

Prevalence of Deliberate Self-Harm in Alcohol Dependence Syndrome Patients

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Abstract- Deliberate self-harm (DSH) is common in people with Alcohol use disorders. Individuals who engage in deliberate self-harm (DSH) report using problematic coping mechanisms one of which is alcohol consumption. An observational, cross-sectional, clinical study was carried out to study the prevalence and methods of deliberate self-harm in patients with alcohol dependence syndrome.

Participants included 30 cases admitted in psychiatry ward and deaddiction ward. Tools used were Deliberate Self-Harm Inventory (DSHI), Mini Mental State examination (MMSE) and additional questionnaires for assessment of alcohol use pattern and socio-demographic data. Prevalence of deliberate self-harm in patients with alcohol dependence syndrome was found to be 30%. The commonest methods of deliberate self-harm in patients with alcohol dependence syndrome were severely scratching (33.3%) followed by carving pictures / designs in to the skin (22.2%). Majority of the patients with ADS had their age of onset of DSH in the age group of 26-35 years (44.4%), one past attempt (44.4%), duration of DSH lasting for more than one year (66.7%), last attempt 1-6 months back (33.3%) and need for hospitalisation for 11.1%.

Index Terms- Deliberate self-harm, Alcohol dependence syndrome.

I. INTRODUCTION

Deliberate self-harm (DSH) is common in people with Alcohol use disorders. Individuals who engage in deliberate self-harm (DSH) report using problematic coping mechanisms. One potential problematic coping mechanism is alcohol consumption. It is well established that alcohol consumption is a major risk factor for deliberate self-harm. Research on alcohol involvement and deliberate self-harm is conflicting.¹ In a study of a sample of 150 DSH patients, compared with other DSH patients, those with an alcohol diagnosis were older and more often male, living alone, unemployed, sick, disabled, or with a past history of DSH. They also had higher scores on measures of anger, aggression, and impulsivity. Comorbid psychiatric disorder was present in 37 (92.5%) patients, in which majority (75%) had depressive disorders. Fourteen (35.0%) patients were receiving treatment from the psychiatric services prior to DSH, and 33 (82.5%) were subsequently offered treatment. Of the patients who were followed up, 37.9% remained in contact with

psychiatric services, 55.2% showed poor compliance with treatment and 44.8% reported a further episode of DSH. Deliberate self-harm (DSH) patients with alcohol dependence present a considerable challenge for clinical services.² There are only a very few published studies from India on this subject. The aims of our study were (a). To study the prevalence of deliberate self-harm in patients with alcohol dependence syndrome and (b) To study the methods of deliberate self-harm in patients with alcohol dependence syndrome.

II. METHODOLOGY

This is an observational, cross sectional, clinical study. Participants were recruited by purposive sampling based on the inclusion and exclusion criteria. Cases for this study included 30 participants, aged 18 years-65 years, who met the ICD 10 DCR diagnostic criteria for alcohol dependence syndrome, willing to participate in the study and given written informed consent. Cases were recruited from patients admitted in psychiatry and deaddiction wards under the department of psychiatry in a tertiary care general hospital located in Mangalore, Karnataka, India.

Patients with comorbid organic mental disorders, schizophrenia spectrum disorders, bipolar affective disorder, those in delirium or those having severe cognitive impairment and those who were unable to give written consent were excluded from the study. Informed written consent was taken from the participants & confidentiality was assured. Participants were interviewed by the authors and DSH was assessed using the Deliberate Self-Harm Inventory (DSHI) and cognitive impairment using Mini Mental State examination (MMSE).

Socio-demographic data was assessed using the Modified Kuppaswamy Socioeconomic Status Scale. Other relevant clinical history and pattern of alcohol use was assessed using an additional semi structured questionnaire.

Statistical analysis was carried out using SPSS software. This study was ethically approved by the institutional ethics committee.

