

ASSESSMENT OF DEMOGRAPHIC PROFILE OF PATIENTS ADMITTED WITH A DIAGNOSIS OF ALLEGED SELF-HARM AT A TEACHING HOSPITAL IN HINDI HEARTLAND

Monica Agrawal¹, Narendra Kumar Tiwary², Nitu Nigam³, Sudhir Kumar Verma⁴, Medhavi Gautam⁵, Durga Prasad Verma⁶, Sunil Kumar Verma⁷, Harish Gupta⁸

¹Assistant Professor, Department of Obstetrics and Gynaecology, KGMU, Lucknow, Uttar Pradesh.

²Assistant Professor, Department of Community Medicine, RG Kar Medical College and Hospital, Kolkata, West Bengal.

³Assistant Professor, Center for Advanced Research, KGMU, Lucknow, Uttar Pradesh.

⁴Assistant Professor, Department of General Medicine, KGMU, Lucknow, Uttar Pradesh.

⁵Assistant Professor, Department of General Medicine, KGMU, Lucknow, Uttar Pradesh.

⁶3rd Year Junior Resident, Department of General Medicine, KGMU, Lucknow, Uttar Pradesh.

⁷Consultant Cardiologist, Department of Cardiology, Vapi, Gujrat.

⁸Assistant Professor, Department of General Medicine, KGMU, Lucknow, Uttar Pradesh.

ABSTRACT

BACKGROUND

At any point of time, we can observe several cases of alleged self-harm in our medical wards. Although most of the studies look at nature and types of poison and its management & prognosis, there is a lack of data to analyse demographic profile of these victims. We wanted to assess demography including age, sex, marital status, religion, locality and mode of suicide of patients presenting to emergency department of our tertiary care hospital in North India.

METHODS

We looked into admission register of emergency department of our hospital and sorted out data of patients of alleged suicidal attempt.

RESULTS

We collected data of 408 patients admitted to our hospital. 365 (90%) were Hindus and rest belonged to other religions. 367 (90%) attempted suicide by poisoning, 36 (9%) by hanging and 5 (1%) by self-injury, including cutting wrist. 252 (62%) were males and 156 (38%) females. Out of these 156 females, 97 (62%) were married and rest 59 (38%) unmarried.

CONCLUSIONS

Suicide is a public health challenge. To control the problem, we need to measure its dimensions in its fullest extent. By looking at demography of these patients, we made an attempt to identify vulnerable population. And in the next step, potentially preventable measures should be taken to help the victims.

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BACKGROUND

As per report of Institute of Health Metrics and Evaluation- a research center- self harm is a global challenge¹ and the 8th leading cause of death in India today.² Physician's suicide breaks us all.^{3,4,5,6,7} But official figures generated through death- report forms provide a picture of completed suicide attempt. There is a dearth of meaningful -data about incomplete attempts of self-harm, some of which may or may not be repeated in future. Only by compiling and analysing this complete- data set, we will be able to make a

comprehensive strategy to design useful and significant interventions.

Hence, we decided to explore indoor record of our hospital of self -harm admissions and compute demographic and social profile of individuals presenting with this medical condition. Until now under section 309, as suicide attempt was a criminal offence, possibly there was underreporting of this figure.^{8,9,10,11,12,13,14,15} However now as our Parliament changed the law and therefore we presume our staff to be sympathetic, rather than put these patients under criminal jurisprudence.¹⁶ Only by analysing this patient population, we will be able to know its reasons and possibly construct intelligent interventions to prevent it in future.

METHODS

All the patients presenting to our hospital initially are examined by residents posted in Emergency Department, working under supervision of Emergency Medical Officer. In the Emergency Department, we collect their demographic information in a register and then make their rapid primary evaluation. For this study we merely collected this

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Corresponding Author:

Dr. Harish Gupta,

Assistant Professor,

Department of General Medicine,

KGMU, Lucknow, Uttar Pradesh.

E-mail: drharish2004@yahoo.com

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information and analysed it to profile the individuals. As this is an observational study, there is no need for ethical clearance.

