

Short Report

Title: The geographic heterogeneity of suicide rates in India by religion, caste, tribe and other backward classes

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Abstract

Background: Caste, tribal and religious associations, which are perhaps the most important aspects of personal and social lives in India, have been neglected in the Indian suicide research

Aim: To investigate suicide rates in India by religion, caste, tribe and other backward classes over the period of 2014-2015

Method: This study acquired unpublished suicide data from the National Crime Records Bureau (NCRB) for 2014 and 2015 with caste, tribal and religious associations of suicide cases. National and state-specific suicide rates (2014-2015) were then calculated for Hindus, Muslims, Christians, Sikhs and other religious groups and for Schedule Caste (SC), Schedule Tribe (ST) and Other Backward Classes (OBC)

Results: The findings show higher suicide rates among Christian and Other religious groups compared to Hindus and higher suicide rates among general populations compared to SC, ST and OBC populations. However, the results varied among different regions highlighting substantial geographical heterogeneity of suicide rates across India by caste and religion

Limitations: Suicide rates presented might be an under-estimation of the true rates

Conclusion: Given the heterogeneity of minority/majority status by religion, caste, tribes and OBC in different states, further investigation between minority status and suicide is warranted

Keywords: Suicide; India; Religion; Caste; Tribe

Introduction

Suicide in India is an important public health issue, with national rates in the past decade ranging from 15-22 per 100,000 (Dandona et al., 2017; Patel et al., 2012), which are comparable to high income settings. The range of suicide rates mentioned likely reflect differences in data collection methods and the extent of possible under-reporting of suicides. For example, Dandona et al. (2017) reported a national suicide rate of 14.9-15.4 per 100,000 based on National Crime Records Bureau (NCRB) data, which is known to under-estimate suicide cases while Patel et al. (2012) reported a national suicide rate of 22 per 100,000 based on a nationally representative verbal autopsy study. While Indian suicide studies have previously focused on geography, age, sex, marital status and other socio-economic factors (Mayer, 2011), no studies of suicide in India have investigated suicide rates by religion or caste at either national or regional level. This is important given the geographic heterogeneity of suicide in India (Arya et al., 2018), and that religion and caste are likely to co-vary with previously investigated regional markers of social and economic status. For example, regions with higher literacy and unemployment rates are associated with higher suicide risk compared to regions with lower literacy and unemployment rates (Arya et al., 2018). Religion and caste are central to Indian culture; they are not only pertinent to personal and social identity, but also to opportunities relating to education, employment and social status.

While the caste system is primarily associated with Hinduism, all major religions in India have hierarchical division (Luce, 2010). Caste can be defined as the hereditary stratification of people based on their occupation and is typically characterized by rigid endogamy (the practice of marrying within one's own caste) (Nadkarni, 2003). Hindus can be divided into four groups namely *Brahmins*, *Kshatriyas*, *Vaisyas*, and *Shudras*, with *Brahmins* considered as the "highest" and *Shudras* as the "lowest" caste (Sharma, 2015). *Shudras* were further divided into *Shudras* and *Ati Shudras*, with the latter engaging in the most menial jobs. Under the Indian constitution post-independence, *Ati Shudras* (also referred to as untouchables in ancient times and as *Dalits* in modern India) came to be known as Schedule Caste (SC) (Sharma, 2015). The populations belonging to the Schedule Tribes (STs), however, are distinct from the Hindu caste system. STs have their own culture, language and mannerisms, differing from known religions and practices in India, and residing predominantly in remote areas (Kijima, 2006).

The most marginalized populations in India have belonged to SC, ST groups, while the classification Other Backward Classes (OBC) (the term "backward classes" refers to the lower level of educational and social achievement) is considered to lie between the upper classes and SC and ST (Karade, 2009; Deshpande & Ramachandran, 2013). Demographically, the SC population is higher among northern and eastern states, ST population is concentrated in north-eastern states while OBC populations are higher among central and southern states (Supplementary table 3). SC, ST and OBC are used for administrative purposes to promote the welfare of historically disadvantaged populations (Deshpande & Ramachandran, 2013). Despite certain constitutional privileges, SC and ST remain the most disadvantaged populations in modern India, with low literacy, high poverty levels, and adverse health outcomes compared to the general population (Karade, 2009). Given that elevated suicide rates have been documented among minority/underprivileged populations in other countries and Hinduism has been associated with approval of religious suicides (Chu et al., 2010; Armstrong et al., 2017; Vijayakumar, 2009), we calculated suicide rates across religious and caste groupings in India. We hypothesized that Hindus would have higher suicide rates compared to other religions, and SC, ST and OBC populations would have higher suicide rates compared to the general population.

Method

The NCRB has published yearly reports on suicides since 1967 on all States and Union Territories (NCRB, 2015). Suicide is defined by the NCRB as an un-natural death where an individual has a self-conceived desire to terminate her or his life (NCRB, 2015).

