



Original Article

# Pathways to care for substance use treatment among tribal patients at a psychiatric hospital: A comparative study

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## ABSTRACT

**Objectives:** According to the national mental health survey, substance use disorders (SUDs) are prevalent in 22.4% of the population above 18 years, whereas the same is 26% among the tribal population. The treatment gap is also high in substance-addictive disorders. Our study aimed to compare the severity of substance use, pathways to psychiatric care, and treatment-seeking behavior among the tribal and non-tribal populations.

**Materials and Methods:** The study was conducted at a tertiary psychiatric teaching institute in India. It was a cross-sectional comparative study. Patients fulfilling the International Classification of Disease 10 diagnostic criteria of mental and behavioral disorders due to substance use, with active dependence, were taken without comorbidity. Forty patients in tribal and non-tribal groups were recruited with consecutive sampling. The samples were assessed with a semi-structured interview schedule, addiction severity index, attitudes toward help-seeking, and pathways-to-care.

**Results:** Excessive substance use median was for 7.00 ( $\pm$  5.00) years in tribal and 6.00 ( $\pm$  4.00) years in non-tribal; in tribal, substance intake was younger than non-tribal ( $P = 0.167$ ), and general health-care system more distance than the non-tribal ( $P < 0.001$ ). Around 65% of the persons with SUD never consulted their general practitioner and primary health-care facilities. Alcohol severity was higher in the tribal population than in the non-tribal population. The cannabis and opioid severity was high in the non-tribal population. Help-seeking behavior was deficient in both groups.

**Conclusion:** Most of the substance abuse tribal and non-tribal populations reach healthcare very late and do not consider it as a health issue initially. The major reason for the delayed pathway is a lack of awareness about mental health care facilities and stigma in both populations. The stigma is high in non-tribal communities compared to the tribal community. There is a need to improve the identification and treatment of alcohol morbidity in primary care.

**Keywords:** Pathways, Substance, Tribal, Indigenous, Addiction

## INTRODUCTION

Substance use disorders (SUDs) are a considerable burden affecting significant sections of society. According to a national mental health survey (2015–2016), SUDs contributed mainly by alcohol and tobacco were more in middle-aged individuals among males in rural areas. SUDs are prevalent in 22.4% of the population above 18 years in all the states in India. The recent national survey on substance use has found a high magnitude of substance use prevalence in the country. The current prevalence of alcohol use was 14.6%, while other substances were found to be prevalent. The prevalence of cannabis (2.8%), opioids (2.1%), and sedatives (1.08%) were found to be high in India.<sup>[1]</sup> According to the 2011 census, India consists of 8.6% of the tribal population in total population; The tribal population

is a marginalized community and lives relatively in isolation with poor socioeconomic and poorer health indices.<sup>[2]</sup>

The treatment gap is higher in SUDs than in other psychiatric disorders. Help-seeking and access to treatment are only 25%; there is an 86% treatment gap in alcohol use disorders. Accessibility to health-care services and attitudes toward professional treatment vary according to different populations.<sup>[3]</sup> Moreover, the prevalence of alcohol and tobacco is higher in rural and tribal populations than in urban areas due to various sociocultural reasons.<sup>[4-6]</sup> The previous studies on pathways to care for SUD do not focus on any ethnic community and are specific to opioid dependence only from India.<sup>[7,8]</sup> Hence, this study aimed to examine the pathway of care, attitude to seek professional help, and treatment delay for substance use among tribal patients and compare those with non-tribal patients at a tertiary psychiatric hospital.

