

# Nature and Course of Clinician- and Self-Rated Depressive Features in Persons with Alcohol Use Disorders: A Preliminary Prospective Study among Men Seeking Treatment

**GOPALAKRISHNAN, U.<sup>1</sup>, SARKAR, S.<sup>1,2</sup>, BALHARA, Y. P. S.<sup>1,2</sup>, LAL, R.<sup>1,2</sup>**

**1** | All India Institute of Medical Sciences, Department of Psychiatry, New Delhi, India

**2** | All India Institute of Medical Sciences, National Drug Dependence Treatment Centre, New Delhi, India

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**INTRODUCTION:** The trajectory and nature of depression in patients with alcohol use disorder as they enter treatment needs to be understood better. This study assessed the nature and course of depressive features among male patients with alcohol use disorder. **METHODS:** Adult male patients with alcohol use disorders seeking treatment at an addiction treatment facility were recruited. They were assessed for depressive features using the Hamilton Rating Scale for Depression (HRSD), a clinician-rated instrument, and the Inventory of Depressive Symptoms – Self Report (IDS-SR), a self-rated instrument. The Severity of Alcohol Dependence Questionnaire (SADQ) was used to ascertain the severity of their alcohol dependence. The study participants were followed up and reassessed at two weeks and four weeks after recruitment, and depressive features were assessed using HRSD and IDS-SR. **RESULTS:** Of the 43 participants recruited for the study, 33 could be assessed at two weeks and four

weeks. The mean age of the sample was 35.7 years. The mean HDRS and IDS-SR scores at the baseline were 5.8, and 9.3 respectively, which came down to 2.5 and 4.4 respectively at four weeks. The decrease in the scores was significant. The most common depressive features at the baseline were related to the HRSD items covering work and interests, depressed mood, and feelings of guilt. The most common IDS-SR items related to feeling irritable, feeling sad, and the view of oneself. The HDRS and IDS-SR scores were highly correlated at the baseline and two and four weeks ( $Rho = 0.879, 0.937, 0.820$  respectively; all  $p < .01$ ). The reduction of depressive symptoms at four weeks was found to be higher among those who were abstinent from alcohol. **CONCLUSIONS:** There was a reduction of depressive features over the first four weeks of treatment among the patients with alcohol dependence. Clinicians should consider waiting for this period before starting any additional treatment for depression among patients with alcohol dependence.

**Keywords** | Alcohol – Depression – Longitudinal – Trajectory

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**Corresponding author** | Yatan Pal Singh Balhara, All India Institute of Medical Sciences, National Drug Dependence Treatment Centre and Department of Psychiatry, New Delhi, India

[ypsbalhara@gmail.com](mailto:ypsbalhara@gmail.com)

## 1 INTRODUCTION

Depressive features are commonly observed among patients with alcohol use disorders. A meta-analysis performed by Lai et al. reported that the pooled odds ratio for major depression and alcohol abuse was 1.532 (95% confidence interval 1.20–1.95; range 0.90–6.70 across studies) (Lai et al., 2015). Depressive features in alcohol use disorders are associated with a poorer quality of life and higher relapse rates (Hasin et al., 2002; Rudolf & Priebe, 2002). Depression also leads to an increased risk of suicide attempts and suicidal deaths in patients with alcohol use disorders (Schneider, 2009).

Previous studies that have looked at the course of the severity of depressive features among patients with alcohol use disorders have used clinician-rated measures of depression. Brown and Schuckit (1998) used the Hamilton Rating Scale for Depression (HRSD) and found clinically significant depressive symptoms in about 42% of the male alcohol-dependent individuals with no pre-existing major psychiatric disorder at one week, which was reduced to 12%, 11%, and 6% at weeks 2, 3, and 4, respectively (Brown & Schuckit, 1988). Another study found that the mean HRSD scores decreased from 40 to 15 over the period of detoxification (Liappas et al., 2002). Gallagher et al. (2018) found that the mean Beck Depression Inventory scores were reduced from 19.76 at the baseline to 7.53 at 28 days among patients with alcohol dependence enrolled in a residential treatment programme. Taken together, the studies suggested that significant depressive features were present in a considerable proportion of the patients with alcohol use disorders at the time of their enrolment into treatment. Also, the severity of the depressive features, as measured by clinician-rated instruments, decreased significantly over the initial few weeks of treatment for alcohol use disorders.