RESULTS

Of the data analysed of these patients 62% (252) were males and 156 (38%) were females (Figure 1). In the study, of all the patients presenting to our hospital (n=408) with allegation of self- harm, 89.5% (365) declared their faith as Hindu, rest belonged to other religions (Figure 2). 367 (90%) chose poisoning as mode of self- harm, 36 (8.8%) chose hanging while 5 (1.2%) chose other modes, including cutting their wrist (Figure 3). Out of these 156 females, 97(62%) registered their marital status as married and rest 59(38%) unmarried (Figure 4). We don't know if those 97 married women were still married, or widow, divorced or having some other legal/social status. 233 patients (57%) belonged to rural areas and 175 (43%) to urban areas.

Similar proportion of Hindus (90%) and others (90%) chose poisoning as mode of self- harm, i.e. one's faith has no bearing on deciding one's selection of mode of self-harm in this study. Hanging is preferred mode of suicide in rural population. While overall 57% victims belonged to rural areas, its share in those admitted with alleged hanging attempt is 75% (27 out of 36). In our records, we could discover only 5 individuals with an alleged attempt to cut one's wrist, and all of them were males.

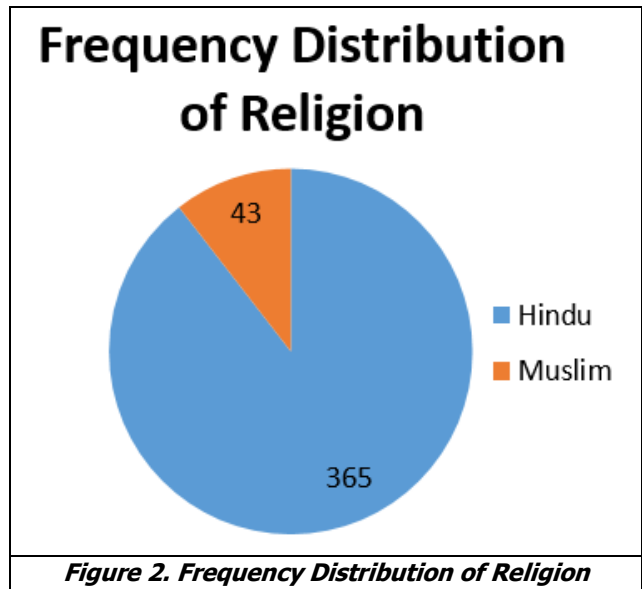


Figure 2. Frequency Distribution of Religion

Religion	Frequency	Percentage
Hindu	365	89.5
Muslim	43	10.5

Table 2. Frequency Distribution of Religion

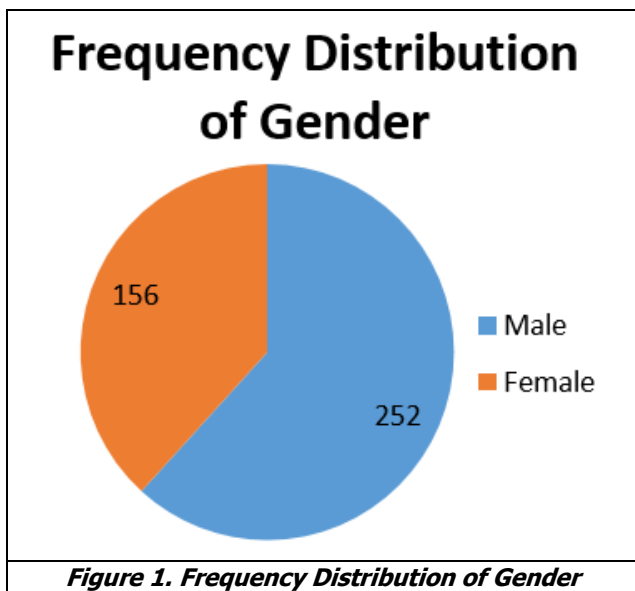


Figure 1. Frequency Distribution of Gender

Gender	Frequency	Percentage
Male	252	62%
Female	156	38%

Table 1. Frequency Distribution of Gender

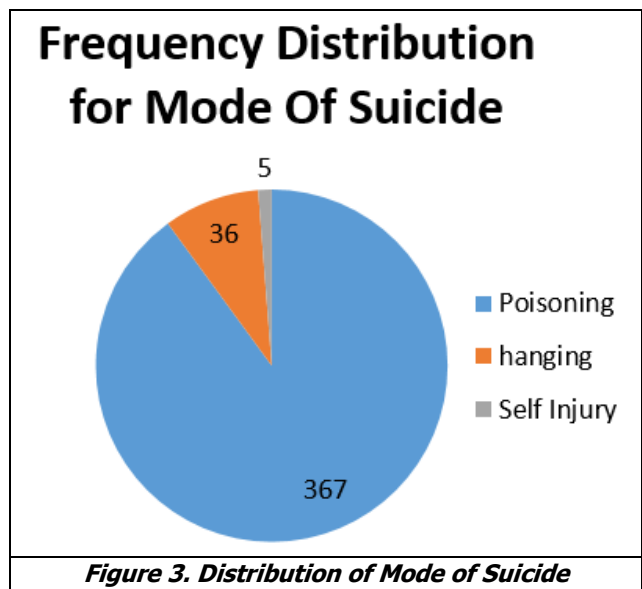
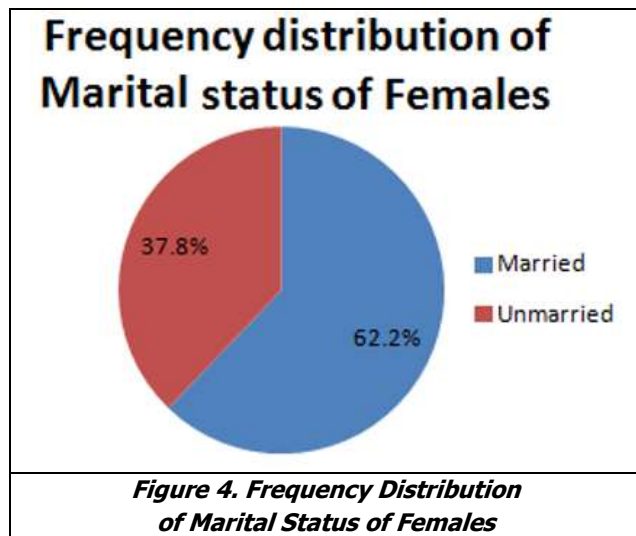


Figure 3. Distribution of Mode of Suicide

Mode of Suicide	Frequency
Poisoning	367
Hanging	36
Self-Injury	5

Table 3. Distribution of Mode of Suicide



DISCUSSION

