

An Hospital Based Observational Assessment of Pattern of Suicide among Young Females**Abuzar Rizwi**

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Received: 08-07-2023 / Revised 17-08-2023 / Accepted 28-09-2023

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Conflict of interest: Nil

Abstract:**Aim:** The present study was undertaken to study pattern of suicide among young females in Bihta, Patna, Bihar, India.**Material & Methods:** The Present retrospective, descriptive study was conducted in Department of Forensic Medicine and Toxicology over the period of 24 months, post-mortem records of the female victims reported to mortuary of During defined study period, total 100 cases were fitting study criteria.**Results:** Most of the cases were from age group 16- 25 years (46%), followed by age group 26-35 years (34%) and age group 36-45 years (20%). When socio-demographic characteristics were compared most cases were from Hindu religion (80%) and 58% from lower socio-economic class. Poisoning (35%) was most common method for suicide. Other methods for suicide were hanging (24%), burn (20%), drowning (14%), train (2%) and other methods (5%). Family disputes (41%) were most common underlying cause for suicide in present study. Love affairs (15%), dowry related (14%), other (10%) and financial (4%) were other underlying causes for suicide. In 16% cases underlying cause for suicide was not known.**Conclusion:** Women's lack of empowerment and both financial and emotional dependence has restricted their self-expression and choices in life. Several forms of gender role differentiation and gender-based discrimination are possible reasons for high Suicidal Death Rates in women**Keywords:** Young Female Suicides, Gender Differences, Dowry.

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Introduction

WHO defines reproductive age in women to be between 15 and 44 years and reproductive health as "a state of physical, mental and social wellbeing in all matters relating to reproductive systems at all stages of life." Young people are among those most affected: for suicide between the ages of 15 and 29 years globally. [1] Suicide is a major public health problem and top three causes of death among youth worldwide. As per WHO, almost around one million people die every year from suicide and almost twenty times more people attempt suicide.

16 per 100,000 or one death every forty seconds is a global mortality rate and one attempt in every three seconds on an average. Worldwide suicide was estimated to represent 1.8% of the total global burden of disease in 1998, and it is expected that by 2020 the figure may come as around 2.4% especially in countries with market and former socialist economies. [2] Importantly, suicide was the leading cause of death in the 15-39 year age group, with 71.2% of the suicide deaths among women occurring in this age group in India. [3]

The highest female suicide mortality rates were seen in the WHO South-East Asia Region (11.6 per 100 000 population) and in lower-middle-income countries (8.8 per 100 000 population). Male-to-female gender ratio of suicide rates is lower than 1 (i.e., a predominance of females) in the young age groups and greater than 1 (i.e., a predominance of males) in the middle and older age groups. [1]

Effective prevention requires a clear understanding of the size of the problem, its distribution in the population, and the major risk and protective factors at the levels of the individual, the family and the community. [4] Men and women differ in their roles, responsibilities, status and power and these socially constructed differences interact with biological differences to contribute to differences in their suicidal behaviour. Among young people, suicidal behaviour was found to be associated with female gender, not attending school or college, independent decision making, premarital sex, physical abuse at home, lifetime experience of sexual abuse, and probable common mental disorders. [5] Violence and psychological distress

were independently associated with suicidal behaviour. Factors associated with gender disadvantage increased vulnerability, particularly in rural women. [5] The reasons for greater female suicide completion in India may be sociocultural. The common practice of arranged marriages in India result in social and family pressure for the woman to stay married even in an abusive relationship; this may increase the risk of suicide in women. [6] Also, stresses related to dowry demands may drive young brides to suicide. [7] The increase in suicide rates among girls and female adolescents may reflect an increase in the use of more lethal methods for suicide attempts by this group. This change may be specific, or it may reflect some broader convergence in male and female gender roles, although there are clearly great differences in this regard across cultures. [8] Indian women are a vulnerable group for suicide deaths.

Hence, present study was undertaken to study pattern of suicide among young females in BIHAR region.

Material & Methods

The Present retrospective, descriptive study was conducted in Department of Forensic Medicine and Toxicology, Netaji Subhas Medical College and Hospital, Bihta, Patna, Bihar, India over the period

of 24 months, post-mortem records of the female victims reported to mortuary of Netaji Subhas Medical College and Hospital, Bihta, Bihar were included. During defined study period, total 100 cases were fitting study criteria. Strict confidentiality was kept regarding identity, medical and Forensic details of study subjects.

Inclusion Criteria: Postmortem records of the females, from 16-45 years of age with suicidal deaths were included for study.

Exclusion Criteria: Cases with suspicious manner of death other than suicide were not included.

Methodology

Autopsy reports, scene and post-mortem photographs and other case materials such as copies of the police scene investigation findings were studied. Findings and observations such as historical details, scene findings, findings of autopsy external and internal examinations, the results of the post-mortem investigations and the opinions and conclusions given were entered in a pre-designed proforma.