Previous studies that used both clinician-rated and self-report measures to assess the severity of depressive symptoms reported that clinicians' ratings and self-reports of the severity of depressive symptoms may not be in agreement (Rush et al., 2006), though some evidence also exists of them correlating well with each other. A meta-analysis found that the clinician-rated and self-report measures of improvement following psychotherapy for depression were not equivalent (Cuijpers et al., 2010). While the trajectory of depressive symptoms has been studied in patients with alcohol use disorders, these studies mainly used clinician-rated measures to assess the severity of depression (Brown et al., 1995; Brown & Schuckit, 1988; Liappas et al., 2002). Using both clinician-rated and self-rated depression assessment instruments should present a more comprehensive picture of the changes in the severity of depressive features in this population. Additionally, the nature of depressive features needs to be studied to assess the trajectory of change in different types of depressive features (affective, somatic, biological function, cognitive, etc.). Hence, the current study aimed to bridge this gap in the existing knowledge by assessing the nature and course of clinician-rated and self-rated depressive features in persons with alcohol use disorders.

## 2 METHODS

### 2.1 Setting and participants

This longitudinal observational study was carried out in the National Drug Dependence Treatment Center (NDDTC), All India Institute of Medical Sciences (AIIMS), New Delhi. This is a specialist addiction treatment centre affiliated with a tertiary hospital in North India.

Adult male patients diagnosed with alcohol use disorders as per the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5), who were actively consuming alcohol at the time of presentation with the last consumption within previous 48 hours were included in the study. Those who were unable or unwilling to give written informed consent, had another type of substance use disorder (except tobacco use disorder), and those who had any severe medical or psychiatric illnesses that precluded participation in the study were excluded.

### 2.2 Procedure

Patients with alcohol use disorders seeking treatment at NDDTC were screened on the basis of the predefined inclusion and exclusion criteria for participation in the study. Those found suitable were assessed at the baseline during their first visit. Data on their socio-demographic and clinical profile was collected on the specified socio-demographic sheet and clinical profile sheet, followed by administration of the Hamilton Rating Scale for Depression (HRSD) and Inventory of Depressive Symptomatology – Self Report (IDS-SR) to assess depressive features, and the Severity of Alcohol Dependence Questionnaire (SADQ) to assess alcohol dependence. Alcohol withdrawal status was assessed using Clinical Institute Withdrawal Assessment for Alcohol revised (CIWA-Ar). Subsequently, the participants were assessed for depressive features with HRSD and IDS-SR at two time points. The first was two weeks after the baseline assessment and the second was four weeks after the baseline assessment. Different studies have used different time frames for the assessment of depressive symptoms, ranging from weekly assessment to as much as four weeks (West & Gocka, 1986; Brown & Schuckit, 1988; Schuckit et al., 1990). We chose two and four weeks for pragmatic reasons. Clinical details regarding medication and abstinence status were also recorded at both time points. Participants who did not present to the outpatient department for follow-up in the specified time period were contacted by telephone.

### 2.3 Instruments

Hamilton Rating Scale for Depression (HRSD): This is a 17-item questionnaire that is used to monitor the severity of major depression, with a focus on somatic symptoms (Hamilton, 1960). It covers a seven-day period prior to assessment. Severity is graded as 0–7 (normal), 8–16 (mild depression), 17–23 (moderate depression), and  $\geq 24$  (severe depression) (Zimmerman et al., 2013). The Hamilton Depression Scale has been shown to have high sensitivity, high specificity, and good correlation

**Table 1** | Socio-demographic and clinical characteristics of the subjects (n = 33)

Variable	Mean (SD) / frequency (%)
Age in years	35.7 (9.7)
Male gender	33 (100)
Married	27 (81.8)
Nuclear family	16 (48.5)
Education up to 10th grade	18 (54.5)
Currently employed	28 (84.8)
Urban residence	29 (87.9)
Age of onset of alcohol use in years	18.8 (4.6)
Duration of alcohol use in years	17.3 (9.1)
SADQ score	19.4 (12.4)
CIWA-AR score	2.1 (4.1)
History of complicated withdrawal	2 (6.1)
Morning drinking	23 (69.7)
Past history of treatment for alcohol use disorders	9 (27.3)
Tobacco use disorder	17 (51.5)

**Note.** CIWA-AR Clinical Institute Withdrawal Assessment for Alcohol Revised; SADQ Severity of Alcohol Dependence Questionnaire

with the DSM-3 criteria for depression in a population of alcohol-dependent patients with  $r = 0.76$  and Cohen's kappa = 0.84 (Willenbring, 1986).