We analysed the data at admission of patients in our hospitals, and that may be different from their respective final -diagnosis. Information about patients at admission is filled by non-technical personnel at a common reception counter and may include a few non-scientific terms. But in this study as we analysed demographic information of population, presenting to emergency department of our hospital, this point hardly matters. There are several children in our study who at admission had working diagnosis of poisoning. Although suicide and suicide ideation is prevalent in adolescents,¹⁷ it's mentioned in a baby as young as 6. But we believe that due to a different socio cultural and economic conditions, for children presenting to our hospital, that is accidental one.

When we talked to several elderly patients admitted with poisoning, they revealed that that for them drug overdose¹⁸ occurred due to mistake. Due to lack of social support they are unable to care for themselves and hence consume and adjust doses of medicines themselves. And as some mistake occurs somewhere, they landed up in our hospital with a diagnosis of drug- overdose. On admission several patients had a working diagnosis of unconsciousness. At least a few of them are worked up in our wards as having consumed a high dose of oral hypoglycaemic drugs^{19,20} or insulin and subsequent delay in arrival of food. Therefore, there is a further scope of a larger study to know the real percentage of such patients in our geography.

Although suicide is now decriminalized as per statute, related section of IPC- 309 remains in law books. And resultantly to save themselves from entailing Police harassment, many attendants may not be giving a correct detail of accounts, hence there may be several gaps in our data. So there is need to further amend the concerned law and make the act non -criminal one, so that the person making the attempt is not ostracised and further victimised.

