

## Original Research Paper

# Unnatural Deaths of Adult Females in South Bangalore An Autopsy Study

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### Abstract

Discrimination against women in our society is deeply embedded within the family context of the women. The women are often subjected to violence from their husbands and from relatives in their natal as well as marital homes. This study was designed to determine unnatural deaths of adult females in the age group of 18-50 years in South Bangalore and was conducted from November 2011 to November 2012. Total 85 cases were studied during the study period from 450 total autopsies. Third decade of life was the most common age group. 76.5% of females were married, with 58.6% of deaths occurred in 0-7 years of married life. Most of the unnatural female deaths (88.2%) were suicidal in manner. This study reflects the susceptibility of married women to unnatural deaths, thus need to enhance the multipronged protective system, to curb these potentially preventable unnatural deaths of females.

**Key Words:** Unnatural deaths, Adult females, Married, Suicide, Hanging

### Introduction:

Females of India have suffered violence at the hands of men including family members from conception to death. Gone are the days where women used to die on husband's pyre, but now women are dying within four walls of house due to domestic torture, dowry death being heinous amongst them. A total of 2, 13, 585 incidents of crime against women were reported in the country during 2010 as compared to 2, 03, 804 during 2009. The rate of crime has increased marginally from 17.4 during the year 2009 to 18.0 during 2010. [1]

This shows increase in nature and extent of violence directed at women and which vary according to class, region, culture and the strata of the society across the country.

The women are often subjected to violence from their husbands and relatives in their natal as well as marital homes. The violence against women includes not only physical aggression but sexual, psychological and emotional abuse as well.

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Present study was conducted in South Bangalore to evaluate factors related to unnatural deaths in adult females.

### Material and Method:

This was prospective descriptive study with the aim to establish the state of unnatural deaths occurring in adult females in the age group of 18-50 years in South Bangalore, and to formulate recommendations that could probably help prevent or reduce these deaths.

The objective was to gather epidemiologic information on the unnatural deaths in adult female (18-50 years).

Autopsy was conducted on all cases of unnatural deaths in females between age group 18 to 50 years at Kempegowda Institute of Medical Science Hospital and Research Centre, Bangalore, during the period November 2011 to November 2012.

Performa was filled in each case regarding the history given by relatives, information obtained during inquest and post mortem findings. The comparison was made between these findings and conclusions were drawn after comparing and discussing with similar type of the work carried out by other authors.

### Results:

There were 450 medico-legal autopsies conducted from November 2011 to November 2012. Of those, 75.5% (n=340) deaths were due unnatural causes, out of which, 85 cases (25%) were of adult females belonging to age group of 18 to 50 years. Age wise distribution of the

victim shows that most of the incidences (52.9%, n=45) were noticed in 3<sup>rd</sup> decade. 76.5% (n=65) of victims were married, out of which 58.6% (n=38) were within 7 years of marriage. (Fig. 1)

Hindus (92.9%, n=79) comprised the single largest category followed by Christians and then Muslims. (Table 1) With regard to cause of death, hanging was leading cause of death in 71.8% (n =61) followed by death due to poisoning in 11.8% (n=10). (Table 2)

As per history, circumstantial evidences and post-mortem findings it was noticed that in most of the victims the manner of death was suicidal (88.2 %, n= 75), followed by accidental (7.1%, n=6) and homicidal (4.7%, n=4).

Maximum suicidal cases (54.66%, n=41) were observed in age 3<sup>rd</sup> decade, followed by in age group of 18-20 years (21.33%, n = 16). (Table 3) In the current study, attempt has also been made to study the approximate time of victim's death (Table 4), maximum cases (43.5 %, n=37) occurred in late hours of day (12 noon to 8 PM), followed by (34.1%, n=29) in early hours of day (4 AM to 12 noon).

### Discussion:

Bangalore is the most populous city in the Karnataka state with population share of 15.69%. Sex ratio of Bangalore is Bangalore is 908 females per 1000 male which is lowest in the state, and far below the national average which is 940 females per 1000 males. [2] Son preference and other social factors are responsible for the skewed sex ratio.

Present study was on adult females as more and more women are now coming out of the territory of their homes for education and employment and thus exposing themselves like males to related causes of death, like road traffic accidents and occupational deaths.

Incidence of unnatural deaths of adult females (between age group of 18 to 50 years) was 25% of total number of unnatural deaths. Similar was finding of Sharma BR et al [3] where the incidence observed was 28%.

In our study majority of victims (52.9 %, n=45) were in their 3<sup>rd</sup> decade, followed by in 18-20 year age group (20%, n=17) which is consistent with studies by other authors. [4, 5] Suicide (88.2%, n = 75) was most common manner of death, followed by accidental (7.1%) and homicides (4.7%). This is also observed by Sharma et al, [3] however accidental manner of death was reported by Pathak et al. [4]

Further analysis of age group with manner of death shows that suicidal deaths were maximum in 3<sup>rd</sup> decade of life (54.66%, n=41) consistent with other authors. [6, 7] The

reason for this may be that, this age forms the most important and crucial part of woman's life.