Inventory of Depressive Symptomatology – Self Report (IDS-SR): It consists of 30 items designed to assess the severity of depressive symptoms. It covers a seven-day period prior to assessment. It is patient-rated and a Hindi version is available. The IDS-SR had good internal reliability and correlated significantly with the Hamilton Rating Scale for Depression with  $r = 0.88$  and Cronbach's alpha = 0.93 (Rush et al., 1986).

CIWA-Ar – The revised Clinical Institute Withdrawal Assessment for Alcohol Scale: This instrument is used for the assessment of alcohol withdrawal and as an aid to management. There are ten items included, which are the common symptoms and signs of alcohol withdrawal such as nausea and vomiting, tremor, paroxysmal sweats, anxiety, agitation, tactile disturbances, auditory disturbances, visual disturbance, headaches, orientation, and clouded sensorium (Sullivan et al., 1989). The total score range is from 0–67, with scores being categorised as absent or minimal withdrawal (0–9), mild to moderate withdrawal (10–19), and severe withdrawal (a score greater than 20).

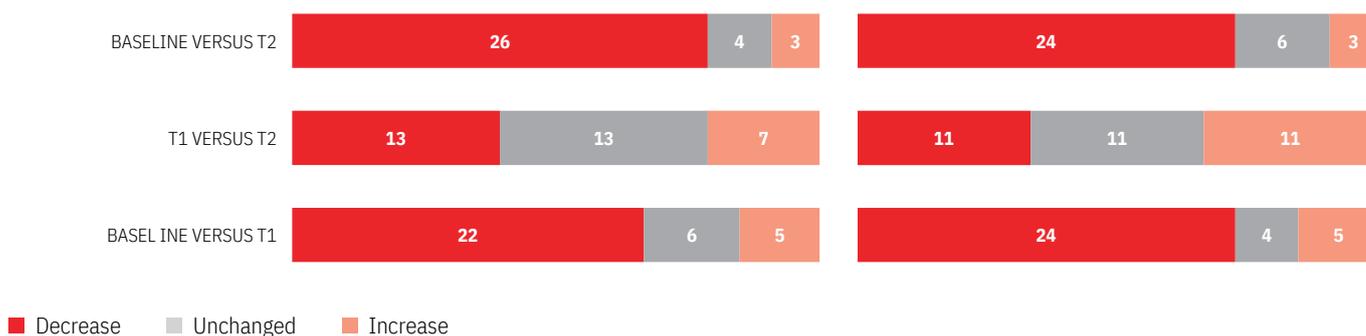
Severity of Alcohol Dependence Questionnaire (SADQ): This self-reported questionnaire is used to measure the severity of alcohol dependence. It has five subscales – physical withdrawal, affective withdrawal, withdrawal relief drinking, alcohol consumption, and rapidity of reinstatement – and four items for each subscale. The SADQ has a high degree of test-retest reliability and good construct validity. SADQ scores correlate well with indices of withdrawal severity (Stockwell et al.,

1983). There are 20 items in total and each item is rated on a 0-3 Likert score. The total score ranges from zero to 60. A score of 0–3 indicates no dependence, 4–19 suggests mild dependence, 20–30 suggests moderate dependence, 31–44 suggests severe dependence, and 45 or more is indicative of very severe dependence.

The study was conducted in accordance with the Helsinki Declaration, The study was approved by the institutional ethics committee (IECPG-556/26.09.2019, RT-19/24.10.2019).

## 2.4 Statistical Analysis

The data was compiled in an MS Excel spreadsheet. Statistical analysis was performed with licensed SPSS software, version 26.0. The data was checked for normality using the Kolmogorov-Smirnov test. Descriptive statistics were used to analyse the socio-demographic and clinical variables. Measures of central tendency were used for the quantitative variables and frequencies with percentages were calculated for the qualitative variables. Socio-demographic and clinical variables between samples with completed follow-up and samples lost to follow-up were compared with the use of appropriate parametric and non-parametric tests. Friedman's test and the Wilcoxon signed rank test were used to analyse change in the HRSD and IDS-SR scores with time. The correlates of the baseline HRSD scores were analysed using correlation coefficients using non-parametric tests. The association between the depression rating scale scores and drinking outcomes was assessed using the Mann-Whitney U test. A  $p$ -value of less than 0.05 was considered significant for all the tests.