III. RESULTS

Majority of the cases hailed from rural areas (53.3%) and nuclear families (80%) with occupation of an unskilled labourer

(33.3%) . Most of the participants belonged to the lower middle (33.3%) and middle socio economic categories (26.7%). Majority of the cases were in the age bracket of 31-40 yrs (40 %). Cases comprised of 66.7 % Hindus, 30 % Christians and 3.3% Muslims. On an average, most of the cases (46.7%) were educated up to high school.

Marital status of the cases varied with 70% being married, 30% being unmarried.

From amongst the sample, 63.3% cases had comorbid nicotine dependence. 70% had comorbid medical comorbidities and 16.7% had psychiatric comorbidities. In the study group, gastritis and alcoholic liver disease were the most common

medical comorbidity and anxiety disorders was the most common psychiatric comorbidity encountered.

Majority of the cases had onset of alcohol dependence syndrome before the age of 25 years (86.7%) , total duration of alcohol dependence for a period of 5-10 years (40%). Majority of the patients scored between 25-30 on MMSE (96.7%) .

30% of the patients had deliberate self- harm.(fig 1) The commonest methods of deliberate self-harm were severely scratching (33.3%) , carving pictures / designs into skin (22.2%), burning with lighter or match (11.1%) , carving wounds into skin (11.1%) , cutting (11.1%) and burning with cigarette (11.1%). (fig 2)