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## MATERIALS AND METHODS

The study was approved by the institute ethics committee. It was a hospital-based, cross-sectional, and comparative study. The hospital is in a state whose population consists of 26.21% of tribes.<sup>[9]</sup> The inclusion criteria were (1) age of more than 18 years, (2) seeking treatment from the outpatient department of addiction psychiatry unit of the hospital on Wednesday, and Saturday except government holidays, (3) diagnosed with mental and behavioral disorder due to use of psychoactive substances as per international classification of disease-10<sup>th</sup> version by the World Health Organization (WHO, 1993) criteria, and (4) providing informed consent. Patients those (1) were diagnosed with psychiatric comorbidity and (2) were not accompanied by any family member were excluded from the study. Belonging to tribes was recorded by self-report during registration at the outpatient department as per the hospital outpatient registration policy. Every first tribal and non-tribal patient fulfilling inclusion criteria was included in the study using a consecutive sampling technique. Informed consent was obtained from all participants. Data were collected between August 2021 and February 2022. The sample consisted of 40 each from tribal and non-tribal treatment-seeking populations. The following tools were administered –

### Measures

1. A semi-structured interview schedule has been used to collect the socio-demographic details of the participants. It consists of basic sociodemographic data. In addition, information has been collected regarding the substance use pattern.
2. Addiction severity index<sup>[10]</sup> (ASI) is used to screen for the screening and assess the severity of substance use. The ASI is a semi-structured interview designed to address seven potential problem areas in substance-abusing patients: Medical status, employment and support, drug use, alcohol use, legal status, family/social status, and psychiatric status.
3. “WHO pathway to care proforma”<sup>[11]</sup> is semi-structured interview schedule, an adapted version of the WHO encounter form of pathways to psychiatric care used to assess the delay in accessing psychiatric care.
4. Attitudes toward seeking professional psychological help scale<sup>[12]</sup> is a 10-item self-report used to assess attitudes toward seeking professional psychological help. Higher scores represent positive attitudes.

### Statistical analysis

Data were analyzed using Statistical Package for Social Sciences (IBM-SPSS) version 25 for Windows. Shapiro–Wilk

test considered for checking normality. The statistical method has been determined based on the test of normality.

## RESULTS

The median age of the tribal patient group was higher 31.00 (14.75) (Mean = 32.60 ± 9.23) years, while that of the non-tribal patients’ group was 26.50 (14.00) (Mean = 28.87 ± 8.29) years ( $P = 0.071$ ). The majority of tribal patient group hailed from rural compared to the non-tribal group ( $P = 0.025$ ). Furthermore, There was a difference in the distance of the nearest general health-care system between tribal and non-tribal populations, tribal group patients had to travel longer to access the general health care system ( $P = 0.051$ ). The distance to a psychiatric health-care system is high in both populations. [Table 1] Compares sociodemographic characteristics between two groups.

Addiction severity for alcohol severity was significantly higher in the tribal patients ( $P = 0.008$ ) and the same for the illicit drugs (cannabinoids, and opioids) was high in the non-tribal patients ( $P = 0.035$ ). Family issues were higher in tribal patients ( $P = 0.013$ ) [Table 2].

In both groups, family members noticed the problem first. In the tribal group, spouses mostly noticed the changes among patients, while the same for non-tribal group parents ( $P = 0.020$ ). In both groups, parents and spouses commonly recognized the need for psychiatric care. In tribal groups, siblings also recognized the same ( $P = 0.028$ ). Referral from the general health-care system is very minimal in both groups. Time passed to identify patient problems since its onset was longer in the tribal patient group ( $P = 0.002$ ), and both groups have minute differences on treatment gap to access the psychiatric care. [Table 3] describes and compares the pathways of care between the two groups.

The reason for treatment delay was comparable between groups. It was found that lack of proper awareness about psychiatric treatment place and person, financial problems, problems in taking the patient to mental health facilities, poorly functional social networks low social support to family were higher among tribal patients [Table 4]. On comparison of attitude toward seeking professional psychological help, both groups have a relatively poor attitude toward seeking psychological help in [Table 5].

