



AN EMPIRICAL ANALYSIS OF SUICIDAL TRENDS IN INDIA FROM 2014 TO 2018: A RETROSPECTIVE APPROACH

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ABSTRACT

One of the major issues that we can observe as a trend; also, the constituent considers it as a criminal act is "SUICIDE". The scope of this research covers the statistical analysis of the recent trends in suicidal activity in various states of India. Section 306 of IPC (Indian Penal Code) covers this crime and states "Whoever attempts to commit suicide and does any such activity towards the commission of suicide, shall be punished with simple imprisonment for a term which may extend to one year or fine or both". Although various governmental and non-governmental organisations continuously spreading awareness among people, but various reasons still dominating to result such crime to be happened. Following analysis is based on age groups, gender and region wise comparison to reveal the stats in the near past. This can be helpful for various studies further and can give an Idea regarding the act.

KEYWORDS : Suicidal Trends, Forensic analysis, Intentional Self Harming, Hanging, Family Issues

INTRODUCTION

Suicide represents a major public-health problem worldwide. The World Health Organization (WHO) estimates 800 000 people die by suicide each year all over the world and around 1,00,000 in India. Since 1967, India's National Crime Records Bureau (NCRB) is collecting suicidal reports from police record and publish yearly reports on suicide. According to the statistics by the NCRB, A 3.6 per cent increase was observed in suicides during 2018(1,34,516) compared to 2017(1,29,887), data showed. The aim of present study is to present the analysis of five years suicidal trends including rate, sex, method, cause and age of the people who were decreased due to suicide during this period in India. Hanging was found to be the major mode of suicide in majority of the cases. Data were collected from National Crime Records Bureau. "Intentional Self Harm" or ISH in recent past replaced the commonly used term "Suicide" because of its derogatory approach [1]. According to World Health Organisation, suicide comes in the top 13 causes of death (F & B, 2008). Millions of suicidal deaths are being reported world-wide per annum and around 20% of those suicide victims are Indians [2]. However, our study includes the number of individuals those committed suicide rather than the individual who attempted suicide. The figure is 20 times more frequent than in case of suicide attempt [3,4]. Tamilnadu, Karnataka, Maharashtra, Andhra Pradesh, West Bengal recorded the highest percentage of suicidal act in near past which is around 52% together. In this study, the main objective is to approach the complete information regarding suicidal deaths in India. Also, to classify the information considering various parameters such as cause of suicide, gender based, marital status, economic status based, educational and age group based. National Crime Records Bureau official website is considered as the major source of information.

MATERIALS AND METHOD

This retrospective analysis was done in India using various information available online. Most of the data collection was done form National Crime Records Bureau (NCBR) ("National Crime Records Bureau," n.d.) [2]. The analysis was done considering the alarming rate of increase in suicidal rate by various means. Various parameters have been taken into account for the classification and analysis, such as- number of suicides and rate of suicide, distribution according to age, gender, profession, educational qualification, means adopted, cause of suicidal attempt, economic status etc.

RESULTS

The collection of data was done and presented considering

the last 5 years, that is 2014 to 2018. Information presented in a tabular manner below and discussed further.

Table 1- Number Of Suicides, Growth Of Population And Rate Of Suicides During 2014 - 2018

Sl. No.	Year	Total no. of suicide	Mid-Year Projected Population* (in Lakh) +	Rate of Suicides*** (Col.3/Col.4)
1	2014	1,31,666	12,440.4	10.6
2	2015	1,33,623	12,591.1	10.6
3	2016	1,31,008	12,739.9	10.3
4	2017	1,29,887	13091.6	9.9
5	2018	1,34,516	13233.8	10.2

Source: Report of the Technical Group on Population Projections (November,2019), National Commission on Population, Ministry of Health & Family Welfare ("National Crime Records Bureau," n.d.).

+ One Lakh = 0.1 Million

*** Rate of Suicides = Incidence of suicides per one lakh (1,00,000) of population.

Table 2. Distribution Of Suicidal Cases According To Sex

Year	Male	Female	Transgender	Total
2014	89129	42521	16	131666
2015	91528	42088	7	133623
2016	88997	41997	14	131008
2017	89019	40852	16	129887
2018	92114	42391	11	134516

Table 3. Age Wise Distribution

Year	below 18 years	18 yrs. – Below 30 years	30 yrs. – Below 45 years	45 yrs. – Below 60 years	60 years & above
2014	1095	44883	42384	5248	9761
2015	9408	43852	44593	25376	10394
2016	8951	43213	42971	25684	10189
2017	9316	45217	40941	24265	10148
2018	9431	46912	42495	24982	10696

Table 4. Number(n) And Percentage (%) Share Of Victims As Per The Means Adopted During 2014-2018

Year	2014	2015	2016	2017	2018	Total
Means adopted						
Consuming	0.5%	0.5%	0.5%	0.8%	0.7%	0.6%