When we were analysing medical records, we discovered that several patients were brought by Police. We discovered that many of them were travelling by surface transport- e. g. bus or train, were poisoned by looters on

their way, then were found unconscious by fellow -passengers midway, or at the end of the journey by conductor or driver, and then were brought to our hospital. Hence, we believe that a future study should be made to know percentage of this patient- population. As obviously these are not the cases of self -harm.

Interestingly sometimes when patients regain their consciousness, they give history of consumption of food, offered by their fellow passengers or consumption of high dose of drugs or miscalculation of its dose, and that information is noted in case -sheets. But that information is not linked to admission record in an accessible format. We believe that with further computerisation and digitisation, we will soon be able to find a link. And then various calculations will be made at the click of a mouse. As e hospital project is applied in full swing in our hospital at present, we plan to soon conduct another large related study.

Although most of the patients of alleged hanging are admitted to medical department, a few are in surgery department too. When reviewing the case record for the study, we curiously wanted to know the algorithm used to take the decision, we discovered that as per our hospital policy if a patient is injured, e.g. cut his wrists, he is admitted to surgical side. If there is no obvious injury, he is sent to medical side.

Although we analysed admission- register of emergency department of our hospital of a very short duration, we rapidly discovered that a lot of admissions occur during March to July months than during other part of the year. Its reason may be that in our country these months follow annual domestic -examinations and entrance -tests to various competitive professional courses. As results of these examinations and tests are declared soon afterwards, we observe a spike in cases in this period. Therefore, there is need to review our examination system and its social perception. Also, there is a need to make students number of suicide -helpline available, especially during March to July months.

All the patients of alleged self-harm are advised mandatorily to undergo a psychiatry visit. And in most of the cases a diagnosis of impulsive act is made. What does that mean is that most of the patients don't carry a psychiatric diagnosis. Hence most of these acts are done in the heat of the moment. So, there is an ample scope to identify the precipitating factors and then make further studies to reduce the stress. By doing so, we will be able to save several precious lives, several of which may contribute to enhance economy of this country.

Some cases were brought dead at arrival. But when attendants provided a history of consumption of poisonous substance, we recorded that in our register and included in this study. Hindus constitute about 80% of the population of India,²¹ whereas in this study, their share is found to be close to 90%. That may be due to resource bias. When a person consumes poison, he is initially brought to local hospital, which in village consists of primary health center. If patient is found to be stable by examination, it's well and good. But if one is found to be unstable, one is referred to higher

center. Then ultimately patients reach our hospital. So those reaching us crossed several invisible barriers. And to cross these barriers, one needs resources for transportation. So, this demography perhaps also depicts our sociology as well. Those reaching tertiary care center may not only be unstable, but also have means to reach us. As Muslims may not be having such resources in those crucial moments, their number is found to be relatively less.

Also, depression is common in females.^{22,23} Hence there is a likelihood of a greater number of suicide attempts in females. But in our data analysis, we recorded a higher number of males (almost double). Its reason may be that when a female becomes sick at a peripheral health center, her attendants may be less likely to carry her to our hospital in state capital, as compared to her male counterpart. So, data in our study may simply show social bias against females. Not only they are unwanted when in womb, and also after that.²⁴

CONCLUSIONS

As self-harm is a preventable 'illness', we should make attempts to nip it in the bud. And in that endeavour, we need to identify those that are at risk. While looking at the relevant literature, we discovered several studies made abroad. But we were unable to find even a single study in our Institution. So, this is the first study of its type where we make attempt to socially identify victims of self-harm, and hope to make suitable intervention beforehand in near future. Suicide is the second leading cause of death in India in 15 to 30 years age group today. In males, it ranks second to transport related injuries and in females, after maternal-deaths. As we discovered that many attempts are related to impulse of the moment, most of the cases are preventable by offering timely counselling, talks and social support. Strengthening of basic mental healthcare services will make strong foundation for a healthy and economically productive society.

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