

Suicide in Rural Central India: Profile of Attempters of Deliberate Self Harm Presenting to Padhar Hospital in Madhya Pradesh

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ABSTRACT

Background: Suicide is a significant public health issue. India currently has the largest number of suicides in the world and has a disproportionate number of youth suicides including young women. The studies on patterns of suicide in rural central India are sparse, particularly among tribal communities. **Aims:** The aim of this study is to describe the profile of suicide attempters presenting to a secondary-level hospital in rural central India and identify areas for potential future research toward preventive strategies. **Materials and Methods:** A retrospective chart review was carried out of eighty patients who were admitted with presenting complaints of deliberate self-harm and survived until psychiatric consultation. Descriptive statistics was employed to generate the results. **Results and Conclusions:** 86% of the attempts were isolated impulsive attempts following triggers, the most common of which was interpersonal disputes (71%). Only 67% of patients had a mental health condition, the most common syndrome being alcohol use disorder, followed by depression, and personality disorders. Although 45% of attempters had background interpersonal conflicts, only 5% reported financial stressors as contributory. Psychosocial stressors, especially interpersonal conflicts within the family, appear to be at least as important factors as mental illnesses in contributing to suicide attempts in the area.

Key words: Rural central India, suicide, triggers of suicide

INTRODUCTION

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,^[1] a situation made even more alarming by the unusually large proportion of youth - including young women - that complete suicide in the country.^[2]

Suicide patterns in rural central India have been described in some studies;^[3] however, patterns across different tribal and ethnic groups have been insufficiently researched to date. This paper describes the profile of suicide attempters presenting to a rural secondary-level hospital in a predominantly tribal area in Central India, with the aim to identify the

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areas of potential future research toward preventive strategies.

Setting

Padhar Hospital is a 200-bed, multispecialty, Lutheran mission hospital in the Betul district of the state of Madhya Pradesh. The Psychiatry Department at Padhar is currently the only full-time mental health facility in a radius of 200 km. The department provides outpatient and inpatient care for psychiatric disorders and also runs a community mental health project, Project Shifa, covering 75 surrounding villages. It also provides consultation-liaison services to other departments, including for all patients who survive after presenting to the hospital with deliberate self-harm. The population served is multi-ethnic, predominantly consisting of tribal populations such as the Gonds as well as Hindi-speakers, and a few large minorities such as a second-generation Bengali refugee population from Bangladesh.

MATERIALS AND METHODS

A retrospective chart review was done of all patients who were admitted in Padhar Hospital between June 2014 and April 2016 with presenting complaints of deliberate self-harm and survived till they underwent inpatient psychiatric consultation. Although 82 patients met inclusion criteria, 2 patients were excluded as their charts could not be traced. Thus, 80 patients were included in the study. Data were collected from the charts using a structured data collection sheet that included both demographic and clinical details. Descriptive statistics was employed to generate the results.

RESULTS

Demographic factors

Forty-five (56%) of our patients were male, and 35 (44%) were female. Apart from ten patients (12%) of other ethnicity (including seven Bengalis), the overwhelming majority were members of the local Hindi-speaking or Gondi tribal populations. Seventy-six patients (95%) were Hindus, with two each from Christian and Muslim backgrounds. Fifty-five patients (69%) were from rural agrarian families while 25 (31%) were from urban or semi-urban backgrounds. Forty-nine (61%) were from lower socioeconomic status backgrounds. The overwhelming majority of the patients were young, with 74 (93%) of our patients – 41 males and 33 females – below the age of 45 years.

As regards marital status, 23 (51%) of the males were single and 21 (47%) were married while one was a widower. This contrasted somewhat with the

female patients, only 12 (34%) of whom were single whereas 22 (63%) were married and one was a widow. None of the patients included were divorced or separated. A surprising finding was that very few – only five (6%) – lived alone; all the rest lived with family members.

Clinical factors

Only 11 (14%) patients had a previous history of suicide attempt. As regards psychiatric syndromes, 53 (67%) patients – 34 (76%) males and 19 (54%) females – had psychiatric syndromes that were identified during the psychiatric consultations. Among these 34 males with psychiatric syndromes, the most common condition was alcohol use disorders with 22 (49%), followed by nine (20%) with anxiety and other neurotic disorders, seven (16%) with personality disorders, three (7%) with depression, three (7%) with delirium, and one each with psychosis, compromised intelligence, school refusal, and headache syndromes. The picture was considerably different among the 19 females with psychiatric syndromes, with depression topping the list with seven (20%) followed by five (14%) with personality disorders, four (11%) with alcohol use disorders, three (9%) with delirium, and three (9%) with anxiety and other neurotic disorders. Only 11 (14%) patients in all had nonpsychiatric chronic medical illnesses.

As regards the nature of the suicide attempts, only 11 (14%) were planned attempts, the vast majority of attempts – 69 (86%) – were thus impulsive in nature. Only 17 (21%) patients could be described as having high intentionality at the time of the attempt, and a mere four (5%) patients had active suicidal ideas at the time of the psychiatric consultation. Apart from a single hanging attempt, the modalities of the attempts were of low lethality: 68 (85%) were ingestions of agricultural poisons, seven (9%) were drug overdoses, and three (4%) were self-mutilations. Only one patient had presented with attempts in more than one modality.

Fifty-eight (73%) patients had a clear antecedent precipitating event; 41 (71%) of these were interpersonal disputes (which were mostly with family members). In addition, ten (13%) of the attempts (nine males and one female) were made under the influence of alcohol, often with the patient having little to no recollection of the actual circumstances surrounding the attempt. Regarding background psychosocial stressors, surprisingly, few – five (6%) – reported financial issues as contributory; in contrast to this as many as 36 (45%) reported background interpersonal conflicts.