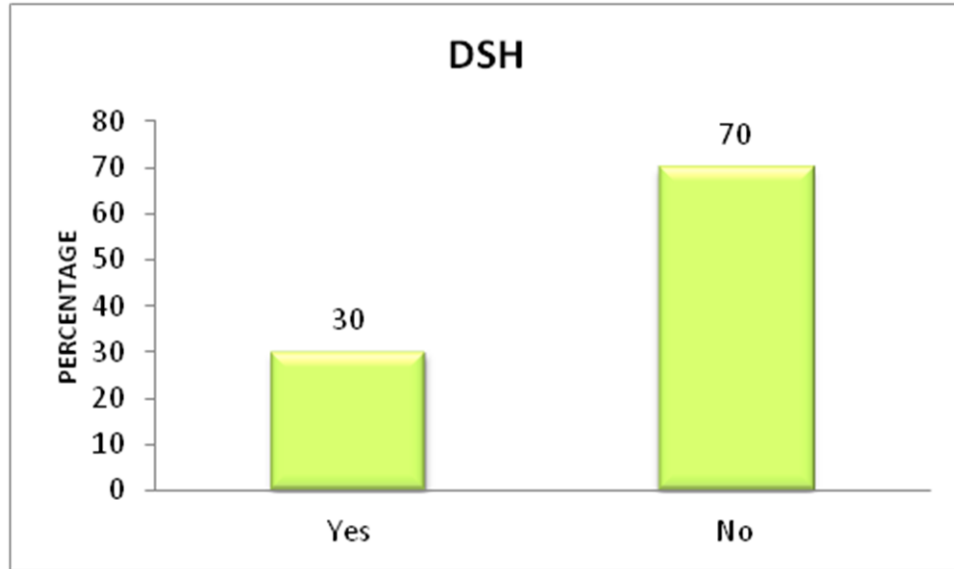


FIGURE 1 : PREVALENCE OF DSH IN ADS PATIENTS

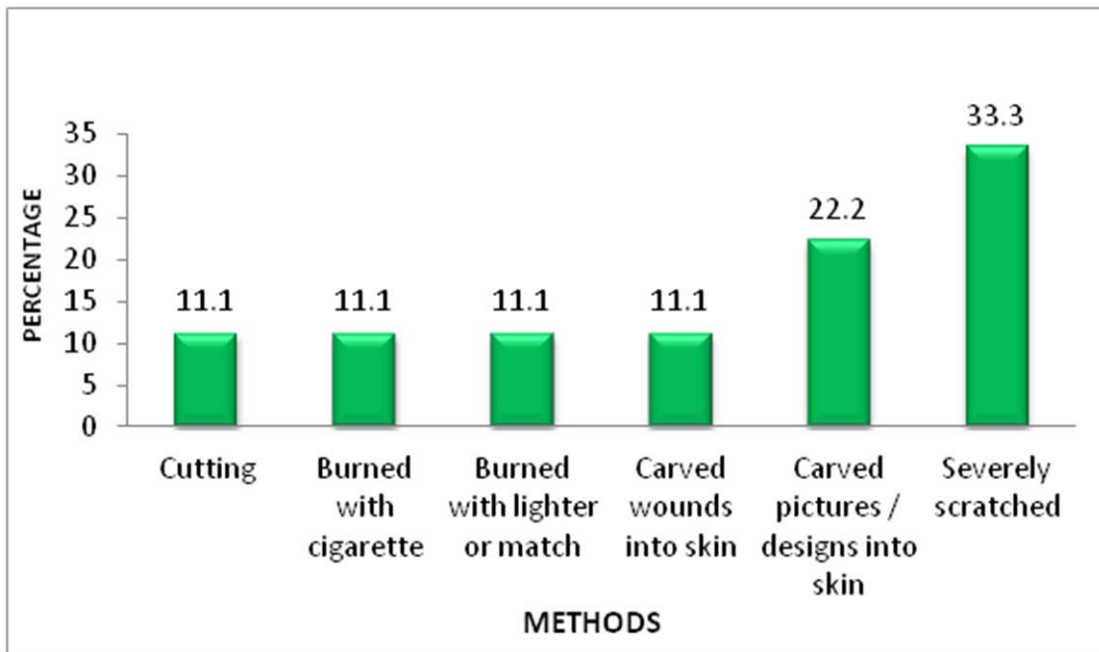


FIGURE 2 : METHODS USED FOR DSH IN ADS PATIENTS

Majority of the patients with ADS had their onset of DSH in the age group of 26-35 years (44.4%) (fig3) , one past attempt (44.4%) (fig 4), duration of DSH behaviour lasting for more than

one year (66.7%) (fig 5), last attempt 1-6 months back (33.3%) (fig 6) and need for hospitalisation for 11.1% (fig 7).

