

A study of socio demographic profile of farmer admitted for attempting suicide

Rahul N Hakepatil^{1*}, Reshma D Naik², S V Birajdar³, R T Ankushe⁴

{¹Associate Professor, ²JR, Department of Psychiatry} {³Professor & HOD, Department of Medicine} {⁴Professor and HOD, Department of Community Medicine} SRTR Medical College, Ambajogai, Beed, Maharashtra, INDIA.

Email: rahulhakepatil123@gmail.com

Abstract

Background: September 10 is celebrated as world suicide prevention day; World Health Organization defines suicide acts as “The injury with varying degrees of lethal intent and that suicide may be defined as suicidal act with fatal outcome” Attempted suicide can be defined as a non fatal self directed potentially injurious behaviour with intent to die. **Aims and Objectives:** To study socio demographic and clinical profile of farmers admitted for attempting suicide. **Material and Methodology:** This was a cross-sectional study carried out at the department of psychiatry of tertiary health care centre during the year 2019 to 2020 in patients who were taking treatment at psychiatry and medicine department were taken consent for taking interview by inclusion and exclusion criteria. The patients in the age group of 18-45 referred for psychiatric evaluation following admission in other department for suicidal attempt were included. A study sample consist of farmer in rural health centre for attempting suicide. In the one year duration total 50 patients were enrolled for study. The data was presented in percentages and proportion. **Result:** In our study we have found The majority of the patients were in the age group of 27-34 were 44% followed by 35-42 were 26%, 43-45 were 24% 18-26 were 06%. The majority of the patients were Male i.e. 68% and Female were 32 % Most of the patients were un-married i.e. 56% followed by Married were 40%, Separated were 2%, Divorced were 2%. Majority of the patients were rural by residence i.e. 88% and 12 % were Urban. Majority of the patients by educational status were Secondary 40%, followed by Illiterate were 36%, Primary -12%, Graduate were 08%, Higher secondary were 04%. Most of the patients were Unemployed by occupation i.e. 62% and 38% were employed. Most of the patients were having Nuclear Family i.e. 76% and 24% were having joint family. **Conclusion:** It can be concluded from above study that most common age was 27-34 Years, majority were males and most of the patients were having rural background and education up to secondary school most of them were having nuclear family and majority of them had 2000-3000 Rs monthly income.

Key word: Farmer suicide, Socio-demography of suicide, Factors associated with suicide

*Address for Correspondence:

Dr Rahul N Hakepatil, Associate Professor, Department of Psychiatry, SRTR Medical College, Ambajogai, Beed, Maharashtra, INDIA.

Email: rahulhakepatil123@gmail.com

Received Date: 18/04/2021 Revised Date: 21/05/2021 Accepted Date: 12/06/2021

DOI: <https://doi.org/10.26611/1071912>

This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/). 

Access this article online

Quick Response Code:	Website: www.medpulse.in
	Accessed Date: 13 July 2021

INTRODUCTION

September 10 is celebrated as world suicide prevention day; World Health Organization defines suicide acts as

“the injury with varying degrees of lethal intent and that suicide may be defined as suicidal act with fatal outcome. The top six states in India i.e. Maharashtra (3030), Karnataka (1297), Andhra Pradesh (516), Madhya Pradesh (581), Chhattisgarh (854), and Telangana (498) according to national crime records Bureau (2015-2016) According to the most recent World Health Organization (WHO) data that was available as of 2011,¹ the rates of suicide range from 0.7/100,000 in the Maldives to 63.3/100,000 in Belarus. India ranks 43rd in descending order of rates of suicide with a rate of 10.6/100,000 reported in 2009 (WHO suicide rates).¹ The rates of suicide have greatly increased among youth, and youth are now the group at highest risk in one-third of the developed and developing countries. The emerging phenomenon of “cyber-suicide” in the

internet era is a further cause for concern;^{2,3} also because the use of new methods of suicide are associated with epidemic increases in overall suicide rates.⁴ Suicide is nevertheless a private and personal act and a wide disparity exists in the rates of suicide across different countries. A greater understanding of region-specific factors related to suicide would enable prevention strategies to be more culturally sensitive. This focus is also highlighted in the September 10, 2012 World Suicide Prevention Day theme “Suicide Prevention across the Globe: Strengthening Protective Factors and Instilling Hope”.⁵

