Research Paper

Mental Health Status and Socio-demographic Profile of Tribal Populations in Jharkhand

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ABSTRACT

The aim of this paper is to present the socio demographic profile and mental health status of the males during COVID-19 in three tribal districts of Jharkhand. The survey was undertaken between June 2021 and December 2022. It was largely representative of the population as 74,318 persons were screened in 3 the districts of Khunti, Simdega and Dumka. The survey population was aged 15 to 65 years. 74,318 people were screened for anxiety, depression, suicidal thoughts (if scores severe on screening). Conditions which they were facing were explored by a semi structured script accompanied with PHQ4 as a screening tool. This paper presents findings for the pattern and sociodemographic profile of the persons screened. Inferences and conclusion: Female contributed higher proportions of mental health issues. Unmarried, divorced, separated and widowed people reported to face higher proportions of moderate and severe mental issues. Unemployed people and students reported higher proportions of moderate and severe mental issues.

Mental health is a critically underserved field, especially in low and middle-income nations (LMIC). According to data from community-based studies, around 10% of the population deals with common Mental Disorders; also known as CMD's.

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These include anxiety, depression and psychosomatic challenges (Gururaj, 2005).

According to review of a few epidemiological studies that were conducted in India between 1960 and 2009, approximately 20% of adults in the community have psychiatric disorders, and with estimates that range from 9.5 to 103/1000 persons, with changes in methodology and inclusion and exclusion criteria's being the major reason for variation in numbers.

Tribal mental health is an underserved and underserved area of health-care services. Furthermore, limited information is available about the prevalence of mental problems in native cultures. Globally, tribal health research is deficient (Math, 2010).

Substance abuse and alcoholism

200 opium addicts were interviewed in an ethnographic study done in three western districts of Rajasthan. Opium usage was frequent among both younger and older males during non-harvest seasons. The most prevalent reasons for using opium were to relieve anxiety caused by drought induced agricultural loss, to get high, to fit in with peers, and to improve sexual function. (Ganguly, 1995). In an Arunachal Pradesh survey including over 5000 people, alcohol usage was found in 30% of adults and opium use in roughly 5% of adults (Chaturvedi, 2004). In both sexes, higher age meant more opium use, lower literacy rate meant higher opium use and the more a person engaged in work the more they used opium. It was discovered that salaries were being utilised to purchase opium (Chaturvedi, 2013).

The incidence of tobacco use was higher in males, but the prevalence of alcohol usage was higher in females, most likely due to greater access to homemade rice brew, which is typically prepared by women. (Chaturvedi, 2013)

Alcohol use is seen as a male hobby among Paniyas in Kerala's Wayanad district, with an increase in consumption by younger persons than previously. According to one study, alcohol use among them was less of a "decision" and more of a result of their conditions acting through diverse processes. Traditionally, drinking was common among elderly males; however, the consumption pattern has shifted, with a large percentage of younger men now drinking. Drinking was concentrated within households, with fathers and sons drinking together. Alcohol is freely accessible because the government gives possibilities. Many organisations choose to offer spirits as a perk to entice men from the Paniya community to join their workforce (Mohindra, 2011).

In a Jharkhand study, numerous members of the ST community identified social enhancement and coping with stress as motivations for drinking alcohol, rather than individual enhancement. The key aetiology leading to a higher prevalence of substance dependence in tribal societies seems to be acceptance of society toward alcohol and pressure by peer groups, and furthermore in dealing with severe emotional difficulties (Sreeraj, 2012). Another study discovered a significant prevalence of life-time alcohol usage, with the reasons cited as rising poverty, illiteracy, increased stress, and peer pressure (Whiteford, 2010).

Common mental illnesses and socio-cultural factors

Suicide was more common among Idu Mishmi in Arunachal Pradesh's Roing and Anini districts (14.2%) than among the total urban population (0.4%-4.2%). Suicides were linked to symptoms of sadness, anxiety, drinking, and eating disorders. Depression was much higher among those who tried suicide than in the general population (Singh, 2013). In a

