# A study of prevalence and factors associated with suicide in a tribal population

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# Abstract

More than one lakh lives are lost every year due to suicide in India. In the last three decades (from 1975 to 2005), the suicide rate increased by 43% **Aims and Objectives:** To study Prevalence and factors associated with suicide in a Tribal Population. **Methodology:** This was a cross-sectional study carried out in the tribal area during the two year period i.e. June 2015 to June 2017. In the two year period there were 77 suicides occurred. All such suicides were identified The data is presented in percentages and in tabular form. **Results:** The prevalence of suicide in our study was 38.5 persons per year per lakh population The majority of the patients were in the age group of 40-50 i.e. 37.66%, followed by 50-60 were 24.68 %, >60 were 9.09%, 20-30 were 6.49%. Majority of the patients were Female 58.44 % and 41.56% were females. The majority of the patients associated with H/o Social stigma -89.61%, followed by Poor socio Economic Status -84.42%, Family history -64.94%, Female sex -58.44, Associated with Severe depression -32.47%, H/o Alcohol addiction -19.48%, Un-employed -16.88%, Terminal illness-14.29%. **Conclusion:** The suicidal rate in tribal population found to be very high and the associated factors were H/o Social stigma, Poor socio Economic Status, Family history, Female sex, Severe depression, Alcohol addiction, Un-employment, Terminal illness etc. **Key Word:** Tribal Population, Suicide, Depression.

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# **INTRODUCTION**

More than one lakh lives are lost every year due to suicide in India. In the last three decades (from 1975 to 2005), the suicide rate increased by 43%. The rates were approximately the same in 1975 and 1985; from 1985 to 1995 there was an increase of 35% and from 1995 to 2005, the increase was 5%. However, the male-female ratio has been stable at around 1.4 to 1. There is a wide variation in suicide rates within the country. The states like Kerala, Karnataka, Andhra Pradesh and Tamil Nadu Maharashtra have a suicide rate of >15 while in the Northern States and central state like Punjab, Uttar Pradesh, Bihar and Jammu and Kashmir, the suicide rate is <3. This variable pattern has been stable for the last 20 years. Higher literacy, a better reporting system, lower external aggression, higher socioeconomic status and higher expectations are the possible explanations for the higher suicide rates in the southern states (Vijayakumar L, 2008).<sup>1</sup> Majority of the suicides (37.8%) in India are by those below the age of 30 years. The fact that 71% of suicides in India are by persons below the age of 44 years imposes a huge social, emotional and economic burden on society. The near equal suicide rates of young men and women and consistently narrow male: female ratio denotes that more Indian women die by suicide than their Western counterparts. Poisoning (34.8%), hanging (31.7%) and self-immolation (8.5%) were the common methods used to commit suicide (accidental deaths and suicide 2007)<sup>2</sup>, The World Health Organization (WHO) estimates that nearly 900 000 people worldwide die from suicide every year, including about 200 000 in China, about 170 000 in India, and 140 000 in high-income countries.<sup>3</sup> The Government of India relies on

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its National Crime Records Bureau (NCRB) for national estimates, and these report fewer suicide deaths (about 135 000 suicides in  $2010)^2$  than estimated by WHO. The reliability of the NCRB data is questionable since they are based on police reports.<sup>4</sup> The age- and sex-specific death totals, rates and risks and the mode of suicide in India's markedly diverse socio-demographic populations are not well understood. Reliable quantification of the suicide deaths is timely as the Government of India 12thYear Plan for 2012–17 includes strategies to tackle chronic disease, injuries and mental health.<sup>5</sup> Here, we quantify suicide mortality within the ongoing Million Death Study (MDS) in India one of the few nationally-representative studies of the causes of death in any low or middle-income country.<sup>6-</sup> <sup>9</sup> The tribal populations have greater vulnerability to mental health issues for multiple reasons. The impact of rapid social changes alters their lifestyles, beliefs and community living. The strain of acculturation to moving to urban spaces and use of alcohol and other substances predisposes them to a number of mental health issues. So we studied the tribal population

# **METHODOLOGY**

This was a cross-sectional study carried out in the tribal area during the two year period i.e. June 2015 to June 2017. In the two year period there were 77 suicides occurred. All such suicides were identified, such families were interviewed for various information like age, sex, any social stigma, socio Economic Status (for this BG Prasad classification was used), Family history, depression (Medical records and symptoms narrated by relatives), any addiction like Alcohol, employment status, Terminal illness. The data is presented in percentages and in tabular form.