**Figure 1 (A and B) |** Change in HDRS and IDS-SR scores over different time periods**Table 2 |** Prevalence of suicidal ideation and suicidal behaviours among participants

Item	T0	T1	T2
Work and interests	0.91 (1.28)	0.58 (1.15)	0.42 (0.83)
Depressed mood	0.82 (0.92)	0.67 (0.96)	0.58 (0.83)
Feelings of guilt	0.73 (0.80)	0.36 (0.70)	0.33 (0.69)
Insomnia – initial	0.48 (0.71)	0.06 (0.24)	0.06 (0.24)
Weight loss	0.45 (0.75)	0.00 (0.00)	0.03 (0.17)
Somatic symptoms – Gastrointestinal	0.42 (0.61)	0.18 (0.39)	0.27 (0.52)
Anxiety – psychic	0.39 (0.75)	0.45 (0.83)	0.27 (0.52)
Genital symptoms	0.33 (0.69)	0.27 (0.67)	0.21 (0.60)
Suicide	0.33 (0.65)	0.15 (0.51)	0.09 (0.29)
Insomnia – delayed	0.24 (0.61)	0.03 (0.17)	0.00 (0.00)
Insomnia – middle	0.21 (0.55)	0.03 (0.17)	0.00 (0.00)
Somatic symptoms – General	0.21 (0.49)	0.24 (0.50)	0.18 (0.39)
Anxiety – somatic	0.12 (0.33)	0.09 (0.29)	0.03 (0.17)
Retardation	0.03 (0.17)	0.00 (0.00)	0.00 (0.00)
Agitation	0.03 (0.17)	0.03 (0.17)	0.00 (0.00)
Insight	0.03 (0.17)	0.00 (0.00)	0.00 (0.00)
Hypochondriasis	0.00 (0.00)	0.03 (0.17)	0.00 (0.00)

**Note.** Presented as mean (SD), HDRS Hamilton Depression Rating Scale

### 3 RESULTS

Forty-three participants were included at the baseline (T0), out of whom thirty-three (~77%) completed the follow-up at two weeks (T1) and four weeks (T2) (ten participants could not be followed up, and were considered to have dropped out from the study). Those who dropped out from the study did not differ from the retained participants on any of the socio-demographic and clinical variables except for the age of onset of alcohol use, which was significantly lower among those who dropped out (Mann-Whitney  $U = 260$ ,  $p < .01$ ). The socio-demographic and clinical characteristics of the study participants at the baseline (T0) are presented in *Table 1*. Eighteen patients (54.4%) were abstinent at two weeks (T1), while 20 patients (60.6%) were abstinent at four weeks (T2).

Out of 33 participants, 12 (36.4%), seven (21.2%), and three (9.1%) had HRSD scores  $\geq 7$  at T0, T1, and T2, respectively. Five

(15.2%), four (12.1%), and one (3%) participant had IDS-SR scores  $\geq 18$  at T0, T1, and T2, respectively. The median HDRS scores at T0, T1, and T2 were 4 (Interquartile Range [IQR] 2- 7.5), 1 (IQR 0- 4), and 1 (IQR 0- 5), respectively. The median IDS-SR scores at T0, T1, and T2 were 5 (IQR 2- 14), 2 (IQR 2-6), and 2 (IQR 0.5- 7), respectively.

There was a significant decrease in the HDRS scores from T0 to T1 and T2 ( $\chi^2 = 24.400$ ,  $p < .01$ ), and a similar significant decrease in the IDS-SR scores ( $\chi^2 = 22.241$ ,  $p < .01$ ). The change in the HDRS score between T0 and T1 was significant ( $Z = -3.421$ ,  $p < .01$ ), but between T1 and T2 it was not significant. Similarly, the change in the IDS-SR scores between T0 and T1 was significant ( $Z = -3.304$ ,  $p < .01$ ), but between T1 and T2 it was not significant. The HDRS and IDS-SR scores were highly correlated at T0, T1, and T2 (Rho = 0.879, 0.937, and 0.820 respectively; all  $p < .01$ ).