study from West Godavari district in rural Andhra Pradesh, almost 5% of 5007 people from thirty villages comprised of ST suffered from CMDs. CMDs were classified as moderate/severe depression and/or anxiety, stress, and an elevated risk of suicidal ideation. Women exhibited a higher prevalence of depression, although this could be attributable to cultural norms, as men are less likely to express depression or anxiety symptoms, resulting in underreporting. CMD was strongly linked to marital status, education, and age (Maulik, 2017). In a study risk of elevated CMD risk were found to be directly related to gender, literacy levels, death of an infant in the household, more than three adults living in the household, a family with four or more children, illness. When comparing via rurality in the same ST Sikkim group of Bhutia identity, it was discovered that the urban population reported more stress than their rural counterparts (Singh, 2013). In an Andaman and Nicobar Islands study, the main factors of cigarette use and nicotine dependence were age, current use of alcohol, lack of education, loss of partner to death (Manimunda, 2012). Research among Ao-Naga population discovered that 74.6% of the persons screened linked mental health issues to psychological or social variables, and a significant number sought treatment from a mental health professional. Nonetheless, 15.4% blamed mental illnesses on malevolent spirits. Around 47% wanted to consult a psychiatrist, whereas 25% preferred to pray. Around 10.6% wanted to consult a psychiatrist as well as a prayer group, while 4.4% preferred traditional healers (Longkumer, 2013). The frequency of Down syndrome among ST in Chikhalia, Barwani district, Madhya Pradesh, was greater than in the rest of India. Three-quarters of the children were the firstborn. None of the parents of Down syndrome children had a consanguineous marriage or a family history of Down syndrome, intellectual disability, or any other neurological illness such as cerebral palsy or epilepsy. The tribal community is known to be severely destitute and disadvantaged in a variety of ways, with a disproportionately larger burden of dietary and genetic diseases, both of which are potential risk factors for Down syndrome (Lakhan, 2016)

Objective

The objective of this study is to assess the mental health status and socio-demographic profile of tribal populations in Jharkhand during the COVID-19 pandemic, with a focus on identifying the prevalence of anxiety, depression, and suicidal thoughts. The study aims to examine the patterns and factors associated with mental health issues among the screened population, particularly the impact of gender, marital status, employment status, and student status. The study will provide valuable insights into the mental health needs of the tribal population in Jharkhand, with a view to informing policies and interventions to address mental health disparities in the region.

METHODS

Sample

The study was undertaken during an 18-month period by World Health Partners under the mental health project 'Comprehensively Address Mental Health Issues due to COVID 19'. All interviews were conducted between June 2021 and December 2022.

It was largely representative of the population as 74,318 people were screened in 3 the districts of Khunti, Simdega and Dumka.

Door to door screening of all households in COVID afflicted communities was carried out face to face as well as via telecommunication. The study population aged 15 to 65 years. 74,318 people were screened for anxiety, depression, and suicidal thoughts (when required).

This paper presents selected findings about the pattern and sociodemographic profile of the people screened.

Screening tools: Patient Health Questionnaire-4.

➢ Brief - The Patient Health Questionnaire-4 (PHQ-4) is an ultra-brief screener for anxiety and depression, which combines the Patient Health Questionnaire-2 (PHQ-2) and the Generalised Anxiety Disorder-2 (GAD-2). The use of the PHQ-4 was first published in 2009, reporting a study conducted in 2004–05 (Kroenke et al., 2009)

Severity

➢ PHQ-4 Scoring: Total score ranges from 0 to 12,

➢ None: 0-2

➢ Mild: 3-5

➢ Moderate: 6-8

➢ Severe: 9-12

Inclusion criteria

Respondents within the age range of 15-65 at the time of interview were included. Respondents who scored 0-12 on PHQ 4 were included in this data set.

Exclusion criteria

Respondents below the age of 15 years were excluded.

Socio-demographic profile

The socio-demographic data of age at interview, and sex, marital status, employment status were collected as a standard. Though socio-economic status could not be successfully elicited, in many respondents, hence cannot be used as a reliable marker in socio-demographic profile.

Analysis

Descriptive analyses were calculated by the use of SPSS Version 29.0.0.0(241). To examine data separate cross tabulations were conducted to determine Chi-square, setting statistical significance at $p < .001$.