The NCRB recorded information on caste and religion of suicides for the first time in 2014 and 2015, but to date have not published this information. State-specific suicide cases for 2014 and 2015 stratified by religion (Hindu, Muslim, Christian, Sikh, Other) and by caste/tribe (SC, ST, OBC, General) were obtained under the Right to Information (RTI) act (Roberts, 2010). State-specific population percentages by religion, SC, ST and OBC were obtained from Census of India website based on the 2011 census (Census of India, 2011) and Ministry of Social Justice & Empowerment website (Ministry of Social Justice & Empowerment, 2016). These are the latest available data and the most accurate source of population data in India, and are not likely to differ substantially

from population numbers of 2014-2015. Other religions include Jains, Buddhists and various tribal religions while general population includes everybody who does not fall into the category of either SC, ST or OBC.

Statistical analysis

State specific suicide rates per 100,000 with 95% CI were calculated using suicide counts for each social group and corresponding populations. A series of negative binomial regression models (based on suicide counts and offset by the natural logarithm of the population) were also specified to estimate Rates ratios (RR). RRs were calculated for Muslims, Christians, Sikhs and other religions relative to Hindus (as almost 80% of the whole Indian population is Hindu); and for SC, ST and OBC relative to general population. Analyses were conducted in SAS 9.3.

Results

Among different religions, the lowest rates were observed among Sikhs and Muslims (4.3 and 7.0 per 100,000 respectively) followed by Hindus (11.4 per 100,000), while the highest rates were observed among Christians (17.6 per 100,000) and other religious groups (19.3 per 100,000) (Table 1). Among caste and tribal groups, general populations recorded the highest suicide rate (15.0 per 100,000) followed by ST (10.7 per 100,000), SC (9.4 per 100,000) and OBC populations (8.6 per 100,000) (Table 1). RRs were higher among Christians and other religions compared to Hindus, and also higher among the general population compared to SC, ST and OBC populations (Table 1). Substantial geographic heterogeneity of suicide rates by different populations were observed among different regions in India.

Overall, Muslim and Sikh suicide rates were generally lower than Hindu and Christian suicide rates, however this was not the case in Rajasthan, Orissa, and states in central India (Supplementary Table 1).

Among different castes, tribes and OBC populations, ST populations generally had lower suicide rates compared to the rest in north-eastern states (except Sikkim) while suicide rates were similar across all populations in northern states (except Uttar Pradesh and Uttarakhand where ST populations had higher rates). While east Indian states generally had higher suicide rates among general populations compared to the rest, west and south Indian states varied with higher and lower suicide rates among ST, SC and OBC compared to general populations. The two states of central India had high suicide rates across all population groups (Supplementary Table 2).

Discussion

Previously, it has been reported that Hinduism has been more tolerant of religious suicides (Vijayakumar, 2009), and, similarly, Christianity has also been associated with higher suicide rates among specific denominations (Gearing & Lizardi, 2009). For example, previous analyses have shown higher suicide rates among Protestants compared to Catholics (Gearing & Lizardi, 2009).

Given that two-thirds of the Christian population in India is Catholic (Mosse, 2012), and that higher suicide rates have been observed among Hindus in India (Sauvaget et al., 2009), higher suicide rates among Christian and other religious groups and lower rates among Hindu groups is an unexpected finding. However, higher suicide risk among Christians and other religious groups compared to Hindus was not uniform in state-specific comparisons (Supplementary Tables 1 and 4), and further examination is required to understand these patterns. For example, in north-eastern states (predominantly Christian populations), Christians had substantially lower rates compared to Hindus.

Suicide rates were lower among SC, ST and OBC populations compared to the general population. This finding is surprising given the disadvantaged socioeconomic position of these categories, especially of SC and ST populations. This finding was not consistent in state-specific analyses; for example, ST populations had higher rates than general populations in Uttarakhand, Uttar Pradesh, and Kerala where their population is very low. While there were lower suicide rates than general populations in the north-eastern states with very high proportions of ST populations. OBC populations also had lower suicide rates in Rajasthan, Uttar Pradesh, Sikkim, Madhya Pradesh, Gujarat, Andhra Pradesh, Tamil Nadu and Pondicherry, where there are high proportions of OBC populations. General populations in Sikkim, Chhattisgarh, Madhya Pradesh, Karnataka, Kerala, Tamil Nadu and Pondicherry, had higher rates compared to other caste categories while having low proportions of population in those states (Supplementary Tables 2 and 3).

Lower suicide rates among ST and OBC populations in regions dominated by these groups, indicate that minority stress theory may be a useful area for further research. The concept of minority stress suggests that the stigma, discrimination and hostile social environment towards minority populations is associated with increased mental health problems and suicidal behavior (Meyer, 2003). In the Indian context this is indicated by the proportions of populations rather than their cultural or social stigmatization, and it may suggest that majority populations have lower suicide rates because of the less hostile or stressful environment. However, this is not uniform across states which is indicative of other, or a combination of, different socio-economic determinants affecting the suicide rates in specific regions.