She has to face many types of burden i.e. mental, physical, social, economical etc. and this is the age of marriage leading to change in social environment. About 50 % of homicidal deaths occurred in age group of 30-40 years. This finding is in accordance with other studies [6, 8] making this age group most vulnerable for homicidal violence. Hindu comprised maximum cases (92.9%), followed by Christian (4.7%, n = 4). Hindu females also constituted maximum cases in various other studies. [4, 5, 9]

In this study Distribution according to marital status showed that most cases (76.5%) of unnatural female deaths were from married group, which is consistent with other author findings, [10, 11] where married females constituted maximum unnatural deaths among females. Further analysis of marital females shows that maximum cases (58.6%) were seen in first 7 years of marriage, with 19 cases (29.3%) observed in each category of 0-3 years and 4-7 years of duration of marriage. Similar were findings of other studies. [10, 12]

The reason for high incidence in first 7 years of marriage is mainly dowry related deaths and victim is mentally not mature enough to handle the situation.

Hanging was the most common cause of death (71.8%, n=61), followed by poisoning (11.8%, n=10) and burns (4.7%, n=4) in our study. However, these findings are not similar to other studies [4, 5, 9, 10, 12] where most victims died due to burns, while poisoning was most the common cause of death reported by Prajapati P et al. [7] In present study, maximum deaths (43.5%, n=37) occurred in late hours of day (After 12 noon to 8 PM), followed by 29 cases (34.1%) which occurred in early hours of day (4 AM to 12 noon) and 19 cases which occurred during night hours (After 8 PM to 4 AM).

Similar findings are reported by others. [13-15] The probable reason for above finding may be that in early morning and in afternoon, as most of them were either asleep or gone out to work, the victim take advantage of loneliness in the house.

This study indicates that married, homemaker females are vulnerable to spectrum of stress problems leading to unnatural deaths, more so in first seven years of marriage. Multipronged approach is needed to bring down these potentially preventable deaths and which include measures at society level, strong legislation, counseling of concerned person and preventive measures against further malady.

We suggest following measures and recommendations:

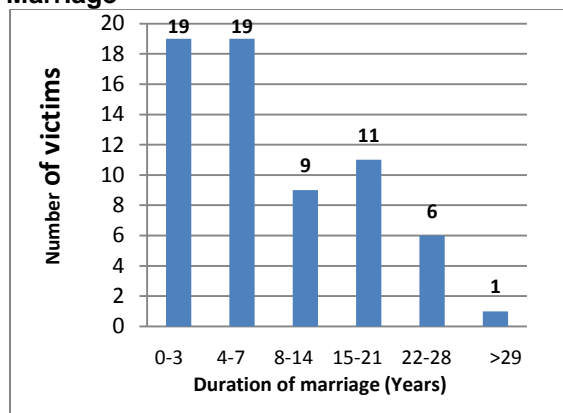
1. Early marriage of women should be discouraged to prevent them from exposure to innate stressful events at an early age.
2. Centres shall be developed to provide free counselling to the families and newly wed couple about their expected problems and their solutions in initial years of marriage.
3. Anti-dowry cell and women protection cell concepts shall be brought up more.
4. An effective coordination should be sought between the NGO's and law enforcing agencies to prevent crime against women.
5. Risk factors of suicides in women should be identified and attended.
6. A change in attitude and mindset of society, judiciary, and the most importantly of a male person (husband/father) who is supposed to be guardian of a woman should be sensitized to make home/workplace a safer and happier place for a woman.

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**Fig. 1: Victims According to Duration of Marriage**



**Table 1: Religion Wise Distribution of Victims**

Religion	Number of victims (Percentage)
Hindu	79 (92.9)
Christian	4 (4.7)
Muslim	2 (2.4)
Total	85 (100.0)

**Table 2: Victims according to Cause of Death**

Cause of death	Number of victims (Percentage)
Hanging	61 (71.8)
Poisoning	10 (11.8)
Burns	4 (4.8)
Road traffic accident	3 (3.5)
Strangulation, smothering	3 (3.5)
Others	4 (4.8)
Total	85 (100)

**Table 3: Age Group Wise Analysis of Manner of Death**

Age group (yrs)	Manner of death			Total
	Accidental	Homicidal	Suicidal	
18-20	1 (16.66)	0 (0)	16 (21.33)	17 (20)
21-30	3 (50)	1 (25)	41 (54.66)	45 (52.9)
31-40	1 (16.66)	2 (50)	13 (17.33)	16 (18.8)
41-50	1 (16.66)	1 (25)	5 (6.66)	7 (8.2)
Total	6 (100)	4 (100)	75 (100)	85 (100)

**Table 4: Cases According to Diurnal Occurrence of Incidence**

Diurnal	Frequency (Percentage)
Early hours of day (4 AM to 12 noon)	29 (34.1)
Later hours of day (After 12 noon to 8 PM)	37 (43.5)
Night hours (After 8 PM to 4 AM)	19 (22.4)
Total	85 (100)