So, in Our study we have done the study of socio demographic profile of farmers admitted for attempting suicide

MATERIAL AND METHODOLOGY

This was a cross-sectional study carried out at the department of psychiatry of tertiary health care centre during the year 2019 to 2020 in patients who were taking treatment at psychiatry and medicine department were taken consent for taking interview by inclusion and exclusion criteria. The patients in the age group of 18-45 referred for psychiatric evaluation following admission in another department for suicidal attempt were included. A study sample consist of farmer in rural health centre for attempting suicide. In the one-year duration total 50 patients were enrolled for study. The data was presented in percentages and proportion.

RESULT

Table 1: Distribution of the patients as per the age

Age (Yrs.)	No. Patients	Percentage (%)
18-26	03	06
27-34	22	44
35-42	13	26
43-45	12	24
Total	50	100

The majority of the patients were in the age group of 27-34 were 44%, followed by 35-42 were 26%, 43-45 were 24%, 18-26 were 06%.

Table 2: Distribution of the patients as per the sex

Sex	No.	Percentage (%)
Male	34	68
Female	16	32
Total	50	100

The majority of the patients were Male i.e. 68% and Female were 32%.

Table 3: Distribution of the patients as per the marital status

Marital status	No	Percentage (%)
Un-married	28	56
Married	20	40
Separated	1	2
Divorced	1	2
Total	50	100

Most of the patients were un-married i.e. 56% followed by Married were 40%, Separated were 2%, Divorced were 2%.

Table 4: Distribution of the patients as per the residence

Residence	No.	Percentage (%)
Rural	44	88
Urban	6	12
Total	50	100

Majority of the patients were rural by residence i.e. 88% and 12 % were Urban

Table 5: Distribution of the patients as per the educational status

Status	No.	Percentage (%)
Illiterate	18	36
Primary	06	12
Secondary	20	40
Higher secondary	02	04
Graduate	04	08
Total	50	100

Majority of the patients by educational status were Secondary 40%, followed by Illiterate were 36%, Primary -12%, Graduate were 08%, Higher secondary were 04%.

Table 6: Distribution of the patients as per the Occupation

Occupation	No.	Percentage (%)
Employed	19	38
Unemployed	31	62
Total	50	100

Most of the patients were Unemployed by occupation i.e. 62% and 38% were employed

Table 7: Distribution of the patients as per the type of family

Family	No.	Percentage (%)
Joint	12	24
Nuclear	38	76
Total	50	100

Most of the patients were having Nuclear Family i.e. 76% and 24% were having joint family.

Table 8: Distribution of the patients as per income

Rupees per Months	No.	Percentage (%)
00	06	12
100-1000	04	08
1000-2000	16	32
2000-3000	20	40
>3000	04	08

The majority of the patients were having monthly income of 2000-3000 Rs were 40%, followed by 1000-2000 were 32%, 100-1000 and >3000 were 08%, 00 were 12%. Patients not earning and these patients were supported by family members.

