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Study Of Socio-Demographic Factors In Deaths Due To Burns At Tertiary Care Hospital.

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ABSTRACT

The obnoxious and ubiquitous practice of dowry has perpetuated a new and alarming rise in mortality from burns, so called "Dowry Death. In a marriage, where the husband is disgruntled and dissatisfied with a paltry dowry where he had been promised more, or imagines that he is entitled to get more, a dangerous situation arises. In order to marry another wealthier girl, instead of going for divorce, which is a cumbersome procedure, he will adopt the cruel and inhumane act of murdering his wife. In many cases the probable instigation comes from the in-laws. To study the socio-demographic factors in deaths due to burns. Present study was a cross sectional study carried out at a tertiary care center. Cases of death due to burns brought to the mortuary of rural medical college and hospital Loni were considered for study. Thus, such 143 death cases were studied to find the sociodemographic factors in deaths due to burns. Information obtained from the survivors of the deceased. The statistical analysis of the data was done and presented as results and observations in tabular form, graphs and charts. Most of the deaths 46.85% occurred in the age group of 21-30 years of 8.39% of deaths occurred in age group of 11-20 years. This is because 11-30 years age group is most often exposed to fire i.e. while cooking. Females outnumbered males by about 3-times i.e., the incidence being 75.52% in females and 24.48% in males. In females, most common age group is 15-30 years. Married outnumbered unmarried in a ratio of 13:1 i.e., married cases were 133 (93%) and unmarried cases were 10 (7%), out of 143 victims. Hospital deaths also outnumbered the brought dead. hospital deaths were 142 and brought dead was 1. Out of 143 cases. Present study concludes that majority burns were in 21 to 30 years of age and female being most common victim. Married cases were more. Study suggest that recently married couples should be properly counselled and should be mentally made stable to avoid such incidence. Strict laws and action should be implemented for dowry deaths.

Keywords: Medico-legal, Autopsy, death, burns.

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INTRODUCTION

In a marriage, where the husband is disgruntled and dissatisfied with a paltry dowry where he had been promised more, or imagines that he is entitled to get more, a dangerous situation arises. In order to marry another wealthier girl, instead of going for divorce, which is a cumbersome procedure, he will adopt the cruel and inhumane act of murdering his wife. In many cases the probable instigation comes from the in-laws [1].

As it is known, dowry deaths occur either by murder of a married woman, or she herself commits suicide being unable to bear harassment or cruelty for not fulfilling the promises by her parents at the time of her marriage [2].

Such homicidal act take place in secrecy, either in the house or at a place where outsiders may not have a chance to witness. In majority of cases, evidence will be either concealed or made to disappear [3].

The method adopted to murder such helpless victim by fire is known as “bride burning”. There may be efforts to give it a twist, or an appearance of accidental fire or suicidal one. In such cases, it is difficult task to prove whether the burning was accidental, homicidal or suicidal. This has led to its widespread popularity and the problem has assumed such an immense proportion, that newspapers come out every day with details of yet another case of “bride burning”. Adding to the complexity, is the fact that immolation is a popular method for suicide especially among women [4].

Aim

To study the socio-demographic factors in deaths due to burns.

MATERIAL AND METHODS

Present study was a cross sectional study carried out at a tertiary care center. Cases of death due to burns brought to the mortuary of rural medical college and hospital Loni were considered for study. Thus, such 143 death cases were studied to find the sociodemographic factors in deaths due to burns. Information obtained from the survivors of the deceased. The statistical analysis of the data was done and presented as results and observations in tabular form, graphs and charts.

RESULTS

In present study maximum number of deaths i.e.67(46.85%) deaths occurred in the age group of 21-30 and minimum number of death occurred in the age group of 61 and above i.e 3 (2.09%).

Figure 1: Age wise distribution of victims.

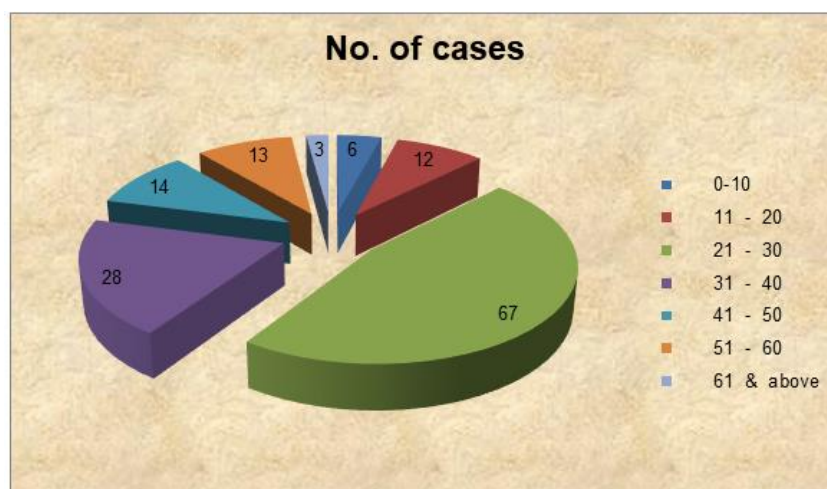


Table 1: Sex wise distribution

Gender	No. of cases	Percentage
Male	35	24.48
Female	108	75.52
Total	143	100

From the above table we can say that females outnumbered the male. Out of 143 cases, females were 108(75.52%) and males were 35(24.48%).