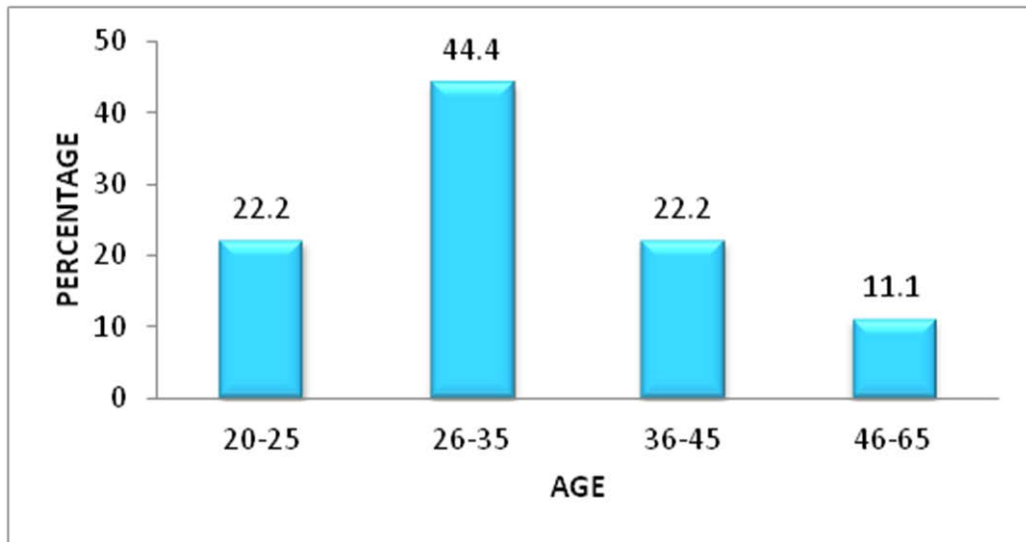


FIGURE 3 : AGE OF ONSET OF DSH

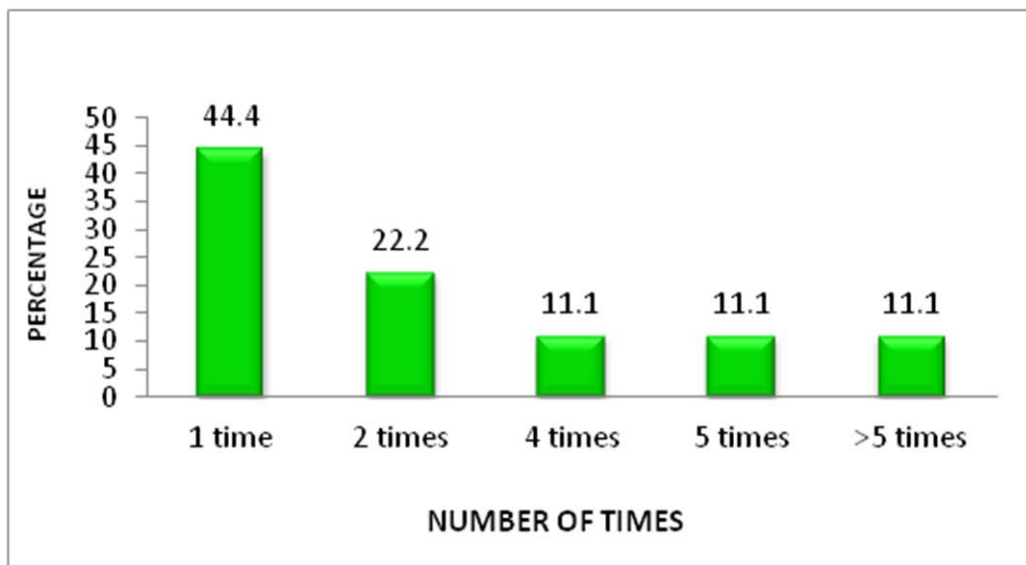


FIGURE 4 : NO :OF PAST ATTEMPTS OF DSH

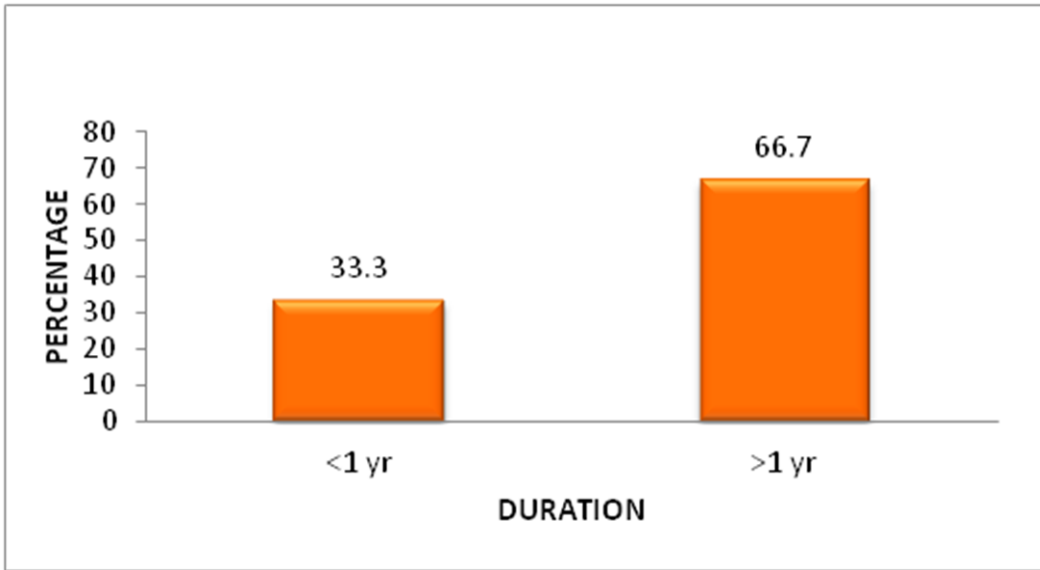


FIGURE 5 : DURATION OF DSH

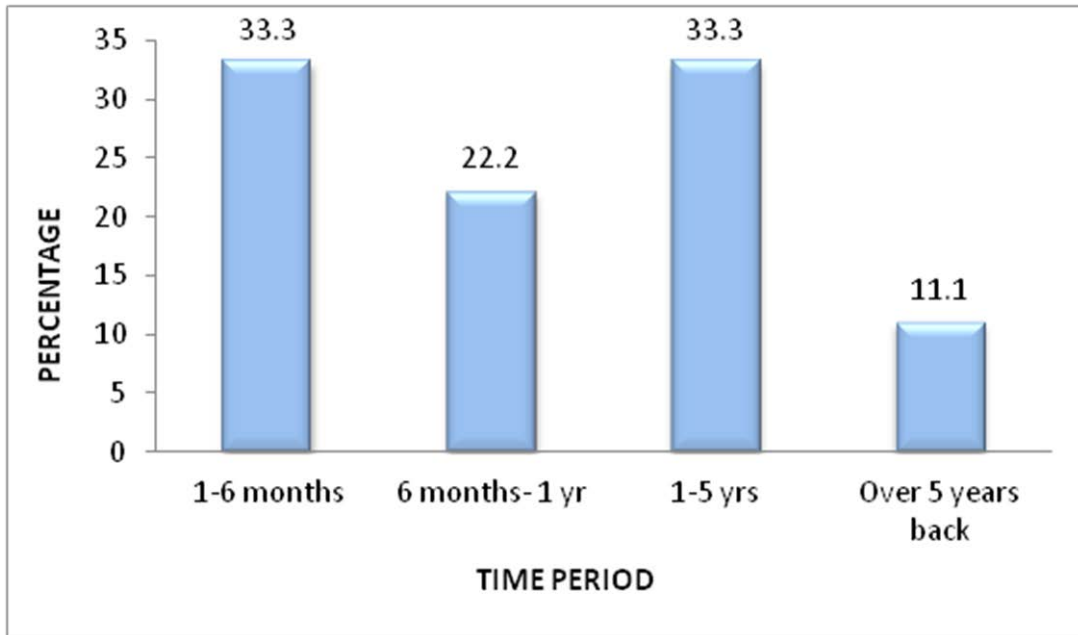


FIGURE 6 : DURATION OF PAST ATTEMPTS

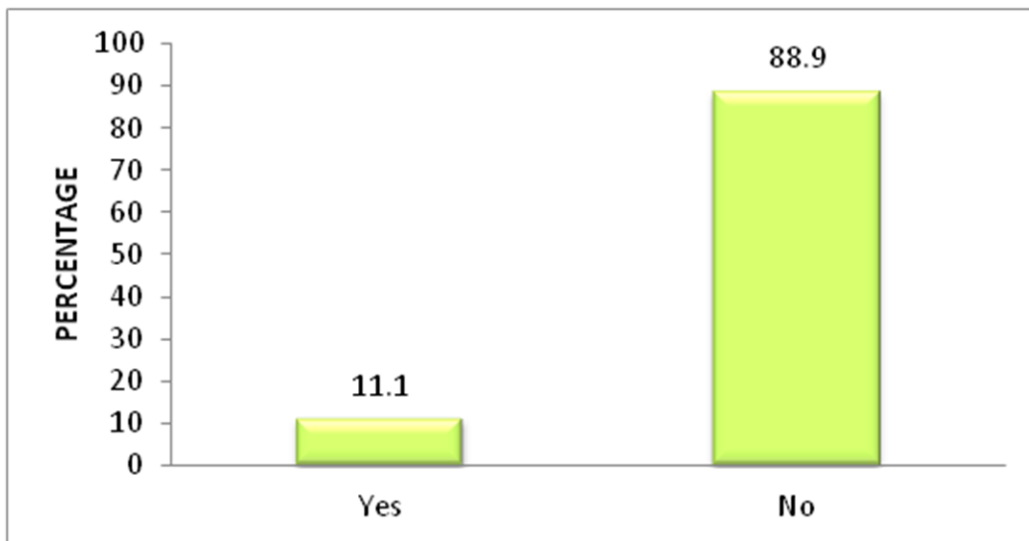


FIGURE 7 : NEED FOR HOSPITALISATION

IV. DISCUSSION

Deliberate self-harm (DSH) is the intentional destruction of healthy body tissue without conscious suicidal intent.³ It includes behaviours such as cutting, burning, scratching, carving and head banging. DSH may include a range of self harming behaviours which may range between those with no immediate physical tissue damage (i.e. self-starvation or alcohol abuse) to those that include suicide-related behaviours (i.e. self poisoning). Genital self mutilation which is a rare and a severe form of self-injurious behaviour can also be seen.⁴

There are a number of theories explaining DSH which includes affect regulation, depersonalization and behavioural / environmental but there remains a lack of consensus on the aetiology of DSH. There are strong evidences for a self-punishment function, and modest evidence for anti-dissociation, interpersonal-influence, anti-suicide, sensation-seeking, and interpersonal boundaries functions.⁵

The prevalence rates of DSH ranges between 4% to 20% in adult inpatients and up to 40% in adolescent inpatients. In non-clinical populations, the estimates range between 12% and 38% in college / university students. The highest risk age group for DSH is 18 to 34 years with a female to male ratio estimated at 8:1 for adolescents and at 1.6:1 for the 20-50 age group.⁶ The prevalence rates of the current investigation (30%) are consistent with the study, however, the study sample consisted of only male patients.