DISCUSSION

In India the various methods of committing suicide, drowning occupies the first position and after it comes hanging and consumption of poison but most commonly Organophosphorus poisoning in farmers. To “Commit Suicide” is for a person voluntarily to do an act for the purpose of destroying his own life. The most common cause of suicide in farmers are crop failure, Loans, debt, addiction, poor prices for farm product, stress and family members responsibilities, poor irrigation, illness of family members, failure to arrange marriage of daughters, lack of alternative source of income and government apathy. As found in our study farmers are losing faith in government due to its failure to design and implement proper policies for majority of small farmers who survive on agriculture, hence the government should ensure institutional finance and crop insurance to small farmers. On an average, more than 1 lakh person committed suicide every year in India between 2004 and 2014. Of this, the 5 states of Maharashtra, Tamil Nadu, West Bengal, Karnataka, and Telangana together accounted for more than 50% of the suicides reported in 2014. Karnataka which had a suicide rate of 17.8, higher than the national average of 10.6, accounted for 10,945 suicides in 2014.⁶ The media have been regularly reporting about farmer suicides in these states. Globally, too agriculture as an industry has been shown to a high-risk occupation for suicide.⁷ A culmination of various factors such as dependency on unpredictable weather conditions for a good harvest, financial difficulties and indebtedness arising out of crop failures, limited availability of off-farm employment and relatively easy access to pesticides as a means of attempting suicides places the farmers at a higher risk of suicide than the general population.⁸ A psychological autopsy study conducted in central rural India found that economic problems, psychiatric illness, and stressful life events such as crop failure, interpersonal problems, medical illness, and marriage of female family member were important contributors to farmers' suicides.⁹ Studies from Europe have found that farmers were significantly more likely to use firearms to kill themselves. According to the World Health Organization (WHO), suicide in 2004 was the 8th leading cause of potential years of life lost worldwide among persons aged 15-44 years.¹³ Suicide is the third leading cause of death among those aged 15-44 years, and the second leading cause of death in the 10-24 years age group in some countries; these figures do not include suicide attempts which may be up to 20 times more frequent than completed suicide. The rate of suicide is highest in Eastern European countries such as Belarus, Estonia, Lithuania, and the Russian Federation. High rates of suicide have also been reported in Sri Lanka, based on data from the WHO Regional Office for South-East Asia.¹⁴

There is an interesting speculation that latitude and the daily amount of sunlight has an effect on rates of suicide.¹⁵ Rates of suicide are higher in northern parts of Japan and in northern countries of Europe compared to the southern countries. However, countries at about the same latitude, such as the UK and Hungary, have substantially different rates of suicide (21.6/100,000 and 6.9/100,000, respectively, in 2009).¹⁶ Low rates are found mainly in Latin America (notably Colombia and Paraguay) and some countries in Asia (eg., the Philippines and Thailand). Haiti reported no suicides in 2003. Countries in other parts of Europe, North America, and parts of Asia and the Pacific tend to fall in between these extremes. Eighty-six percent of all suicides occurred in the low and middle-income countries. The suicide rate in India is comparable to that of Australia and the USA; and the increasing rates during recent decades is consistent with the global trend. Data on suicide in India are available from the National Crime Records Bureau (NCRB; Ministry of Home Affairs). The suicide rates in India rose from 6.3 per 100,000 in 1978 to 8.9 per 100,000 in 1990, an increase of 41.3% during the decade from 1980 to 1990, and a compound growth rate of 4.1% per year. More recent data, however, reveal a different picture. The rate of suicide showed a declining trend from 1999 to 2002 and a mixed trend during 2003-2006, followed by an increasing trend from 2006 to 2010. During 2009, the rate was 10.9 per 100,000 population. This represented a 1.7% increase in suicides since 2008. In the most recent NCRB report the rate in 2010 rose to 11.4 per 100,000 population; an increase of 5.9% in the number of suicides. The NCRB data are based on police records. Sociocultural factors undermine the veracity of these records. Suicide attempt is a punishable offence under the Indian Penal Code (IPC Section 309); this results in under-reporting. Deaths in rural areas are certified by village headmen (“panchayatdars”) though all cases are investigated by the police. The process of registering a death is particularly inefficient in rural areas.¹⁷ Eventually, only about 25% of deaths are registered and only about 10% are medically certified.^{18,19} Death by suicide is frequently reported as due to illness or accident to avoid police investigation. The families of suicide victims usually do not want postmortems because of the fear of mutilation of the body, the time-consuming nature of the process, and the stigma involved. Statistics derived from police records hence under-report suicides. In our study we have found The majority of the patients were in the age group of 27-34 were 44%, followed by 35-42 were 26%, 43-45 were 24%, 18-26 were 06%. The majority of the patients were Male i.e. 68% and Female were 32 % Most of the patients were un-married i.e. 56% followed by Married were 40%, Separated were 2%, Divorced were 2%. Majority of the patients were rural by

residence i.e. 88% and 12 % were Urban. Majority of the patients by educational status were Secondary 40%, followed by Illiterate were 36%, Primary -12%, Graduate were 08%, Higher secondary were 04%. Most of the patients were Unemployed by occupation i.e. 62% and 38% were employed. Most of the patients were having Nuclear Family i.e. 76% and 24% were having joint family.