## DISCUSSION

The pattern of substance use was different in the two groups. Compared to the previous studies, the tribal were less educated, and most of them were engaged in agricultural activities and came from low socioeconomic conditions.<sup>[5]</sup> In the case of occupation, the findings contradict previous studies.<sup>[5,13]</sup> The prevalence of alcohol use was high in tribal individuals with low occupational and uneducated. The comparable age of

**Table 1:** Comparison of sample characteristics between tribal patients and non-tribal patients groups (n=80).

Sociodemographic characteristics	Groups		$\chi^2$ /Fishers exact test/mann whitney U	P
	Tribal group n=40 (%)	Non-tribal group n=40 (%)		
Age (in years), median (IQR)	31.00 (14.75)	26.50 (14.00)	612.50	0.071
Mean rank	45.19	35.81		
Education (in years), median (IQR)	10.00 (5.50)	12.00 (4.75)	712.50	0.397
Mean rank	38.31	42.69		
Religion			2.581	0.108
Hindu	28 (70.0)	34 (85.0)		
Others	12 (30.0)	6 (15.0)		
Domicile			<b>5.000</b>	<b>0.025*</b>
Rural	25 (62.5)	15 (37.5)		
Urban/semi urban	15 (37.5)	25 (62.5)		
Family			0.054	0.816
Nuclear	25 (62.5)	26 (65.0)		
Joint/extended	15 (37.5)	14 (35.0)		
Occupation			0.626 <sup>f</sup>	0.913
Employed	17 (42.5)	14 (35.0)		
Daily wage	10 (25.0)	11 (27.5)		
Unemployed	10 (25.0)	11 (27.5)		
Others	3 (7.5)	4 (10.0)		
Family monthly income			3.447	0.178
<10000	14 (35.0)	9 (22.5)		
11000–20000	12 (30.0)	20 (50.0)		
>20000	14 (35.0)	11 (27.5)		
Excessive use of substance use (in years), median (IQR) Mean rank	7.00 (5.00) 45.33	6.00 (4.00) 35.48	599.00	0.051
When did you start substance intake (in years), median (IQR) Mean rank	17.00 (4.00) 36.91	18.00 (5.75) 44.09	656.50	0.167
Distance to a general health-care system (in kilometers), Median (IQR) Mean rank	4.00 (3.00) 51.61	2.00 (1.75) 29.39	355.50	0.001***
Distance to a psychiatric health care system (in kilometers), median (IQR) Mean rank	15.0 (90.00) 41.63	19.0 (72.25) 39.38	755.00	0.663

f: Fisher's exact test, IQR: Interquartile range. \*P<0.05, \*\*\*P<0.001

initiation of substance use lower in tribal patients is consistent with earlier studies.<sup>[5,14]</sup> Both groups had moderate problems in employment, but the tribal population reported more severe problems than the non-tribal populations. The alcohol and other illicit drugs opioids and cannabinoids showed a significant difference between the groups. The previous studies also show that the prevalence of alcohol use is high in tribal populations.<sup>[2,15-18]</sup> However, in the non-tribal population, most of them have illicit drugs use in high severity. The severity of family/social problems were higher in tribal populations, and it leads to various negative consequences in families such as domestic violence, family discord, and burden on spouses.<sup>[17,19]</sup>

Very few studies systematically assessed the pathways to care among persons diagnosed with SUDs in India. These studies were conducted with alcohol use disorders<sup>[19]</sup> and opioid use disorders.<sup>[7,21]</sup> Globally, common pathways fall under three

categories, physician, specialist, and traditional healer.<sup>[22]</sup> In the present study, the most common pathway was the delayed pathway, which takes years to seek psychiatric help after recognizing the symptoms of family members. In our study, the mean duration taken to access psychiatric services after identifying the problem was 2 years in the tribal population. The comparison of the duration of the problem identified for the first time between the two groups was significant. This could be because the caregivers do not think substance intake is a problem, and in tribal, they accept it as part of the culture. In others, studies about psychiatric disorders to look at the generic pathway to psychiatric care found a more significant delay between the onset of first symptoms and seeking the first health care with a mean delay of 2.8 years.<sup>[23]</sup>