**Table 3** | Nature of depressive symptoms as per IDS-SR at different time points (n = 33)

Item	Baseline	T1	T2
Feeling irritable	0.85 (0.83)	0.70 (0.73)	0.61 (0.79)
Feeling sad	0.82 (0.98)	0.64 (0.96)	0.58 (0.87)
View of myself	0.76 (0.87)	0.30 (0.64)	0.33 (0.69)
General interest	0.73 (0.98)	0.45 (0.87)	0.27 (0.63)
Decreased appetite	0.67 (0.82)	0.18 (0.39)	0.18 (0.39)
Feeling anxious or tense	0.58 (0.87)	0.55 (0.79)	0.39 (0.70)
Decreased weight	0.55 (0.91)	0.00 (0.00)	0.03 (0.17)
Response of mood to good events	0.48 (0.94)	0.33 (0.74)	0.18 (0.47)
Capacity for pleasure or enjoyment	0.48 (0.91)	0.36 (0.85)	0.33 (0.78)
Interpersonal sensitivity	0.42 (0.79)	0.27 (0.52)	0.27 (0.67)
Falling asleep	0.39 (0.88)	0.06 (0.24)	0.03 (0.17)
Waking up too early	0.30 (0.77)	0.03 (0.17)	0.00 (0.00)
Interest in sex	0.30 (0.73)	0.27 (0.76)	0.24 (0.71)
View of my future	0.30 (0.68)	0.15 (0.44)	0.12 (0.33)
The quality of mood	0.24 (0.56)	0.18 (0.53)	0.15 (0.51)
Energy level	0.24 (0.50)	0.24 (0.50)	0.09 (0.29)
Sleep during the night	0.21 (0.65)	0.12 (0.42)	0.03 (0.17)
Concentration/Decision making	0.21 (0.55)	0.15 (0.44)	0.12 (0.33)
Thoughts of death or suicide	0.18 (0.39)	0.03 (0.17)	0.06 (0.24)
Increased appetite	0.12 (0.42)	0.00 (0.00)	0.09 (0.29)
Feeling restless	0.09 (0.38)	0.09 (0.29)	0.00 (0.00)
Feeling slowed down	0.09 (0.29)	0.00 (0.00)	0.03 (0.17)
Increased weight	0.06 (0.24)	0.00 (0.00)	0.03 (0.17)
Aches and pains	0.06 (0.24)	0.06 (0.24)	0.09 (0.29)
Lead paralysis	0.06 (0.24)	0.03 (0.17)	0.00 (0.00)
Mood in relation to time of the day	0.03 (0.17)	0.03 (0.17)	0.00 (0.00)
Constipation/Diarrhoea	0.03 (0.17)	0.03 (0.17)	0.12 (0.33)
Sleeping too much	0.00 (0.00)	0.09 (0.52)	0.00 (0.00)
Other bodily symptoms	0.00 (0.00)	0.06 (0.35)	0.00 (0.00)
Panic/Phobic symptoms	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)

**Note.** Presented as mean (SD) scores, IDS-SR Inventory of Depressive Symptomatology

The changes in the HDRS and IDS-SR scores over time are presented in *Figure 1* (A and B).

The nature of the depressive symptoms as per HDRS and IDS-SR at T0, T1, and T2 is presented in *Tables 2* and *3*, respectively. The most common depressive symptoms at the baseline were related to the HRSD items work and interests (item 7), depressed mood (item 1), and feelings of guilt (item 2). The least common symptoms were hypochondriasis (item 15), insight (item 17), retardation (item 8), and agitation (item 9). All items showed a decreasing trend in the mean scores, with the exception of psychic anxiety (item 10), gastrointestinal and general somatic symptoms (item 12 and 13), and hypochondriasis (Item 15). The most commonly reported symptoms were related to the IDS-SR items feeling irritable (item 6), feeling sad

(item 5), and view of oneself (item 16). At four weeks, the most commonly reported symptoms were related to the items feeling irritable (item 6), feeling sad (item 5), and feeling anxious or tense (Item 7). The least commonly reported symptoms were related to the items panic/phobic symptoms (item 27), other bodily symptoms (item 26), and sleeping too much (item 30). Again, while most symptoms decreased, feeling sad or irritable, quality of mood, capacity for pleasure or enjoyment, and interpersonal sensitivity did not show much of a decline.