CONCLUSION

It can be concluded from above study that most common age was 27-34 Years, majority were males and most of the patients were having rural background and education up to secondary school most of them were having nuclear family and majority of them had 2000-3000 Rs monthly income.

REFERENCES

1. World Health Organization. Suicide rates per 100,000 by country, year and sex. [Last accessed on 2012 Mar 27]. Available from: http://www.who.int/mental_health/prevention/suicide_rates/en/index.html.
2. Rajagopal S. Suicide pacts and the internet. *BMJ*. 2004;329:1298–9.
3. Birbal R, Maharajh HD, Clapperton M, Jarvis J, Ragoonath A, Uppalapati K. Cybersuicide and the adolescent population: Challenges of the future? *Int J Adolesc Med Health*. 2009;21:151–9.
4. Thomas K, Chang SS, Gunnell D. Suicide epidemics: The impact of newly emerging methods on overall suicide rates - a time trends study. *BMC Public Health*. 2011;11:314.
5. International Association for Suicide Prevention. World Suicide Prevention Day. Sep 10, [Last cited in 2011]. Available from: http://www.iasp.info/wspd/2011_wspd.php
6. National Crime Records Bureau. Accidental Deaths and Suicides in India. New Delhi: Ministry of Home Affairs, Government of India; [Last updated on 2015 Jul 24; Last accessed on 2017 Jun 15]. Available from: <http://www.ncrb.nic.in/StatPublications/ADSI/ADSI2014/chapter2%20suicides.pdf>.
7. Roberts SE, Jaremin B, Lloyd K. High-risk occupations for suicide. *Psychol Med*. 2013;43:1231–40.
8. Behere PB, Bhise MC. Farmers' suicide: Across culture. *Indian J Psychiatry*. 2009;51:242–3.
9. Bhise MC, Behere PB. Risk factors for farmers' suicides in central rural India: Matched casecontrol psychological autopsy study. *Indian J Psychol Med*. 2016;38:560–6.
10. Booth N, Briscoe M, Powell R. Suicide in the farming community: Methods used and contact with health services. *Occup Environ Med*. 2000;57:642–4.
11. Stark C, Gibbs D, Hopkins P, Bellin A, Hay A, Selvaraj S. Suicide in Farmers in Scotland. *Rural and Remote Health*. 2006. [Last accessed on 2017 Jun 15]. Available from: http://www.rrh.org.au/publishedarticles/article_print_509.pdf.
12. Kapusta ND, Zorman A, Etzersdorfer E, Ponocny-Seliger E, Jandl-Jager E, Sonneck G. Ruralurban differences in Austrian suicides. *Soc Psychiatry Psychiatr Epidemiol*. 2008;43:311–8.
13. World Health Organization. Global Burden of Disease. 2004. [Last cited in 2004]. Update. Available from: http://www.who.int/healthinfo/global_burden_disease/GBD_report_2004update_full.pdf.
14. Gururaj GA, Isaac MK, Latif MA, Abeyasinghe R, Tantiwathanaskul P. SEA/Ment/118. New Delhi: WHO/SEARO; 2001. Suicide prevention- emerging from darkness.
15. Terao T, Soeda S, Yoshimura R, Nakamura J, Iwata N. Effect of latitude on suicide rates in Japan. *Lancet*. 2002;360:1892.
16. Hawton K, van Heeringen K. Suicide. *Lancet*. 2009;373:1372–81.
17. Bose A, Konradsen F, John J, Suganthi P, Muliylil J, Abraham S. Mortality rate and years of life lost from unintentional injury and suicide in south India. *Trop Med Int Health*. 2006;11:1553–6.
18. Bhat M. Vol. 7. Minneapolis, MI, United States: Centre for Population Analysis and Policy, Humphrey Institute of Public Affairs, University of Minnesota; 1991. Mortality from accidents and violence in India and China, Research Report 91-06-1.
19. Ruzicka LT. Suicide in countries and areas of the ESCAP region. *Asia Pac Popul J*. 1998;13:55–74.

Source of Support: None Declared
Conflict of Interest: None Declared