There are limitations of the study. Firstly, NCRB data likely to under-estimate the number of suicides in India (Patel et al., 2012), and there is additional potential misclassification by religion, caste and tribal status. For example, it is plausible that suicides in remote tribal regions are more likely to be under-reported than in more urbanized settings, which may underestimate ST rates. Secondly, the data as provided did not allow investigation of caste/tribal suicide rates by different religions. Thus, the analysis could not account for the phenomenon where Hindu caste sub-groups, for example SC, convert to Christianity (Bauman, 2013). Thirdly, demographic patterns of suicide within various castes and religions could not be ascertained as the data provided by the NCRB did not stratify the state-wise suicide numbers either by sex or age-group. Despite these limitations, this study provides preliminary insights into the role of religion and caste on suicide at the sub-national level, and also can inform hypotheses relating to the likely co-variation with previously investigated regional markers of social and economic status.

In a diverse country such as India, effective suicide prevention strategies must consider various social, economic and personal factors. Religion, caste and tribal identity are perhaps the most important aspects of social, cultural and interpersonal relations in India, and yet these factors to date have been neglected in suicide research in India. Findings from this investigation, particularly when considering the heterogeneity of suicide rates by state, are suggestive of important intersections between social, economic and cultural factors associated with religion, caste and tribal status that warrant further investigation.

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Table 1: Suicide by religion, caste and tribe in India 2014-2015

	Total suicide count	Rate /100,000 (95%CI)	RR (95%CI) (a)
<i>Religion</i>			
Hindu	220425	11.4 (11.3-11.5)	1.00
Muslim	24076	7.0 (6.9-7.0)	0.61 (0.60-0.62)
Christian	9827	17.6 (17.2-17.9)	1.55 (1.52-1.58)
Sikh	1800	4.3 (4.1-4.5)	0.38 (0.36-0.40)
Other	9161	19.3 (18.9-19.7)	1.70 (1.66-1.74)
Total	265289	10.9 (10.9-11.0)	
<i>Caste/ Tribe</i>			
General	112198	15.0 (14.9-15.1)	1.00
Scheduled Caste	38106	9.4 (9.3-9.5)	0.63 (0.62-0.64)
Scheduled Tribe	22437	10.7 (10.6-10.9)	0.72 (0.71-0.73)
Other Backward Classes	92548	8.6 (8.6-8.7)	0.58 (0.57-0.58)
Total	265289	10.9 (10.9-11.0)	

(a) Reference group for Rate Ratios for religion is 'Hindu', and for caste/tribe/OBC is 'general'

Supplementary Table 1: Suicide rates by religion, India (2014-2015) (Rate /100,000, 95%CI)

