious accident
3. Had a serious accident
4. Close family member sent to jail
5. Them being sent to jail
6. Foster care or for adoption
7. Parents' separation or divorce
8. Own separation or divorce
9. Serious money problems
10. Serious physical or mental illness
11. Emotionally abused or neglected
12. Physically neglected
13. Abortion or miscarriage
14. Separated from child against will
15. Having child with severe handicap
16. Responsible for taking care of someone with severe handicap
17. Sudden/unexpected death of close ones
18. Death of close ones (not sudden/unexpected)
19. Before age 16, seen family violence
20. Seen a robbery, mugging, or attack taking place
21. Been robbed, mugged, or physically attacked by unknown person
22. Before age 16, physically abused/attacked
23. After age 16, physically abused/attacked
24. Sexual harassment at work or school
25. Before age 16, forcibly touched or made to touch someone in a sexual way
26. After age 16, forcibly touched or made to touch someone in a sexual way
27. Before age 16, sex without consent
28. After age 16, sex without consent
29. Additional stressors that happened to them (such as marital discord)
30. Stressors that happened to someone else

addiction severity, greater psychopathology, and greater psychosocial adversities among women in the existing studies.^[8,9,15] This indicates that women with AUDs and history of childhood abuse are a vulnerable subgroup that requires significant attention at prevention and intervention level. Early identification and intervention would help improve their mental health and substance use status, leading to less severe adverse consequences.

In addition to childhood abuse, patients also experienced a number of adverse life events in their adulthood. Women with AUDs reported high rates of marital discord, physical, and sexual IPV. In addition to IPV, they experienced other stressful events such as death of

loved ones, financial difficulties, poverty, and difficult living circumstances, which further added to their distress. This suggests that women with AUDs are at risk for multiple cumulative adversities. It is highly likely that in the face of multiple and cumulative adversities, women used drinking as a refuge from the overwhelming emotional stress and pain.^[7,25] This mechanism of drinking heavily to manage affective states associated with traumatic experiences is referred to as “self-medication.”^[26] The findings of the present study provide preliminary support for the self-medication phenomenon.

Most of the existing studies have largely assessed physical IPV.^[10,11] Sexual IPV among women with AUDs has been given very less attention in the field. In the present study, findings indicated that a considerable percentage of women with AUDs had been subjected to sexual IPV. Further, sexual harassment at work was reported by one-fourth of the patients in the current study. These findings suggest that women with AUDs are at greater risk for gender-based violence. The WHO reports^[27] have indicated that sexual violence is related to various adverse effects on women’s physical and mental health. Thus, this variable deserves significant attention at both assessment and intervention levels in the field of addiction.

Further, secondary trauma, that is significant distress associated with traumatic events that were not directly experienced by them but happened to a significant other such as sexual abuse of a family member and divorce/separation of a family member, were reported by some of the patients in the present study. Studies that have explored the development of secondary trauma stress reactions among women, its effect on their coping and its relation to alcohol abuse are nonexistent. This needs to be examined more systematically in future studies.

Our findings revealed a bidirectional relationship between adverse life experiences and alcohol abuse among women. Patients experienced many adverse life experiences before initiating alcohol and majority of

them continued to experience hardship and adversities after the onset of alcohol problems. In majority of the cases, exacerbation of IPV (physical and sexual), marital discord and dissolution during the course of their alcohol abuse again indicates women with AUDs are at a greater risk for adverse outcomes because of their gender. The existing social taboo against alcohol use among women in India and many other countries across the world contributes to higher rates of marital dissolution and IPV among women with AUDs.^[28,29] These findings suggest that women with AUDs are caught in a vicious circle of interpersonal conflicts, violence, loss, and alcohol use, where one maintains the other.

Our study has certain limitations. The present study was carried out with a small sample. All the patients in the clinical group were drawn from a single tertiary care center in an urban location. All the participants in the comparison group were from the single urban city of India. A study with a larger sample, drawn from multiple primary, secondary, and tertiary care centers, utilizing advanced statistical techniques, would be vital for replicating the findings of the current study and identify other risk and protective factors in this population. The present study was cross-sectional in nature. A longitudinal study would help to get a better understanding of temporal relationships between trauma and alcohol abuse.

Despite these limitations, the present study is one of the few hospital-based studies in India that has systematically examined psychosocial factors among women seeking treatment for AUDs. The study findings have important clinical implications. In treatment of women with AUDs in India, assessing for childhood and adulthood traumatic experiences is essential. The formulation needs to move beyond “psychopathology-in-the-patient” model to take into account various sociocontextual factors that have significant bearing on initiation and maintenance of alcohol abuse among women. Many of these patients would benefit from trauma-focused interventions that addresses issues related to recovering from past trauma, abstinence from alcohol, emotional regulation, coping, empowerment, and safe and clean living.

CONCLUSIONS

The present study is among the few that sheds light on the psychosocial factors associated with alcohol use among women who sought treatment for AUDs in India. Women with AUDs are at a greater risk for exposure to traumatic events across the lifespan. The bidirectional relationship between traumatic events and alcohol abuse in this population indicate that

trauma-focused assessments and interventions will be useful for this group.

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Conflicts of interest

There are no conflicts of interest.

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