RESULTS AND DISCUSSION

Gender with MH category cross tabulation

		Normal	Mild	Moderate	Severe	Total
Male	Count	33756	2903	92	22	36773
	%	91.80%	7.90%	0.30%	0.10%	100.00%
Female	Count	33009	4425	89	13	37536
	%	87.90%	11.80%	0.20%	0.00%	100.00%
LGBTQIA2s+	Count	9	0	0	0	9
	%	100.00%	0.00%	0.00%	0.00%	100.00%
Total	Count	66774	7328	181	35	74318
	%	89.80%	9.90%	0.20%	0.00%	100.00%

Chi-Square Tests

	Value	df	p-value
Pearson Chi-Square	320.09	6	0

The above data throws up the trend that the female population shows more mild mental health issues with a prevalence rate of 11.8% as compared to men with a prevalence rate of 7.90%. However, the prevalence rate for moderate and severe Mental Health issues this trend is reversed slightly with men having 0.30% moderate MH issues and 0.10% severe MH issues when compared to women in whom moderate MH issues were 0.20% and severe MH issues were 0.003%

Age Group with MH category Cross Tabulation

		Normal	Mild	Moderate	Severe	Total
0-18	Count	1216	49	2	0	1267
	%	96.00%	3.90%	0.20%	0.00%	100.00%
19-35	Count	31130	2578	70	15	33793
	%	92.10%	7.60%	0.20%	0.00%	100.00%
36-59	Count	27829	3529	77	18	31453
	%	88.50%	11.20%	0.20%	0.10%	100.00%
60>=	Count	6599	1172	32	2	7805
	%	84.50%	15.00%	0.40%	0.00%	100.00%
Total	Count	66774	7328	181	35	74318
	%	89.80%	9.90%	0.20%	0.00%	100.00%

Chi-Square Tests

	Value	Df	p-value
Pearson Chi-Square	555.051	9	0

The above data allows us to observe that highest prevalence rate of mild mental health issues were found to be in the 60>= age group at 15% followed by the 36-59 age group at 11.2%; 19-35 age group at 7.60% and 0-18 age group at 3.90%.

Similar trends were seen for moderate mental health issues where the prevalence rate was found to be 0.40% in the 60>= age group but 0.20 percent in all the other age groupings.

Marital Status with MH category Cross Tabulation

		Normal	Mild	Moderate	Severe	Total
Married	Count	55297	6049	135	18	61499
	%	89.90%	9.80%	0.20%	0.00%	100.00%
Unmarried	Count	8346	520	24	10	8900
	%	93.80%	5.80%	0.30%	0.10%	100.00%
Divorced/Widower/Separated	Count	3131	759	22	7	3919
	%	79.90%	19.40%	0.60%	0.20%	100.00%
Total	Count	66774	7328	181	35	74318
	%	89.80%	9.90%	0.20%	0.00%	100.00%

Chi-Square Tests

	Value	df	p-value
Pearson Chi-Square	608.04	6	0

The above data set brings up a few interesting observations. When it comes to severity of MH issues, unmarried people (0.10%) and divorced/widowed/separated persons (0.20%) report a higher prevalence rate of severe MH than married people who reported 0.001% severe MH cases.

A similar trend is observed in moderate MH cases. Unmarried people (0.30%) and divorced/widowed/separated persons (0.60%) report a higher prevalence rate of moderate MH than married people who reported 0.20% moderate MH cases.

However, this trend changes for mild MH cases where divorced/widowed/separated persons showed a prevalence rate of 19.4% as compared to married persons (9.8%) and unmarried persons (5.8%)

Occupational Status with MH category Cross Tabulation

		Normal	Mild	Moderate	Severe	Total
unemployed	Count	9908	1049	61	19	11037
	%	89.80%	9.50%	0.60%	0.20%	100.00%
student	Count	3508	178	3	1	3690
	%	95.10%	4.80%	0.10%	0.00%	100.00%
employed	Count	28809	2800	53	8	31670
	%	91.00%	8.80%	0.20%	0.00%	100.00%
home-maker	Count	24549	3301	64	7	27921
	%	87.90%	11.80%	0.20%	0.00%	100.00%
Total	Count	66774	7328	181	35	74318
	%	89.80%	9.90%	0.20%	0.00%	100.00%

Chi-Square Tests

	Value	Df	p-value
Pearson Chi-Square	363.989	9	0

When we took a look at the above given tables we came across a pattern. When it comes to severity of MH issues in occupational groups; home-makers exhibited the highest prevalence rate of mild MH issues with 11.80% followed by unemployed people (9.50%), employed people (8.80%) and students (4.80%). However, when it came to moderate and severe MH issues, unemployed people threw up a higher prevalence rate of 0.60 % and 0.20% respectively as compared to home-makers (moderate MH issues-0.20% and severe MH issues - 0.02%); employed people, (moderate MH issues-0.20% and severe MH issues - 0.02%) and students ((moderate MH issues-0.10% and severe MH issues - 0.02%).