	Hindu	Muslim	Christian	Sikh	Other	Total
North India						
Jammu & Kashmir	4.8 (4.3-5.3)	1.7 (1.5-1.9)	-	1.6 (0.6-3.3)	3.8 (1.9-6.6)	2.6 (2.4-2.8)
Himachal Pradesh	8.8 (8.3-9.3)	3.7 (1.9-6.7)	-	2.6 (0.7-6.7)	-	8.5 (8.0-9.0)
Punjab	4.0 (3.7-4.2)	3.0 (2.1-4.2)	2.9 (1.8-4.5)	2.8 (2.7-3.0)	23.8 (19.8-28.4)	3.5 (3.3-3.6)
Chandigarh	6.2 (5.3-7.2)	2.5 (0.7-6.5)	-	13.4 (10.2-17.3)	-	6.8 (6.0-7.8)
Uttarakhand	3.4 (3.2-3.7)	2.5 (1.9-3.1)	2.6 (0.3-9.3)	0.8 (0.2-2.1)	7.2 (3.1-14.2)	3.3 (3.0-3.5)
Haryana	12.6 (12.3-12.9)	8.4 (7.5-9.3)	44.4 (32.8-58.9)	12.1 (10.8-13.5)	82.2 (71.8-93.8)	12.5 (12.2-12.8)
Delhi	10.4 (10.0-10.7)	7.5 (6.7-8.2)	3.0 (1.5-5.6)	2.8 (2.0-3.8)	4.5 (3.0-6.6)	9.6 (9.3-9.9)
Rajasthan	5.5 (5.3-5.6)	6.3 (5.9-6.8)	13.9 (8.5-21.5)	5.9 (4.8-7.2)	2.8 (2.1-3.7)	5.5 (5.4-5.6)
Uttar Pradesh	1.9 (1.9-2.0)	0.9 (0.8-1.0)	2.1 (1.2-3.3)	1.3 (0.8-2.1)	4.2 (3.4-5.0)	1.8 (1.7-1.8)
North-East India						
Sikkim	50.4 (45.3-56.0)	5.2 (0.1-29.0)	8.4 (4.0-15.5)	-	34.2 (28.4-40.7)	40.4 (36.9-44.2)
Arunachal Pradesh	26.8 (23.1-30.8)	18.9 (8.7-36.0)	3.4 (2.2-5.0)	20.0 (0.5-111.4)	6.3 (4.8-8.1)	11.6 (10.3-13.1)
Nagaland	3.5 (1.9-5.9)	1.8 (0.2-6.5)	0.4 (0.2-0.6)	-	7.2 (1.5-21.2)	0.7 (0.5-1.0)
Manipur	3.1 (2.4-4.0)	0.7 (0.1-2.1)	0.3 (0.1-0.7)	-	2.7 (1.4-4.6)	1.7 (1.4-2.1)
Mizoram	35.2 (21.2-54.9)	7.7 (0.9-27.8)	12.5 (10.9-14.3)	-	-	12.0 (10.5-13.6)
Tripura	20.2 (19.1-21.3)	28.4 (24.4-32.8)	12.7 (9.1-17.2)	44.4 (1.1-247.6)	8.0 (5.0-12.1)	20.1 (19.1-21.1)
Meghalaya	13.0 (10.4-16.2)	6.7 (3.8-10.9)	4.3 (3.7-5.0)	-	-	5.0 (4.4-5.7)
Assam	10.4 (10.1-10.7)	8.3 (7.9-8.7)	9.1 (7.9-10.4)	51.3 (32.5-77.0)	157.5 (145.5-170.2)	10.6 (10.3-10.8)
East India						
Bihar	0.6 (0.5-0.6)	0.6 (0.5-0.7)	-	-	8.1 (6.4-10.1)	0.6 (0.6-0.6)