# RESULT

The total population under study was 11akh population out of that 77 were committed suicide in last two years so prevalence of suicide in our study was 38.5 persons per year per lakh population.

Table	e 1: Distribution of the patients as per the age					
	Age	No.	Percentage (%)			
	20-30	5	6.49			
	30-40	17	22.08			
	40-50	29	37.66			
	50-60	19	24.68			
	>60	7	9.09			
	Total	77	100.00			

The majority of the patients were in the age group of 40-50 i.e. 37.66%, followed by 50-60 were 24.68 %, >60 were 9.09%, 20-30 were 6.49%. Table 2: Distribution of the patients as per the sex

No.	Percentage (%)
32	41.56
45	58.44
77	100.00
	32 45

The majority of the patients were Female 58.44 % and 41.56% were females.

Associated factors	No.	Percentage (%)
H/o Social stigma	69	89.61
Poor socio Economic Status	65	84.42
Family history	50	64.94
Female sex	45	58.44
Associated with Severe depression	25	32.47
H/o Alcohol addiction	15	19.48
Un-employed	13	16.88
Terminal illness	11	14.29

The majority of the patients associated with H/o Social stigma -89.61%, followed by Poor socio Economic Status -84.42%, Family history -64.94%, Female sex -58.44, Associated with Severe depression -32.47%, H/o Alcohol addiction -19.48%, Un-employed -16.88%, Terminal illness-14.29%.

# DISCUSSION

Suicide is a major public health problem across the world. India currently has surpassed China as having the largest number of suicides in the world,<sup>10</sup> a situation made even more alarming by the unusually large proportion of youth - including young women - that complete suicide in the country Mental health is one of the biggest causes of disability and carries enormous economic burden in India. It is estimated, from the recently reported National Mental Health Survey (2016) that one in every ten Indians is suff ering from some form of mental disorder. Especially in productive age of 20 to 40 years, prevalence of mental disorders is very high. India is home to the largest tribal populations of the world, with 8.6% of total Indian population belonging to Scheduled Tribes who constitute 705 tribal groups across India. The tribal populations have greater vulnerability to mental health issues for multiple reasons. The impact of rapid social changes alters their lifestyles, beliefs and community living. The strain of acculturation to moving to urban spaces and use of alcohol and other substances predisposes them to a number of mental health issues. There has been research in the broader fi eld of mental health, carried out in India. However, mental health of tribal populations is something that has been neglected till now and needs our attention. The Indian Psychiatric Society stresses the lack of data on mental health of tribal populations and the need for conducting more research to bridge the gaps in knowledge. Dr. P.S Subramaniam, Tribal Research Centre, Ooty, in his

presentation highlighted sociocultural factors among the tribal communities to understand the prevalence of mental illnesses, for example, alcohol and substance abuse (mainly tobacco) are often part of the culture and both genders and individuals from even young age groups use it. Alzheimer's disease, mental retardation, suicide, schizophrenia and substance abuse are some of the diseases that are prevalent in this region <sup>13</sup> The prevalence of suicide in our study was 38.5 persons per year per lakh population. which was similar to Venkoba Rao<sup>12</sup> reported an incidence rate of 43 / 100,000 in Madurai. Also we have seen that The majority of the patients were in the age group of 40-50 i.e. 37.66%, followed by 50-60 were 24.68 %, >60 were 9.09%, 20-30 were 6.49%. Majority of the patients were Female 58.44 % and 41.56% were females. The majority of the patients associated with H/o Social stigma -89.61%, followed by Poor socio Economic Status -84.42%, Family history -64.94%, Female sex -58.44, Associated with Severe depression -32.47%, H/o Alcohol addiction -19.48%, Un-employed -16.88%, Terminal illness-14.29%.

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