Education Status with MH category Cross Tabulation

		Normal	Mild	Moderate	Severe	Total
Illiterate	Count	17848	2803	71	16	20738
	%	86.10%	13.50%	0.30%	0.10%	100.00%
School Education	Count	45781	4224	105	18	50128
	%	91.30%	8.40%	0.20%	0.00%	100.00%
Graduate and above	Count	3145	301	5	1	3452
	%	91.10%	8.70%	0.10%	0.00%	100.00%
Total	Count	66774	7328	181	35	74318
	%	89.80%	9.90%	0.20%	0.00%	100.00%

Chi-Square Tests

	Value	df	p-value
Pearson Chi-Square	453.239	6	0

When we took a look at the above table we came across a pattern. When it comes to severity of MH issues in educational groups; illiterate people exhibited the highest prevalence of mild, moderate and severe MH issues at 13.50%, 0.20% and 0.10% respectively.

DISCUSSION AND RECOMMENDATIONS

Recommendations

For planning and executing broad and integrative socioculturally relevant mental health services in India:

Removing language barriers: One effective approach to improving mental health services for tribal populations in India is to use the native language in communication with the community. Research has shown that language barriers can contribute to poor mental health outcomes, as individuals may not fully understand their symptoms or the available treatments. Therefore, mental health professionals should be trained to communicate effectively with tribal populations in their native language, or through trained interpreters if necessary. Additionally, mental health awareness campaigns can be conducted in local languages to increase understanding and awareness of mental health issues.

Health and wellness-centre approach: Another effective approach is to use a health and wellness-centre approach to provide mental health services. This approach integrates mental health care into primary health care services, making it more accessible and less stigmatized. Research has shown that this approach can be particularly effective in rural and remote areas, where access to mental health services is often limited. Health and wellness-centres can be staffed with mental health professionals, or trained community health workers who can provide basic mental health services and referrals to more specialized care if needed.

Engagement of tribal healers and conservation of traditional medicines: Engaging with tribal healers and traditional medicines can also be an effective approach to improving mental health services for tribal populations. Research has shown that traditional healers can play an important role in providing mental health care, particularly in areas where Western-style mental health services are not readily available or accepted. Therefore, mental health professionals can collaborate with traditional healers to provide culturally appropriate mental health care, and to integrate traditional medicines into treatment plans. This can also

help to preserve and promote traditional healing practices, which are an important part of tribal cultures.

Overall, these practical activities can augment the recommendations for planning and executing broad and integrative socioculturally relevant mental health services in India. Studies have shown that these approaches have been successful in improving mental health outcomes for tribal populations in other countries, and can be adapted to the Indian context to provide culturally appropriate and effective mental health care.

Activities and advocacy efforts are aimed at improving the situation and are undoubtedly the necessary actions in this direction. This massive burden of mental, behavioural, and drug use problems in India requires immediate attention of political leaders, policymakers, health professionals, opinion leaders, and society as a whole. It is envisaged that the NMHS data would inform mental health policy and law, as well as assist shape the country's mental health care delivery systems. Most importantly, mental health should be prioritised in India's development plan.

Limitations and strengths of the study
- With regards to limitations; the study does not address prevalence rates of specific mental health issues such as schizophrenia, personality disorders, bipolar affective disorder etc. The study was not able to collect and inform on prevalence in the homeless population, those in prison, or hostels etc. the subgroup of elderly could not be included, which could have had a small impact on the population but remained unrepresented. In some cases, specifically skilled interviewers may be required. It is to be noted that there is a global decline in responses and participation due to time and energy required.
- Despite the limitations there are various strengths to the study; first and foremost being the large data pool, which very well represents the population in question.
- The demographic data available sheds light onto much required analysis of frequency of mental health issues in different age groups.
- The study at large paints a picture of further in-depth exploration as well as possibility of short-term interventions in near future and a direction in policy making as well.

CONCLUSION
The current available data is a smattering of data populations, but it also identifies gaps in knowledge and suggests the type of research that should be sponsored in the future.

Tribal communities make approximately 8.6% of India's overall population, with 705 tribal groupings. The mental health of tribal populations in India must be addressed with techniques that allow the group to improve WHO indicators of ability to cope with one's own difficulties, work productively, and contribute to his community. The programmes must address the multiple underlying causes that contribute to the tribes' vulnerability to mental health disorders. Coping skills for dealing with mental health concerns must be made accessible and affordable in order to develop mental health abilities. Coping skills can be strengthened through community programmes that are culturally sensitive in order to minimise stigma and discrimination.

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