West Bengal	16.6 (16.4-16.8)	13.1 (12.7-13.4)	32.0 (29.0-35.1)	2.3 (0.5-6.8)	8.5 (7.5-9.6)	15.6 (15.4-15.8)
Jharkhand	3.6 (3.5-3.8)	3.5 (3.2-3.9)	4.1 (3.4-4.9)	6.8 (3.1-12.9)	0.4 (0.3-0.5)	3.2 (3.1-3.4)
Orrisa	8.9 (8.7-9.1)	36.1 (33.3-39.0)	16.4 (14.8-18.1)	-	15.5 (13.4-17.8)	9.8 (9.6-10.0)
Central India						
Chhattisgarh	24.0 (23.5-24.4)	29.0 (25.8-32.5)	43.6 (39.6-48.0)	66.8 (51.9-84.7)	47.4 (43.8-51.2)	25.1 (24.7-25.6)
Madhya Pradesh	23.3 (23.0-23.6)	20.4 (19.2-21.6)	39.4 (32.0-47.9)	44.9 (35.3-56.2)	5.8 (4.8-7.1)	22.8 (22.5-23.1)
West India						
Gujarat	12.1 (11.9-12.3)	8.7 (8.2-9.3)	9.0 (6.8-11.7)	9.7 (5.0-16.9)	6.9 (5.7-8.3)	11.7 (11.5-11.9)
Daman & Diu	11.4 (8.8-14.6)	-	45.5 (9.4-132.8)	-	-	10.8 (8.4-13.8)
D & N Haveli	23.3 (20.0-27.0)	20.3 (7.4-44.1)	8.9 (0.2-49.8)	-	-	22.8 (19.6-26.3)
Maharashtra	14.8 (14.6-14.9)	8.1 (7.8-8.5)	12.1 (10.7-13.6)	13.5 (10.4-17.3)	15.9 (15.3-16.5)	14.1 (13.9-14.2)
Goa	17.9 (16.3-19.6)	7.6 (4.9-11.3)	10.4 (8.4-12.6)	26.3 (0.7-146.6)	105.3 (64.3-162.6)	15.6 (14.4-16.9)
South India						
Andhra Pradesh	16.7 (16.5-16.9)	15.2 (14.6-15.8)	42.7 (40.1-45.5)	37.7 (26.0-53.0)	204.8 (197.2-212.7)	18.3 (18.1-18.5)
Karnataka	18.8 (18.5-19.1)	8.4 (7.9-8.8)	23.0 (21.0-25.1)	16.2 (7.8-29.8)	26.8 (24.3-29.5)	17.6 (17.4-17.9)
Lakshadweep	-	5.2 (2.2-10.2)	-	-	-	5.0 (2.2-9.9)
Kerala	30.2 (29.6-30.7)	8.1 (7.7-8.5)	22.1 (21.3-22.9)	-	21.0 (16.5-26.5)	22.8 (22.4-23.1)
Tamil Nadu	22.8 (22.5-23.0)	19.3 (18.3-20.2)	31.9 (30.7-33.1)	21.8 (8.0-47.4)	29.8 (26.1-33.8)	23.1 (22.9-23.4)
Pondicherry	44.7 (42.2-47.3)	20.4 (14.5-28.0)	30.7 (23.4-39.6)	-	329.3 (243.6-435.4)	43.7 (41.4-46.1)
A & N Islands	38.9 (34.4-43.8)	8.2 (3.3-17.0)	16.5 (11.5-23.0)	29.4 (0.7-163.9)	-	31.3 (27.9-35.0)
Total	11.4 (11.3-11.4)	7.0 (6.9-7.0)	17.6 (17.2-17.9)	4.3 (4.1-4.5)	19.3 (18.9-19.7)	10.9 (10.9-11.0)