Increasing age had a relationship with depressive symptoms ( $\rho = 0.351$ ,  $p < .05$ ), and duration of alcohol use in years ( $\rho = 0.305$ ,  $p < .05$ ), but not with age at the onset of alcohol use ( $\rho = 0.170$ ,  $p = .28$ ) or severity of alcohol dependence ( $\rho = 0.255$ ,  $p = .10$ ). It was found that the IDS-SR scores were

significantly lower among those who were abstinent at T1 ( $n = 18$ , median score = 1) than those who were not abstinent ( $n = 15$ , median score = 6) (Mann-Whitney  $U = 200$ ,  $p < .05$ ). The HDRS scores did not differ significantly between those who were abstinent and non-abstinent at T1. The HRSD scores at T2 were significantly lower among those who were abstinent ( $n = 20$ , median score = 0) than those who were not abstinent ( $n = 13$ , median score = 5) (Mann-Whitney  $U = 2112$ ,  $p < .01$ ). The IDS-SR scores at T2 were also significantly lower among those who were abstinent ( $n = 20$ , median score = 1) than those who were not abstinent ( $n = 13$ , median score = 5) (Mann-Whitney  $U = 190$ ,  $p < .05$ ).

## 4 DISCUSSION

The present study suggests that about a sixth to a third of patients with alcohol use disorders have significant depressive symptoms at the baseline, depending on the type of instruments used and the threshold of diagnosing depression. The scores on depression rating scales generally correlated well with each other. There was a significant reduction of depressive symptoms among the patients based upon either HRSD or IDS-SR scores.

Out of 33 patients who completed the study, 36.4% and 15.2% of the sample, respectively, had HRSD and IDS-SR scores above the cut-off at the baseline. Previous studies that were conducted in in-patient settings found HRSD scores in persons with alcohol use disorders to be higher (Brown et al., 1995; Ginieri-Coccosis et al., 2007; Liappas et al., 2002). Persons with greater severity of depression in these studies are probably more likely to be encountered in the in-patient setting. A previous study that examined depression in an outpatient population, like the current study, found a mean HRSD score of 14.22 (Steer et al., 1983). Another study in the outpatient setting reported a mean Beck Depression Inventory (BDI) score of 9.2. A previous Indian study also reported a relatively lower mean HRSD score of 9.37 (Chaudhury et al., 2006). These low scores observed in the outpatient settings are probably a reflection on the sub-clinical depressive symptoms that were associated with acute and protracted withdrawal (Dodge et al., 2005). Another reason for the low scores on the depression rating scales could be that our study included only male participants. A previous study reported that depressive symptoms were more severe in females with alcohol use disorders (Brady et al., 1993). The majority of the sample were experiencing mild to no withdrawal at the time of assessment. Alcohol withdrawal is known to be associated with a range of physical and psychological symptoms that can affect depression rating scale scores (Becker, 2008).

In this study, the majority of the patients were treatment-naïve at the time of recruitment. It has been shown that treatment-naïve alcohol-dependent patients have a different profile compared to those with a past history of treatment. The data from the COMBINE study showed that the treatment-naïve group reported fewer psychological symptoms and less distress than those with a past treatment history (Locastro et al., 2008).

Those who have a longer treatment history have also been found to have greater substance use and more life problems than treatment-naïve persons, which can also lead to greater depressive features being reported (Neale et al., 2007). These factors are likely to have contributed to the relatively lower scores on the depression rating scales in the current study.

In this study, both the HRSD and IDS-SR scores decreased significantly with time over the four weeks. Similar results were obtained in previous studies (Brown et al., 1995; Gallagher et al., 2018; Liappas et al., 2002). The decrease in scores was significant between the baseline and two weeks, but was not significant between two weeks and four weeks. This is also consistent with previous studies, where the maximum decrease was found to occur within the first two weeks of abstinence (Brown et al., 1995).

The significant decrease between the baseline and two weeks coincides with abstinence from alcohol and relief from withdrawal symptoms for most patients, or at least a reduction in the quantity consumed for some.

The most common depressive symptoms were related to the HRSD items concerning work and interests, depressed mood, and feelings of guilt. A previous study reported that depressive symptoms among persons with alcohol use disorders were similar to those with adjustment disorder, which is in keeping with the observations of the current study (Hesselbrock et al., 1985). These results are also similar to those obtained in a previous study (Brown et al., 1995), where depressive mood dominated the symptom presentation. Previous studies have reported an association between chronic alcohol use and decreased libido (Aswal et al., 2012; Prabhakaran et al., 2018). However, almost no participant in the current study reported decreased sexual desire. As mentioned previously, the scores were low on the anxiety- and somatic symptom-related subscales, possibly reflecting low baseline withdrawal symptoms and adequate treatment with benzodiazepines. Alcohol use disorders are known to be associated with insomnia at rates higher than that of the general population. Often, these symptoms of insomnia can persist even up to six months after the cessation of drinking. Insomnia has also been found to be higher among alcohol-dependent patients with comorbid depression (Zhabenko et al., 2013). In this study, the scores on the insomnia-related items of HRSD and IDS-SR were low. This could be related to adequate medication with benzodiazepines or could be reflective of the low baseline severity of withdrawal symptoms and relatively shorter duration of alcohol dependence in this sample.