Noticing the change most commonly by spouses instead of by parents in the tribal group despite early onset of

**Table 2:** Comparison of addiction severity between tribal patients and non-tribal patients group (n=80).

Domain	Response	Groups		Fisher exact test statistics	P
		Tribal group n=40 (%)	Non-tribal group n=40 (%)		
Medical	No problem	36 (90.0)	38 (95.0)	2.165	0.870
	Slight problem	2 (5.0)	00		
	Moderate problem	1 (2.5)	1 (2.5)		
	Severe problem	1 (2.5)	1 (2.5)		
	Extreme problem	00	00		
Employment	No problem	13 (32.5)	21 (52.5)	5.659	0.126
	Slight problem	6 (15.0)	2 (5.0)		
	Moderate problem	15 (37.5)	15 (37.5)		
	Severe problem	6 (15.0)	2 (5.0)		
	Extreme problem	00	00		
Alcohol	No problem	4 (10.0)	17 (42.5)	11.189	0.008**
	Slight problem	3 (7.0)	2 (5.0)		
	Moderate problem	7 (17.5)	5 (12.5)		
	Severe problem	26 (65.0)	16 (40.0)		
	Extreme problem	00	00		
Drug (cannabis, and opioids)	No problem	25 (62.5)	13 (32.5)	7.786	0.035*
	Slight problem	2 (5.0)	3 (7.5)		
	Moderate problem	2 (5.0)	2 (5.0)		
	Severe problem	11 (27.5)	22 (55.0)		
	Extreme problem	00	00		
Legal	No problem	40 (100)	40 (100)		
	Slight problem	00	00		
	Moderate problem	00	00		
	Severe problem	00	00		
	Extreme problem	00	00		
Family	No problem	1 (2.5)	5 (12.5)	10.380	0.013*
	Slight problem	8 (20.0)	18 (45.0)		
	Moderate problem	26 (65.0)	14 (35.0)		
	Severe problem	5 (12.5)	3 (7.5)		
	Extreme problem	00	00		
Psychiatry	No problem	2 (5.0)	2 (5.0)	3.834	0.268
	Slight problem	23 (57.5)	30 (75.0)		
	Moderate problem	13 (32.5)	8 (20.0)		
	Severe problem	2 (5.0)	00		
	Extreme problem	00	00		

\*P<0.05, \*\*P<0.01

substance use, unlike in non-tribal group, might reflect more familial and cultural acceptance. Here, the direct pathway is more among tribal and non-tribal populations than two-step referral pathways. Earlier studies have expressed the strong possibility of pathways to care differences based on the psychiatric diagnosis. A study conducted in North India reported that 58% of patients with mental illness and SUDs are to be consulted a psychiatrist for the first time for treatment.<sup>[24]</sup> Despite that, 33% of the patients sought help from traditional faith healers for the treatment primarily. In the index study, 65.0% of patients from the tribal population consulted a psychiatrist, including whoever directly comes to central institute of psychiatry (CIP), and 62.5% from

the non-tribal population directly consulted a psychiatrist for the SUD. In a previous study, 56.9% of the subjects had the first point of contact with a tertiary care addiction psychiatrist, and traditional healers were consulted by about 5.2% of the patients seeking help for the first time.<sup>[20]</sup> No patients visited a practitioner of an alternate system of medicine in the present study. This was also comparable to the earlier study.<sup>[25]</sup> It shows that most patients with SUDs do not seek treatment from alternate systems of medicine. This observation has an important implication for policies as, over the past years, there has been prominence on the promotion of alternate systems of medicine in the country. In India, the treatment provided by non-specialists for SUDs