Supplementary Table 2: Suicide rates by caste, tribe and other backward classes, India (2014-2015, 95%CI)

	Scheduled caste Rate /100,000 (95%CI)	Scheduled tribe Rate /100,000 (95%CI)	Other backward classes Rate /100,000 (95%CI)	General Rate /100,000 (95%CI)	Total Rate /100,000 (95%CI)
North India					
Jammu & Kashmir	2.8 (2.1-3.7)	1.4 (1.0-2.0)	0.9 (0.6-1.3)	3.0 (2.8-3.3)	2.6 (2.4-2.8)
Himachal Pradesh	7.8 (6.9-8.8)	4.1 (2.6-6.2)	8.7 (7.5-10.0)	9.0 (8.4-9.7)	8.5 (8.0-9.0)
Punjab	3.8 (3.5-4.1)	-	3.4 (3.0-3.8)	3.2 (3.0-3.4)	3.5 (3.3-3.6)
Chandigarh	13.3 (10.5-16.7)	-	5.5 (3.9-7.4)	5.5 (4.5-6.6)	6.8 (6.0-7.8)
Uttarakhand	2.1 (1.6-2.6)	10.8 (8.4-13.7)	2.3 (1.8-2.8)	3.5 (3.2-3.9)	3.3 (3.0-3.5)
Haryana	12.2 (11.5-12.9)	-	10.2 (9.7-10.7)	13.8 (13.4-14.3)	12.5 (12.2-12.8)
Delhi	2.7 (2.3-3.1)	-	9.7 (9.0-10.4)	11.4 (11.0-11.8)	9.6 (9.3-9.9)
Rajasthan	6.8 (6.5-7.1)	7.3 (6.9-7.7)	3.7 (3.6-3.9)	7.3 (7.0-7.6)	5.5 (5.4-5.6)
Uttar Pradesh	1.5 (1.4-1.5)	17.3 (13.6-21.7)	1.3 (1.3-1.4)	2.9 (2.8-3.0)	1.8 (1.7-1.8)
North-East India					
Sikkim	51.7 (35.1-73.3)	61.1 (51.7-71.6)	20.4 (17.0-24.3)	62.7 (53.8-72.6)	40.4 (36.9-44.2)
Arunachal Pradesh	346.7 (258.9-454.6)	5.6 (4.5-6.9)	42.9 (28.9-61.2)	14.7 (12.2-17.6)	11.6 (10.3-13.1)
Nagaland	-	0.4 (0.2-0.6)	76.1 (30.6-156.8)	2.0 (1.0-3.7)	0.7 (0.5-1.0)
Manipur	0.7 (0.0-4.0)	0.4 (0.2-0.8)	0.7 (0.4-1.1)	11.7 (8.9-15.0)	1.7 (1.4-2.1)
Mizoram	-	11.7 (10.3-13.4)	37.5 (19.4-65.5)	1.3 (0.0-7.1)	12.0 (10.5-13.6)
Tripura	30.7 (27.7-33.8)	11.1 (9.8-12.6)	20.7 (18.3-23.4)	22.5 (20.7-24.4)	20.1 (19.1-21.1)
Meghalaya	29.6 (12.8-58.4)	3.8 (3.2-4.4)	20.1 (10.7-34.3)	11.4 (8.9-14.2)	5.0 (4.4-5.7)
Assam	18.7 (17.5-20.0)	4.0 (3.5-4.4)	11.4 (10.9-11.9)	10.7 (10.4-11.0)	10.6 (10.3-10.8)
East India					
Bihar	0.4 (0.4-0.5)	1.0 (0.6-1.5)	0.4 (0.3-0.4)	1.4 (1.3-1.5)	0.6 (0.6-0.6)
West Bengal	7.6 (7.3-7.8)	11.7 (11.1-12.4)	22.9 (22.2-23.7)	17.9 (17.7-18.1)	15.6 (15.4-15.8)
Jharkhand	3.0 (2.6-3.4)	1.7 (1.5-1.9)	1.7 (1.6-1.9)	10.7 (10.1-11.4)	3.2 (3.1-3.4)
Orrisa	8.8 (8.3-9.3)	7.3 (7.0-7.7)	9.0 (8.6-9.3)	13.3 (12.9-13.8)	9.8 (9.6-10.0)
Central India					
Chhattisgarh	32.0 (30.6-33.5)	19.9 (19.2-20.6)	22.3 (21.6-22.9)	44.9 (43.2-46.7)	25.1 (24.7-25.6)
Madhya Pradesh	22.8 (22.0-23.7)	23.9 (23.2-24.6)	19.7 (19.2-20.2)	27.5 (26.8-28.3)	22.8 (22.5-23.1)
West India					
Gujarat	19.7 (18.7-20.6)	10.7 (10.3-11.2)	9.4 (9.1-9.7)	13.0 (12.7-13.3)	11.7 (11.5-11.9)
Daman & Diu	5.4 (0.1-30.0)	13.3 (5.3-27.3)	5.3 (2.7-9.2)	14.9 (10.9-20.0)	10.8 (8.4-13.8)
D & N Haveli	26.3 (7.2-67.4)	24.9 (20.7-29.7)	17.4 (6.4-38.0)	19.0 (14.0-25.2)	22.8 (19.6-26.3)
Maharashtra	17.3 (16.8-17.8)	12.8 (12.3-13.3)	11.2 (11.0-11.4)	15.6 (15.4-15.9)	14.1 (13.9-14.2)
Goa	5.8 (1.6-15.0)	-	9.6 (7.4-12.2)	15.8 (14.4-17.3)	15.6 (14.4-16.9)
South India					
Andhra Pradesh	18.6 (18.1-19.1)	23.8 (22.9-24.7)	16.1 (15.8-16.4)	21.1 (20.7-21.5)	18.3 (18.1-18.5)
Karnataka	11.4 (10.9-11.9)	11.3 (10.6-12.1)	15.1 (14.8-15.3)	30.8 (30.1-31.4)	17.6 (17.4-17.9)
Lakshadweep	-	5.3 (2.3-10.4)	0.0 (0.0-329.7)	0.0 (0.0-48.0)	5.0 (2.2-9.9)
Kerala	16.3 (15.4-17.3)	56.6 (51.5-62.2)	16.5 (16.1-16.9)	41.2 (40.2-42.2)	22.8 (22.4-23.1)
Tamil Nadu	25.8 (25.1-26.4)	32.9 (30.0-36.1)	15.1 (14.9-15.3)	165.1 (161.7-168.6)	23.1 (22.9-23.4)
Pondicherry	54.0 (47.7-60.8)	-	23.9 (22.0-26.0)	245.1 (224.2-267.3)	43.7 (41.4-46.1)
A & N Islands	-	-	50.3 (40.5-61.7)	24.8 (21.5-28.4)	31.3 (27.9-35.0)
Total	9.4 (9.3-9.5)	10.7 (10.6-10.9)	8.6 (8.6-8.7)	15.0 (14.9-15.1)	10.9 (10.9-11.0)