Statistical Analysis: Collected data was entered in Microsoft Excel worksheets and analysed using Statistical Package for Social Sciences (SPSS).

Results

Table 1: Distribution according to age

Age groups in years	N	%
16-25	46	46
26-35	34	34
35-45	20	20
Total	100	100

Most of the cases were from age group 16- 25 years (46%), followed by age group 26-35 years (34%) and age group 36-45 years (20%).

Table 2: Sociodemographic characteristics

Sociodemographic characteristics	N	%
Religion		
Hindu	80	80
Muslim	11	11
Sikh	5	5
Christian	4	4
Socioeconomic status		
Upper	17	17
Middle	25	25
Lower	58	58

When socio-demographic characteristics were compared most cases were from Hindu religion (80%) and 58% from lower socio-economic class.

Table 3: Distribution according to method of suicide

Methods of suicide	N	%
Poisoning	35	35
Hanging	24	24
Burn	20	20
Drowning	14	14
Train	2	2
Others	5	5

Poisoning (35%) was most common method for suicide. Other methods for suicide were hanging (24%), burn (20%), drowning (14%), train (2%) and other methods (5%).

Table 4: Distribution according to underlying reason

Underlying reason	N	%
Family dispute	41	41
Not known	16	16
Love affairs	15	15
Dowry related	14	14
Other	10	10
Financial	4	4

Family disputes (41%) were most common underlying cause for suicide in present study. Love affairs (15%), dowry related (14%), other (10%) and financial (4%) were other underlying causes for suicide. In 16% cases underlying cause for suicide was not known.

Discussion

Suicide is a major public health problem and top three causes of death among youth worldwide. As per WHO, almost around one million people die every year from suicide and almost twenty times more people attempt suicide. 16 per 100,000 or one death every forty seconds is a global mortality rate and one attempt in every three seconds on an average. Worldwide suicide was estimated to represent 1.8% of the total global burden of disease in 1998, and it is expected that by 2020 the figure may come as around 2.4% especially in countries with market and former socialist economies. [9] It is estimated that around 55% suicides occur worldwide between the age of 15 to 44 years and suicide is the second most leading cause of death among youth. [10] The increasing suicide rates in India are similar with the global trend. Young people are a notably vulnerable group and around 34.5% suicides reported were among youth. [11]

Most of the cases were from age group 16- 25 years (46%), followed by age group 26-35 years (34%) and age group 36-45 years (20%). One of the Indian studies mentioned that the suicides among young people aged 15-29 years about 38 per 1,00,000 population. Literatures suggest that attitudes, opinions, perceptions and socio-cultural differences are some of the reasons for variations in suicide rates as well as suicidal behaviour. [12,13] Salve et al [14] in rural areas of Haryana reported 26.5 and 21.5 per 100 000 annual suicide rates for males and females respectively. Several theories of convergence and divergence of the men-to-women SDR ratio with modernisation have been tested globally based on the hypothesis that it affects men and women differently with conflicting results. [15] A previous attempt at understanding this relation for India using administrative data for suicide deaths was inconclusive. [16] Suicide ranks as the

number one cause of mortality in young girls between the ages 15 and 19 years globally. [17]

When socio-demographic characteristics were compared most cases were from Hindu religion (80%) and 58% from lower socio-economic class. Poisoning (35%) was most common method for suicide. Other methods for suicide were hanging (24%), burn (20%), drowning (14%), train (2%) and other methods (5%). Among the unnatural deaths, deaths due to poisoning come next only to road traffic accident deaths. In earlier times, the poisoning deaths from pesticides were mainly accidental but easy availability, low cost and unrestricted sale have led to an increase in suicidal and homicidal cases as well. [18] Family disputes (41%) were most common underlying cause for suicide in present study. Love affairs (15%), dowry related (14%), other (10%) and financial (4%) were other underlying causes for suicide. In 16% cases underlying cause for suicide was not known. The quality of marital relationship, emotional warmth, extended family support, and ability to handle stresses related to marriage and child rearing are more important than marital status, per se, but these qualifiers of marital status are difficult to study. Reduction of intimate partner violence will reduce suicidality in women. In the absence of sexual abuse, the female suicide attempt over lifetime would fall by 28% relative to 7% in men. [19] India launched its National Programme for Adolescent Health in 2014 that aimed to address mental, sexual, and reproductive health among other health needs. [20] The programme has various indicators to track age at marriage and teenage pregnancies, depression, and gender-based violence, but does not explicitly mention suicidal ideation as an indicator, tracking of which is imperative given the study findings. [21]

Conclusion

Women's lack of empowerment and both financial and emotional dependence has restricted their self-expression and choices in life. Several forms of gender role differentiation and gender-based discrimination are possible reasons for high Suicidal Death Rates in women. There is a dire need to further assess the complex relationships

between gender and suicidal behaviour to facilitate women-specific suicide prevention strategies.

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