Psychiatric interventions

All patients reviewed underwent brief individual and family counseling, with a focus on crisis intervention,

support and education about suicidal risks and precautions, along with a verbal no-suicide contract and education about contact mechanisms in case of emergencies. Among the 53 (66%) patients with diagnosed psychiatric syndromes, a total of 37 (70%) patients were prescribed various psychotropic drugs. In addition, 57 (71%) patients were advised or offered regular outpatient psychotherapy. However, only 22 (28%) patients followed up in the psychiatry OPD at least once after discharge from the hospital, and one patient was recorded as having died in hospital after the psychiatric consultation. Only three (4%) patients subsequently presented to the hospital with repeat attempts of self-harm.

DISCUSSION

Several interesting observations could be inferred from the above data. There was an unexpectedly high proportion of young men attempting suicide (especially associated with alcohol use); this is in contrast to most studies which suggest that females tend to attempt suicide more commonly.^[4] The rather low prevalence of psychiatric disorders in these patients, in general, is consistent with other Indian studies^[5] and suggests that psychosocial, cultural, and environmental factors play at least as important a part, if not more, in causation as mental illness.

It appears that the vast majority of these attempts were isolated, impulsive attempts done in anger after a specific interpersonal dispute (usually with a close family member), often under the influence of alcohol. Neither serious mental health issues such as depression and psychosis nor commonly-assumed long-term psychosocial stressors such as financial issues seem to be present in the majority of cases. Although a majority of the cases were impulsive attempts (86%), there was history of previous self-harm only in a minority of cases (14%), and only a small percentage of patients (16% of males and 14% of females) were diagnosed with personality disorders. Why impulsivity seems to be so dominant a factor in these presentations is an area for potential future research – both in terms of identifying psychopathological targets for primary prevention as well as exploring the sociocultural determinants of impulsivity in this area.

Surprisingly, for a rural culture where joint family systems are so central a way of life, it appears that the most common background stressors or precipitating issues were actually family interpersonal conflicts. A factor long assumed to be *protective* as far as suicide goes – the strong joint family system – actually appears to be the most common immediate trigger for suicide

attempts in this population. This is in stark contrast to the standard literature on suicide, particularly from Western countries where living alone is a significant risk factor.^[6] We suggest that community level family interventions that target interactions in families with high-risk patients (such as those with alcohol use disorders, depression, and past history of impulsive behavior) might help to address this problem, particularly by sensitizing family members to be vigilant for high-risk triggers (such as a major interpersonal dispute in the context of alcohol intoxication).

The vast majority of the attempts were agricultural poison ingestion (pesticides, insecticides, or fertilizers) – mostly because these are easily available and within anyone's reach in these rural communities. Since a considerable majority of these were impulsive attempts of low intentionality, it appears that merely limiting accessibility of these agricultural products could potentially have prevented these attempts. This represents an important area for primary prevention strategies as has already been successfully demonstrated in a rural area in Tamil Nadu.^[7]

The strengths of this study include its rural, resource-poor setting as well as its attempts to identify locally-relevant and population-specific targets for exploring primary prevention strategies. There are also important limitations. First, the sample size is still too small for making significant analytical comparisons; consequently, the interpretations must be considered only provisional until a more substantial sample size can be recruited in the future. Second, only patients who presented to the hospital after a suicide attempt were included, and this probably represents a very selective population among suicide attempters. It may not be possible to generalize findings from the study population to other groups such as those who died before reaching the hospital or who could not come to the hospital due to financial or accessibility issues. Employing community-based surveys and research using government and legal records in addition to clinical data from the hospital records may help broaden the nature of the sample population in future studies in this area. Nevertheless, we think that simple and locally-relevant research work like this by rural and resource-poor service providers might be a step in the direction of developing adaptive solutions to the problem of suicide in the country.

CONCLUSIONS

These preliminary findings suggest that a considerable number of suicide attempts in rural

Madhya Pradesh – perhaps even a majority – are isolated impulsive attempts following triggers that are most often interpersonal disputes, many times under the influence of alcohol. Young men seem to be attempting suicide in greater numbers than would be expected, and alcohol use disorders are frequently associated with this trend. The most common psychiatric syndrome present among the attempters is alcohol use disorder, followed by depression, and personality disorders. Psychosocial stressors, especially interpersonal conflicts within the family appear to be at least as important factors as mental illnesses in contributing to suicide attempts in the area.

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Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. GHO by Category Suicide Rates – Data by Country. WHO. Available from: <http://www.apps.who.int/gho/data/node.main.MHSUICIDE?lang=en>. [Last cited on 2016 Aug 04].
2. Patel V, Ramasundarahettige C, Vijayakumar L, Thakur JS, Gajalakshmi V, Gururaj G, *et al*. Suicide mortality in India: A nationally representative survey. *Lancet* 2012;379:2343-51.
3. Mishra KK, Gupta N, Bhabulkar S. Sociodemographic profile of suicide attempters among the rural agrarian community of central India. *Ind Psychiatry J* 2015;24:185-8.
4. Vijayakumar L. Suicide in women. *Indian J Psychiatry* 2015;57 Suppl 2:S233-8.
5. Rane A, Nadkarni A. Suicide in India: A systematic review. *Shanghai Arch Psychiatry* 2014;26:69-80.
6. Stickley A, Koyanagi A. Loneliness, common mental disorders and suicidal behavior: Findings from a general population survey. *J Affect Disord* 2016;197:81-7.
7. Mohanraj R, Kumar S, Manikandan S, Kannaiyan V, Vijayakumar L. A public health initiative for reducing access to pesticides as a means to committing suicide: Findings from a qualitative study. *Int Rev Psychiatry* 2014;26:445-52.