Supplementary Table 3: Population percentage by religion, caste, tribe and other backward classes in India

	Hindu	Muslim	Christian	Sikh	SC	ST	OBC
North India							
Jammu & Kashmir	28.4%	68.3%	0.2%	1.8%	7.4%	11.1%	11.4%
Himachal Pradesh	95.1%	2.1%	0.1%	1.1%	25.2%	5.7%	17.1%
Punjab	38.4%	1.9%	1.2%	57.6%	31.9%	-	16.1%
Chandigarh	80.7%	4.8%	0.8%	13.1%	18.9%	-	22.2%
Uttarakhand	82.9%	13.9%	0.3%	2.3%	18.8%	2.9%	18.3%
Haryana	87.4%	7%	0.2%	4.9%	20.2%	-	28.3%
Delhi	81.6%	12.8%	0.8%	3.4%	16.8%	-	19.5%
Rajasthan	88.4%	9%	0.1%	1.2%	17.8%	13.5%	47.3%
Uttar Pradesh	79.7%	19.2%	0.1%	0.3%	20.7%	0.6%	54.5%
North-East India							
Sikkim	57.7%	1.6%	9.9%	0.3%	4.6%	33.8%	50.6%
Arunachal Pradesh	29%	1.9%	30.2%	0.2%	0.6%	64.2%	2.8%
Nagaland	8.7%	2.4%	87.9%	0.1%	-	86.5%	0.2%
Manipur	41.3%	8.4%	41.2%	0.05%	3.4%	40.9%	52.7%
Mizoram	2.7%	1.3%	87.1%	0.03%	0.1%	94.4%	1.6%
Tripura	83.4%	8.6%	4.3%	0.03%	17.8%	31.8%	16.4%
Meghalaya	11.5%	4.4%	74.5%	0.1%	0.6%	86.1%	1.2%
Assam	61.4%	34.2%	3.7%	0.07%	6.9%	12.4%	25.3%
East India							
Bihar	82.6%	16.8%	0.1%	0.02%	15.7%	0.9%	62.6%
West Bengal	70.4%	27%	0.7%	0.07%	23.5%	5.8%	8.7%
Jharkhand	67.8%	14.5%	4.3%	0.2%	12.1%	26.2%	46.8%
Orrisa	93.6%	2.1%	2.7%	0.05%	17.1%	22.8%	33.2%
Central India							
Chhattisgarh	93.2%	2%	1.9%	0.2%	1.6%	31.8%	45.5%
Madhya Pradesh	90.8%	6.5%	0.2%	0.2%	15.6%	21.1%	41.5%
West India							
Gujarat	88.7%	9.6%	0.5%	0.1%	6.7%	14.8%	40.2%
Daman & Diu	90.5%	7.5%	1.1%	0.07%	2.5%	6.3%	37.9%
D & N Haveli	93.9%	3.7%	1.4%	0.06%	1.8%	52%	4.3%
Maharashtra	79.8%	11.5%	0.9%	0.2%	11.8%	9.4%	33.8%
Goa	66%	8.3%	25.1%	0.1%	1.8%	10.2%	17.9%
South India							
Andhra Pradesh	88.4%	9.5%	1.3%	0.05%	16.2%	6.6%	50.4%
Karnataka	84%	12.9%	1.8%	0.05%	17.1%	7%	55.5%
Lakshadweep	2.7%	96.5%	0.4%	0.01%	-	94.8%	0.7%
Kerala	54.3%	26.5%	18.3%	0.01%	9.1%	1.5%	65.3%
Tamil Nadu	87.5%	5.8%	6.1%	0.02%	20%	1.1%	76.1%
Pondicherry	87.3%	6%	6.2%	0.02%	15.7%	-	77.1%
A & N Islands	69.4%	8.5%	21.2%	0.3%	-	7.5%	18.1%
Total	79.8%	14.2%	2.3%	1.7%	16.6%	8.6%	44%

Supplementary Table 4: Rate ratios (RR, 95%CI) of suicide by specific religions (compared to Hindu) and by caste, tribe and other backward classes (compared to General category), India (2014-2015)