Sleeping Pills	(714)	(645)	(704)	(1,015)	(939)	(4017)
Drowning	5.6% (7,426)	5.4% (7,267)	4.8% (6,263)	4.8% (6,235)	4.9% (6,579)	5.1% (33770)
Fire/Self Immolation	6.9% (9,122)	7.2% (9,558)	7.0% (9,208)	5.3% (6,858)	4.4% (5,950)	6.1% (40696)
Firearms	0.4% (507)	0.4% (469)	0.4% (492)	0.4% (480)	0.4% (521)	0.4% (2469)
By Hanging	41.8% (55,050)	45.6% (60,952)	46.2% (60,494)	49.8% (64,705)	51.5% (69,306)	46.8% (310507)
By Poison	26.0% (34,254)	27.9% (37,232)	26.6% (34,869)	27.5% (35,671)	26.7% (35,862)	26.8% (177888)
By Self inflicting Injury	0.4% (566)	0.4% (572)	0.6% (769)	0.8% (975)	0.6% (772)	0.6% (3654)
By Jumping	1.1% (1,408)	1.8% (2,382)	1.7% (2,265)	1.7% (2,203)	1.9% (2,557)	1.6% 10815
By Coming under Running Vehicles/Train s	2.6% (3,387)	2.5% (3,338)	2.2% (2,884)	2.9% (3,816)	2.9% (3,848)	2.6% (17273)
By Touching Electric Wire	2.5% (3,338)	0.7% (954)	0.5% (647)	0.4% (560)	0.4% (565)	0.9% (6064)
By Other Means	14.0% (18,480)	7.7% (10,254)	9.5% (12,413)	5.7% (7,369)	5.7% (7,617)	8.5% (56133)
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 5. Percentage Of Suicide Victims By Educational Level During 2014-2018

Sl. No.	Educational Level	2014	2015	2016	2017	2018
1	No Education	14.3	13.8	13.8	13.0	12.7
2	Primary Level	19.0	19.7	18.3	16.3	17.1
3	Middle Level	20.2	21.2	20.1	19.4	19.5
4	Matriculate/Secondary Level	20.5	21.7	22.6	23.6	23.6
5	Higher Secondary Level	11.0	11.9	12.8	15.9	16.4
6	Diploma	1.1	1.2	1.1	1.2	1.1
7	Graduate & above	2.8	2.8	3.1	3.5	3.3
8	Professionals (MBA etc.)	0.3	0.4	0.2	0.3	0.3
9	Status Not Known	10.8	7.4	8.1	6.8	6.0
10	Total	100.0	100.0	100.0	100.0	100.0

Table 6. Causes - Wise Distribution Of Suicides During 2014-2018

Sl. No	Cause	2014	2015	2016	2017	2018	Total
1	Bankruptcy or Indebtedness	2308 1.8	4357 3.3	3709 2.8	5151 4.0	4970 3.7	20495 3.1
2	Marriage Related Issues	6773 5.1	6412 4.8	6880 5.3	7196 5.5	8284 6.2	35545 5.4
3	Failure in Examination	2403 1.8	2646 2.0	2408 1.8	2540 2.0	2625 2.0	12622 1.9
4	Impotency/Infertility	332 0.3	448 0.3	317 0.2	363 0.3	297 0.2	1757 0.3
5	Other Family problems	2860 21.7	3692 27.6	3826 29.2	3903 30.1	4093 30.4	183770 27.8
6	Illness	2374 18.0	2117 15.8	2241 17.1	2398 18.5	2376 17.7	115087 17.4
7	Death of Dear Person	981 0.7	951 0.7	1176 0.9	1074 0.8	1073 0.8	5255 0.8
8	Drug Abuse/Addiction	3647 2.8	3670 2.7	5199 4.0	6705 5.2	7193 5.3	26414 4
9	Fall in Social Reputation	490 0.4	1093 0.8	844 0.6	607 0.5	524 0.4	3558 0.5

10	Ideological Causes/Hero Worshipping	56 0.0	57 0.0	123 0.1	94 0.1	94 0.1	424 0.1
11	Love Affairs	4168 3.2	4476 3.3	4579 3.5	5100 3.9	5342 4.0	23665 3.6
12	Poverty	1699 1.3	1699 1.3	1172 0.9	1198 0.9	1202 0.9	6970 1.1
13	Unemployment	2207 1.7	2723 2.0	2298 1.8	2404 1.9	2741 2.0	12373 1.9
14	Property Dispute	1067 0.8	2491 1.9	2590 2.0	1301 1.0	1209 0.9	8658 1.3
15	Suspected/ Illicit Relation	458 0.3	474 0.4	769 0.6	774 0.6	653 0.5	3128 0.5
16	Illegitimate Pregnancy	56 0.0	49 0.0	40 0.0	42 0.0	44 0.0	231 0
17	Physical Abuse (Rape, etc.)	74 0.1	80 0.1	112 0.1	107 0.1	192 0.1	565 0.1
18	Professional/Car eer Problem	903 0.7	1590 1.2	1869 1.4	1875 1.4	1697 1.3	7934 1.2
19	Causes Not Known	1626 4 12.4	1621 4 12.1	1503 7 11.5	1447 9 11.1	1482 8 11.0	76822 11.6
20	Other Causes	3543 2 26.9	2608 7 19.5	2120 8 16.2	1585 1 12.2	1684 9 12.5	115427 17.5
21	Total	1316 66 100.0	1336 23 100.0	1310 08 100.0	1298 87 100.0	1345 16 100.0	660700 100