**Table 3:** Comparison of pathways to psychiatric care between tribal patients and non-tribal patient group (N=80).

Variables	Response category	Groups		χ <sup>2</sup> /fisher exact test statistics/mann whitney U	P
		Tribal group n=40(%)	Non- tribal group n=40(%)		
Person who noticed the change	Parents	15 (37.5)	21 (52.5)	10.269 <sup>f</sup>	0.020*
	Sibling	8 (20.0)	1 (2.5)		
	Spouse	16 (40.0)	12 (30.0)		
	Relatives	00	2 (5.0)		
	Others	1 (2.5)	4 (10.0)		
Person who recognized as it is a mental problem	Parents	13 (32.5)	17 (42.5)	4.746 <sup>f</sup>	0.312
	Sibling	8 (20.0)	2 (5.0)		
	Spouse	13 (32.5)	15 (37.5)		
	Relatives	2 (5.0)	1 (2.5)		
	Others	4 (10.0)	5 (12.5)		
Who recognized need for psychiatric care	Parents	14 (35.0)	18 (45.0)	10.315 <sup>f</sup>	0.028*
	Sibling	8 (20.0)	00		
	Spouse	11 (27.5)	11 (27.5)		
	Relatives	1 (2.5)	1 (2.5)		
	Others	6 (15.0)	8 (20.0)		
Caregivers who were spends maximum time with patient for care giving	Parents	11 (27.5)	18 (35.0)	4.073 <sup>f</sup>	0.215
	Spouse	21 (52.5)	14 (35.0)		
	Sibling	8 (20.0)	7 (17.5)		
	Others	00	1 (2.5)		
Source of referral	General physician	8 (20.0)	4 (10.0)	8.208 <sup>f</sup>	0.379
	Family members	10 (25.0)	12 (30.0)		
	Relatives	11 (27.5)	10 (25.0)		
	Neighbors	9 (22.5)	6 (15.0)		
	Others	1 (2.5)	3 (7.5)		
	More than one referral	1 (2.5)	1 (2.5)		
	Mental health professional	00	4 (10.0)		
Reason for shift from one mode of treatment to other	Increase illness	4 (10.0)	5 (12.5)	4.941 <sup>f</sup>	0.418
	Deterioration in previous state or no improvement	2 (5.0)	5 (12.5)		
	For better improvement	2 (5.0)	2 (5.0)		
	Relapse of symptoms	6 (15.0)	5 (12.5)		
	Not applicable	26 (65.0)	23 (57.5)		
Shifting modality	Faith healing to psychiatric treatment	9 (22.5)	7 (17.5)	2.799 <sup>f</sup>	0.637
	Faith healing along with psychiatric treatment	00	1 (2.5)		
	General physician to psychiatrist	3 (7.5)	4 (10.0)		
	De-addiction center to psychiatric care	2 (5.0)	5 (12.5)		
	Directly come to CIP	26 (65.0)	23 (57.5)		
First modality of treatment	Faith healer	9 (22.5)	7 (17.5)	1.144 <sup>f</sup>	0.827
	Psychiatrist	26 (65.0)	25 (62.5)		
	General physician	3 (7.5)	4 (10.0)		
	De addiction	2 (5.0)	4 (10.0)		
When did you identify patient problem at first time (in years) median (IQR)		5.00 (3.00)	3.00 (3)	486.50	0.002**
	Mean rank	48.34	32.66		
Time gap to access psychiatric care after (in years), median (IQR)		2.0 (3.0)	2.0 (2.0)	790.00	0.923
	Mean rank	40.25	40.75		

f. Fisher's exact test, SD: Standard deviation, IQR: Interquartile range. \*P<0.05, \*\*P<0.01

**Table 4:** Comparison of the reason for treatment delay in seeking psychiatric care between tribal and non-tribal population (n=80).