	RR (Muslim)	RR (Christian)	RR (Sikh)	RR (SC)	RR(ST)	RR (OBC)
North India						
Jammu & Kashmir	0.35 (0.02-5.65)		0.33 (0.02-5.89)	0.93 (0.06-15.08)	0.47 (0.03-7.72)	0.29 (0.02-4.71)
Himachal Pradesh	0.43 (0.02-7.24)		0.30 (0.02-5.58)	0.86 (0.05-13.86)	0.45 (0.03-7.49)	0.96 (0.06-15.43)
Punjab	0.76 (0.05-12.47)	0.73 (0.04-12.13)	0.72 (0.04-11.51)	1.16 (0.07-18.64)	-	1.04 (0.06-16.67)
Chandigarh	0.41 (0.02-7.79)		2.18 (0.13-35.40)	2.43 (0.15-39.52)	-	1.00 (0.06-16.32)
Uttarakhand	0.72 (0.04-11.64)	0.75 (0.03-16.69)	0.24 (0.01-4.58)	0.59 (0.04-9.53)	3.07 (0.19-49.65)	0.64 (0.04-10.39)
Haryana	0.66 (0.04-10.64)	3.53 (0.22-57.25)	0.96 (0.06-15.34)	0.88 (0.06-14.12)	-	0.74 (0.05-11.80)
Delhi	0.72 (0.04-11.53)	0.29 (0.02-5.03)	0.27 (0.02-4.39)	0.24 (0.01-3.79)	-	0.85 (0.05-13.60)
Rajasthan	1.16 (0.07-18.62)	2.55 (0.15-42.27)	1.09 (0.07-17.47)	0.94 (0.06-14.97)	1.00 (0.06-15.99)	0.51 (0.03-8.21)
Uttar Pradesh	0.47 (0.03-7.48)	1.09 (0.07-18.04)	0.68 (0.04-11.38)	0.50 (0.03-8.05)	5.97 (0.37-96.40)	0.46 (0.03-7.32)
North-East India						
Sikkim	0.10 (0.00-3.09)	0.17 (0.01-2.86)		0.82 (0.05-13.53)	0.97 (0.06-15.71)	0.33 (0.02-5.26)
Arunachal Pradesh	0.71 (0.04-12.26)	0.13 (0.01-2.12)	0.75 (0.03-22.34)	23.60 (1.45-384.52)	0.38 (0.02-6.19)	2.92 (0.18-48.00)
Nagaland	0.52 (0.02-12.00)	0.11 (0.01-1.86)		-	0.19 (0.01-3.43)	37.45 (1.99-705.06)
Manipur	0.23 (0.01-4.57)	0.11 (0.01-1.92)		0.06 (0.00-1.84)	0.04 (0.00-0.63)	0.06 (0.00-1.04)
Mizoram	0.22 (0.01-5.01)	0.36 (0.02-5.91)		-	9.16 (0.31-273.79)	29.25 (0.94-913.66)
Tripura	1.41 (0.09-22.60)	0.63 (0.04-10.26)	2.20 (0.07-65.74)	1.36 (0.08-21.82)	0.49 (0.03-7.94)	0.92 (0.06-14.77)
Meghalaya	0.52 (0.03-8.69)	0.33 (0.02-5.37)		2.61 (0.15-45.86)	0.33 (0.02-5.35)	1.77 (0.10-30.06)
Assam	0.80 (0.05-12.82)	0.87 (0.05-14.02)	4.94 (0.30-81.43)	1.75 (0.11-28.00)	0.37 (0.02-5.95)	1.07 (0.07-17.06)
East India						
Bihar	1.03 (0.06-16.53)			0.31 (0.02-4.91)	0.69 (0.04-11.47)	0.26 (0.02-4.20)
West Bengal	0.79 (0.05-12.57)	1.92 (0.12-30.80)	0.14 (0.01-2.78)	0.42 (0.03-6.75)	0.65 (0.04-10.47)	1.28 (0.08-20.49)
Jharkhand	0.96 (0.06-15.46)	1.13 (0.07-18.12)	1.86 (0.11-32.14)	0.28 (0.02-4.44)	0.16 (0.01-2.53)	0.16 (0.01-2.57)
Orrisa	4.04 (0.25-64.59)	1.83 (0.11-29.36)		0.66 (0.04-10.53)	0.55 (0.03-8.82)	0.67 (0.04-10.79)
Central India						
Chhattisgarh	1.21 (0.08-19.38)	1.82 (0.11-29.17)	2.79 (0.17-45.03)	0.71 (0.04-11.41)	0.44 (0.03-7.07)	0.50 (0.03-7.92)
Madhya Pradesh	0.88 (0.05-14.00)	1.69 (0.10-27.19)	1.93 (0.12-31.06)	0.83 (0.05-13.26)	0.87 (0.05-13.89)	0.72 (0.04-11.46)
West India						
Gujarat	0.72 (0.05-11.56)	0.75 (0.05-12.11)	0.80 (0.05-13.57)	1.51 (0.09-24.22)	0.83 (0.05-13.24)	0.72 (0.05-11.59)
Daman & Diu		3.98 (0.20-80.30)		0.36 (0.01-10.86)	0.89 (0.05-15.87)	0.35 (0.02-6.07)
D & N Haveli	0.87 (0.05-15.64)	0.38 (0.01-11.46)		1.39 (0.07-26.57)	1.31 (0.08-21.41)	0.92 (0.05-16.68)
Maharashtra	0.55 (0.03-8.78)	0.82 (0.05-13.11)	0.92 (0.06-14.79)	1.11 (0.07-17.68)	0.82 (0.05-13.10)	0.72 (0.04-11.43)
Goa	0.43 (0.03-7.00)	0.58 (0.04-9.35)	1.47 (0.05-43.87)	0.37 (0.02-7.00)		0.60 (0.04-9.77)
South India						
Andhra Pradesh	0.91 (0.06-14.54)	2.55 (0.16-40.83)	2.26 (0.14-36.82)	0.88 (0.05-14.06)	1.13 (0.07-18.03)	0.76 (0.05-12.19)
Karnataka	0.44 (0.03-7.11)	1.22 (0.08-19.57)	0.86 (0.05-14.77)	0.37 (0.02-5.93)	0.37 (0.02-5.89)	0.49 (0.03-7.83)
Lakshadweep	.			-	-	-
Kerala	0.27 (0.02-4.30)	0.73 (0.05-11.73)		0.40 (0.02-6.35)	1.37 (0.09-22.01)	0.40 (0.03-6.40)
Tamil Nadu	0.85 (0.05-13.54)	1.40 (0.09-22.42)	0.96 (0.05-17.13)	0.16 (0.01-2.49)	0.20 (0.01-3.20)	0.09 (0.01-1.46)
Pondicherry	0.46 (0.03-7.45)	0.69 (0.04-11.12)		0.22 (0.01-3.53)		0.10 (0.01-1.57)
A & N Islands	0.21 (0.01-3.74)	0.42 (0.03-6.94)	0.76 (0.03-22.58)	-	-	2.03 (0.13-32.79)
Total	0.61 (0.60-0.62)	1.55 (1.52-1.58)	0.38 (0.36-0.40)	0.63 (0.62-0.64)	0.72 (0.71-0.73)	0.58 (0.57-0.58)