Table 7. Marital Status Wise Distribution Of Suicides During 2014-2018

Sl. No.	Marital Status	Male	Female	Transgender	Total	Percentage Share
1	Un-Married	93677	50161	32	143870	21.8
2	Married	312863	136836	1	449700	68.1
3	Widowed/ Widower	6461	5763	1	12225	1.9
4	Divorcee	2763	1905	0	4668	0.7
5	Separated	3760	1579	4	5343	0.8
6	Others	13185	6059	15	19259	2.9
7	7 Status not known	18078	7546	8	25632	3.9
	Total	450787	209849	61	660697	100

Table 8. Economic Status

Economic Status	Male	Female	Transgender	Total	Percentage share
less than ` 1 lakh	300822	151181	55	452058	68.4
1 lakh & above - less than ` 5 lakhs	129211	50892	7	180110	27.3
` 5 lakhs & above - less than ` 10 lakhs	16443	6236	2	22681	3.4
10 lakhs and above	4311	1540	0	5851	0.9
Total	450787	209849	64	660700	100

Table 9. Educational Status Wise

Sl. No	Educational Status	Male	Female	Transgender	Total	Percentage share
1	No Education	56915	32335	20	89270	13.5
2	Primary (up to class-5th)	80831	38754	8	119593	18.1

3	Middle (up to class-8th)	91574	40989	10	132573	20.1
4	Matriculate/ Secondary (up to class-10th)	103752	44241	8	148001	22.4
5	Hr. Secondary/ Intermediate/ Pre-University (up to class-12th)	61121	28566	3	89690	13.6
6	6 Diploma/ Certificate/ ITI	5774	1758	1	7533	1.1
7	Graduate and above	14534	6026	0	20560	3.1
8	Professionals (MBA etc.)	1414	563	1	1978	0.3
9	Status Not Known	34872	16617	13	51502	7.8
	Total	450787	209849	64	660700	100

DISCUSSION

The study clearly points out various facts regarding the suicidal trend in India. As per the collected information the rate of suicide slightly decreased in the period of 2014 to 2018. In initiation year 2014, the rate of suicide was noted as 10.6, wherein the rate recorded at the terminal year was 10.2. Although there was fluctuation in this number during the period of 2014 to 2016, the highest recorded rate remained 10.6 (Table-1). Considering the gender of all the individuals who committed suicide, we found the highest number in males. Starting from 2014-2018, the number of males who committed suicide varied between 89129 to 92114. So, here we can clearly observe a clear inclination in this number. However, the transgender group was found to be less prone to suicidal commission (Table-2) [5,6,7]. If we arrange this in an ascending order, then the formulation will be Transgender < Female < Male. Except in the year 2015, the age group between 18 to 30 in all the 4 years were found to be the highest in number in committing suicide. In the year 2015, the age group of 30-45 showed the highest number, that is 44593. When we categorised victims according to the means they adopted, we found higher percentage of people under the “hanging” category in all the respective years.

However, in the year 2018, 51% of the suicide committed by people by hanging. Also, we got to know that the means such as using a firearm, touching high voltage electric wire, consuming sleeping pills in excessive dosage, self-injuring are the less adopted means. As we further classified these cases according to the educational level of victims, fact that most of the people who did such act were Matriculate/ Secondary Level was noted and the percentage of people recorded was 23.6 in the years 2017 and 2018. The category of “Professionals (MBA etc.)” was found to be less prone to suicidal activity [10,11]. When classified further according to the cause, Family issue was noted as the highest impact on suicidal activity. Other facts can be found in the table-6 where in various reason to commit suicide is considered and the exact numbers are mentioned as well. In the study we figured out that the highest number of people who committed suicide were married.

Furthermore, married males were found to be more prone towards suicidal act in the years 2014, 2015, 2016, 2017 and 2018. In the table- 8 we can clearly see that the highest number of people who committed suicide were having a less financial condition that is below 100000/- per annum. Wherein, the

lowest number was noted in case of people who got a high economic condition that is 10,00000/- per annum or more [12].

CONCLUSION

In India, although we observed the suicidal rate as less fluctuating in recent 5 years which in numbers can be mentioned as 10.6 to 10.2, males tend to commit suicide more. The educated and married males number still occupied the top position. Causative factors when analysed, suggested the family issues results in more suicidal activities. The major means adopted was by hanging. These alarming number of suicidal cases due to various reasons as discussed above can be reduced and minimized in upcoming years. The awareness among the people is necessary. Psychological treatment, mentorship, guidance can play a major role to prevent these activities. The above analysis can help identifying various targeted parameters so that the necessary steps can be implicated directly on to the root of this issue.

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