Table 2: Marital status of victim

Marital status	No. of cases	Percentage
Married	133	93
Unmarried	10	07
Total	143	100

From the above Table No.2 shows that out of 143 females, 133 (93%) were married and 10 (7%) were unmarried.

Figure 2: Religion wise distribution of victim

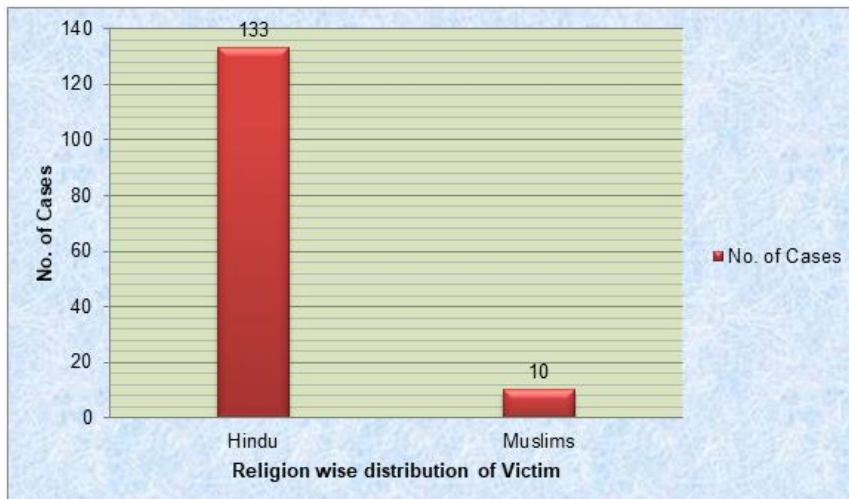


Table 3: Place of incidence

Place of incidence	No. of cases	Percentage
Husband's house	101	70.62
Own house	41	28.68
Son's house	01	0.70
Total	143	100

The above table 3 shows that the incidence of burns was maximum in husband's house (101(70.62%)) and followed by own house (41(28.68%)). One death was noted in son's house.

Table 4: Whether brought dead or admitted to hospital

Brought dead/admitted	No of cases	Percentage
Brought dead	001	00.70
Admitted to hospital	142	99.30
Total	143	100

The table 4 shows that 99.30% of the victims died after being hospitalized.

Table 5: Manner of Death

Mode of burns	No. cases	Percentage
Accidental	109	76.22
Suicidal	33	23.08
Homicidal	01	0.70
Total	143	100

Table no.5 shows out of 143 cases 109(76.22%) cases were accidental .33(23.08%) cases were suicidal and only one out of 143 cases was homicidal(0.70%)

DISCUSSION

Age Maximum number of deaths i.e., 46.85% occurred during the study of 5 years of marriage in the age group 21- 30,31-40 years, and second highest deaths occurred in age group of 11-20 years i.e., 12 cases (8.39%). Mohanty MK [5] observed that majority of deaths (46%) occurred in 21-30 years of age group. Ambade VN [6] in a study on trends of burn deaths it was found that most of the victims were between 11-40 years with peak at 21-30 years (47.1%). So, the present series is in accordance with the above studies.

Females outnumbered males by about 3-times i.e., the incidence being 75.52% in females and 24.48% in males. Ambade VN [6] observed female predominance (74.2%) in burning with male-female ratio equal to 1:2.9. Ashish K Jaiswal [7] found that the incidence was more in females as an absolute number (70.3%). Mago V [8] found that female outnumbered males with a ratio of 1.17:1.

Married outnumbered unmarried in the ratio of 3:1 i.e., married cases were 133 (93%) and unmarried cases were 10 (7%) out of 143 victims. This clearly shows the magnitude of young married females being the victims. In a study by Ambade VN⁶ it was found that married (79.9%) outnumbered unmarried ones in burn death. The present study is consistent with the study of Ambade⁶.

Apart from the cases brought dead directly to the mortuary for above said reasons, the other major contributing factors being lack of transportation facilities, literacy, awareness are among the major contributions to brought dead cases. The hospital deaths and brought dead ratio is 1:142 approximately.

Maximum death were due to accidental burns (76.22%), followed by suicidal burns (23.08%) and the minimum number of cases were of homicidal burns (0.70%). But the above facts remained controversial, when we actually looked into the real history and circumstantial evidences. History in such cases was debatable, because of common age group and allegations of dowry deaths. In many cases of alleged suicide and accidental deaths, when questions were put to the relatives or the attendants of deceased, a hostile attitude was often noticed which arouse suspicion of foul play.

CONCLUSION

A cross sectional (two year) study of Medico-legal Autopsy was conducted in mortuary of the Rural medical college and hospital Ioni. The present study concludes that majority burns were in 21 to 30 years of age and female being most common victim. Married cases were more. Study suggest that recently married couples should be properly counselled and should be mentally made stable to avoid such incidence. Strict laws and action should be implemented for dowry deaths.

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