There has been a significant increase in excessive drinking and consumption of alcohol around the time of DSH by females than males. These changes may relate to increased rates in the affordability and availability of alcohol and to social changes in drinking patterns. They have implications for services for DSH patients and may have an impact on future patterns of suicidal behaviour.⁷ Characteristics of suicide victims with positive blood alcohol concentration are suggestive of Deliberate Self-Harm Syndrome (low lethality methods, substance misuse). These being at high risk of repeated suicide attempts, previous self-harm involving alcohol may represent a warning sign and access

to medication should be limited to prevent recidivism.⁸ There is a strong association between alcohol consumption and suicide/poisoning/deliberate self-harm.⁹

Alcohol dependent patients were more likely than other attempters to be male, have histories of personality disorder and criminal offences and to make repeat attempts, and the drug misusers were more likely to be living alone and unemployed. These are characteristics associated with high risk of suicide.¹⁰ Alcohol-related deaths were associated with unemployed/sick/disabled status, alcohol use during self-harm, referral to drug/alcohol services and lack of psychosocial assessment following self-harm was observed.¹¹ In a prospective cohort study, high alcohol use and psychological distress were significant risk factors for repeat DSH in both males and females.¹²

This study attempted to assess prevalence rates of DSH in ADS. Few studies are available for the same. However, this study has the limitations of a small sample size and the results may not be generalizable to the general population as the population of the present study is a selected one attending a private teaching medical charitable institution in Mangalore. Hence the samples are not representative of the general population. Some of the limitations are due to natural constraints of an investigation which is a study work undertaken in a stipulated period of time. Some others could be attributed to the innate research problems in the area of assessment of DSH in ADS. The subjects are assessed at the time of admission. The assessment is not blind due to constraints of the study. Therefore, rater bias is possible. Comorbid personality disorders were not excluded. This study is a cross-sectional one, and throws light upon the association between DSH and ADS. However, it does not establish a clear causality between the same. A longitudinal study with a larger sample group, with both male and female patients, taking into account the family members report along with the patients report, may perhaps yield more accurate results. Further research need to compare the prevalence rates between ADS and ADS with comorbid anxiety disorders.

V. CONCLUSION

This study highlights the need for assessment of DSH in ADS patients.

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