Domain	Response category	Response	Groups		$\chi^2$	P (df=1)
			Tribal n=40(%)	Non-tribal n=40(%)		
Reason for treatment delay in seeking psychiatric care	Lack of proper awareness about psychiatric treatment place and person	Present	24 (60.0)	18 (45.0)	1.805	0.179
		Absent	16 (40)	22 (55)		
	Illiteracy	Present	4 (10)	3 (7.5)	0.155	0.284
		Absent	36 (90)	37 (92.5)		
	Residing in remote and in accessible place	Present	2 (5.0)	1 (2.5)	0.342	0.380
		Absent	38 (95.0)	39 (97.5)		
	Financial problem	Present	8 (20.0)	6 (15.0)	0.346	0.556
		Absent	32 (80.0)	34 (85.0)		
	Remained busy in other important activity	Present	8 (20.0)	9 (22.5)	0.075	0.785
		Absent	32 (80.0)	31 (77.5)		
	Fear of social stigma and isolation	Present	15 (37.5)	17 (42.5)	0.208	0.648
		Absent	25 (62.5)	23 (57.5)		
	Problem in taking patient to mental health facilities/severity of symptoms	Present	21 (52.5)	13 (32.5)	3.274	0.070
		Absent	19 (47.5)	27 (67.5)		
	Poorly functional social network low social support to family	Present	3 (7.5)	1 (2.5)	0.342	0.380
		Absent	37 (92.5)	39 (97.5)		

**Table 5:** Comparison of attitude toward seeking professional psychological help between tribal and non-tribal population.

Domain	Groups		t (df=78)	P
	Tribal group n=40	Non-Tribal group n=40		
	Mean (SD)	Mean (SD)		
Attitude towards psychological help seeking	14.15 (3.29)	15.47 (3.00)	-1.880	0.064

SD: Standard deviation

might be ineffective by patients; or non-specialists might prefer other disorders for the treatment rather than SUDs. In our study, fewer patients consulted faith healers as the first treatment mode compared to consulting a psychiatrist directly.

Most of the tribal population gave the reason for the delay in psychiatric care was a lack of proper awareness about psychiatric care (treatment, place, and person), and financial problems were another reason for delaying treatment. The previous studies and surveys substantiate the results. Most alcohol use disorders identified with the treatment gap had not been taken care of or could not access appropriate care. More than lack of awareness, affordability of care, which varied between rural and urban areas, appears to influence these wide treatment gaps critically.<sup>[3]</sup> Fear and social stigma were considered major issues among non-tribal populations compared to the tribal population.

A previous study reported high internalized stigma among alcohol-dependent patients.<sup>[26]</sup> Research has indicated that the differences in psychiatric disorders might explain the differences in the pathway of care.<sup>[24]</sup> Both groups have a poor attitude toward seeking professional psychological help. If the patient with higher education, they have a more positive attitude to seek professional help. Our findings show that respondents with higher education viewed them as more positive toward seeking psychological help. The treatment gap is high in substance abuse disorders and current community-based programs are not adequately reaching grassroots levels; all other important stakeholders need to be trained. Furthermore, programs for prevention and early detection measures are needed. Technology-based interventions need to reach unreached tribal populations. Even though pathways to care among tribal with SUD are not studied much, the sample size is inadequate to generalize to tribal communities, both genders could have been a better representation, and future studies need to address the treatment gaps with community-based interventions in tribal communities.

### CONCLUSION

Pathways to care for patients diagnosed with SUDs represent a crucial link in health-care delivery for these disorders. In India, the situation appears to be less than satisfactory. There is a long-time gap between the onset of substance use-related problems and the first help-seeking attempt. Lack of awareness about the health-care facility, problems taking patients to mental health facilities/severity of symptoms was high in tribal population, social

stigma and fear reported by non-tribal population for delayed psychiatric care, and financial problems were also reasons to delay seeking psychiatric care. Attitude toward seeking psychological help is low in both groups. This study adds to the scant literature on treatment-seeking behavior characteristics among tribal patients with SUD and would provide insight both at individual and policy-making levels.

#### Declaration of patient consent

The authors certify that they have obtained all appropriate consent.

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#### Conflicts of interest

There are no conflicts of interest.

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