The items relating to symptoms of melancholic depression or endogenous depression such as psychomotor retardation, insomnia, weight loss, and leaden paralysis had low scores in the current study. In a previous study by Brown and Schuckit (1988) vegetative symptoms were the second most common contributor to HRSD scores, second to symptoms of dysphoric mood. One possible explanation is that melancholic symptoms may arise as a result of a different pathophysiological process than depression associated with alcohol use, which is part of what is considered to be an independent depressive disorder.

Studies have shown that independent depressive disorder is associated with more vegetative symptoms, past history, and a family history of major depression and the onset of depression before substance dependence (Brown et al., 1995; Langås et al., 2013). It is likely that the majority of the participants in the current study had what is considered to be substance-induced depression as most experienced a reduction in their symptoms with abstinence.

There was a good correlation between the self-rated and clinician-rated depressive features at all the time points in the current study. A meta-analysis found that the clinician-rated and self-report measures of improvement following psychotherapy for depression were not equivalent (Cuijpers et al., 2010). Also, previous studies that used both clinician-rated and self-report measures to assess the severity of depressive symptoms reported that clinicians' ratings and self-reports of the severity of depressive symptoms are not in agreement (Rush et al., 2006). However, there are studies that also suggest that clinician-rated assessments and self-reported depressive symptoms may concur as well (Rush et al., 2003; Tondo et al., 1988), as found in the present study.

A significant reduction in the depressive features was observed at two weeks as compared to the baseline. There was no further reduction in depressive features at four weeks as compared to two weeks. While the subjectively-rated depressive features were significantly lower among those who were abstinent at two weeks and four weeks than those who were not abstinent, the clinician-rated depressive features at two weeks did not depend on the abstinence status. Also, while the clinician-rated mood improved significantly over the course of four weeks, the self-rated mood (feeling sad, irritable, quality of mood, capacity for pleasure or enjoyment) did not show much decline.

This study has some implications for clinicians involved in the care of patients with alcohol use disorders. The study findings revealed that a large proportion of the persons had a significant reduction in the self-rated as well as clinician-rated depressive features within the first two weeks of reduction or cessation of alcohol use. This implies that pharmacological treatment of depression in patients with alcohol use disorders can be withheld in favour of watchful expectancy until patients are reassessed at two weeks after a period of abstinence or reduction in use. However, a further spontaneous decline in self-rated as well as clinician-rated depressive features at four weeks is unlikely. In this study, the subset of patients who were unable to remain abstinent had a higher number of depressive features at follow-up. These depressive features, although very mild in terms of their severity, need further exploration as these might be a manifestation as well as potential contributors to ongoing alcohol use. Also, the clinician-rated depressive features at two weeks were not affected by the abstinence status.

There are some limitations of the study that need to be considered while drawing inferences. The generalisability of these results is limited for several reasons. The sample represents male patients who were able to seek treatment at a dedicated treatment facility during the ongoing COVID-19 pandemic. The study population was predominantly from an urban location in northern India. The sample size was relatively small. We followed up the study participants for a period of only four weeks.

## 5 CONCLUSION

The current study offered valuable insights into the time course, as well as the nature, of the clinician-rated and self-rated depressive features among persons with alcohol use disorders. The self-rated and clinician-rated assessments of depression generally concurred with each other. It can be concluded that the cessation of alcohol use or even reducing alcohol use has a beneficial effect on depressive symptoms. Also, the decision on the initiation of pharmacological intervention for depression can be deferred till the second week among persons with alcohol use disorders who are found to have depressive features at the time of the first assessment.

**Authors' contributions:** UG, YPSB, SS and RL conceptualized the study. UG did the data collection. Analysis was done by UG and SS. The first draft of the manuscript was written by SS, which was further edited by all the authors. All authors approved the final version.

**Declaration of interest:** None

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