Epidemiological Study of Female Death within Seven Years of their Marriage in Kanpur Region

Azad Kumar Bharti¹, Punit M. Awasthi², Rajiv Ratan Singh¹, Rahul Dev², Alok Pathak², Soni Verma², Pradeep Kumar Yadav¹

¹Senior Resident, UPUMS Saifai, UP, India, ²Assistant Professor, G.S.V.M. Medical College Kanpur, UP, India, ³Associate Professor, Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow, UP, India, Forensic Medicine and Toxicology

Abstract

Introduction: When girls get married, this heralds a major change in their immediate environment. There is a change of guardianship, separation from the parents and family and creation of a new family. All this creates a stressful environment around them, which is further aggravated by pregnancy, the upbringing of children, managing the household and office works. Eventually, when the tolerance breaks down, the brides are forced to take the extreme step of ending their miserable lives. In the majority of female unnatural deaths, the family members (parents, husbands, in-laws) may be directly or indirectly responsible for precipitating the circumstances leading to the death of the victim.

Methodology: Material for the present study comprised of all information from the relatives, guardians, police or investigating officers pertaining to the cases of ‘unnatural deaths of females within seven years of their marriage’, brought to the District Mortuary, Kanpur during the period of one year.

Conclusion: The incidence of unnatural deaths in females who died within seven years of their marriage was estimated to be 4.17% of the total cases autopsied. Maximum numbers of victims were rural Hindu housewives belonging to lower-middle or middle socioeconomic classes between 18-22 years of age and most of them had died within three years of their marriage. In cases of homicidal deaths burning and throttling/strangulation were found as the most common method used Dowry was the most common motive in homicidal deaths. As such husbands and in-laws were the most common human offenders in homicidal cases. Hanging was the most common method used in suicidal cases followed by burning. Whereas family quarrel and marital disharmony were the most common motives behind such deaths.

Keywords: Married female death within 7 years of marriage, dowry death, burning death, hanging, suicide in married female, homicide in married female.

Introduction

The rapid increase of unnatural deaths in newly married females in our population probably because of problems related to marriages, mal-adjustment and marital disharmony between the newly married women & the family of in-laws has caused great concern to our masses in last few decades. When girls get married, this heralds a major change in their immediate environment. There is a change of guardianship, separation from the parents and family and the creation of a new family. All this creates a stressful environment around them, which is further aggravated by pregnancy, the upbringing of children, managing the household and office works. Eventually, when the tolerance breaks down, the brides are forced to take the extreme step of ending their miserable lives. In the majority of female unnatural

Corresponding Author:
Dr Pradeep Kumar Yadav
Senior Resident, Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow, UP, India
e-mail: dctrprdp@gmail.com
Phone No.: 9410662955
deaths, the family members (parents, husbands, in-laws) may be directly or indirectly responsible for precipitating the circumstances leading to the death of the victim

**Material and Method**

**Material**: Material for the present study comprised all the cases of ‘unnatural deaths of females within seven years of their marriage’, brought to the District Mortuary, Kanpur during the period of one year from January 2017 to December 2017, that numbering 152 (One Hundred Fifty Two) cases. Information was gathered from their relatives, guardians, neighbors, investigating police officers after having informed and explained about our research and taken consent from the guardian.

**Exclusion Criteria**:

1. Unidentified bodies, where the relevant history was not ascertainable.
2. Cases in which, autopsy established a natural cause of death.
3. Cases of deaths, which occurred in mass casualties, like train accidents, major road accidents, explosions etc.
4. Cases of death, which occurred in road traffic accidents, even if not the case of mass casualty.
5. Cases of deaths, where the duration of marriage was found by history and interrogation, to be more than seven years.

**Observation and Results**

Present work is done to explore the epidemiology of deaths in married females, died within seven years of their marriage. The study is done from the cases of unnatural deaths, in such females, brought to District Mortuary of Kanpur, during the year 2017. Total number of cases autopsied were 3643, from January 2017 to December 2017. 152 cases were found of married females, who died within seven years of their marriage. The most of the victims were rural Hindu housewives. The observations thus recorded are tabulated after analyzing the collected data.

**Table 1. Age Distribution**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No. of Cases</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-20</td>
<td>36</td>
<td>23.68</td>
</tr>
<tr>
<td>21-22</td>
<td>50</td>
<td>32.89</td>
</tr>
<tr>
<td>23-24</td>
<td>19</td>
<td>12.50</td>
</tr>
</tbody>
</table>

Maximum number of victims were in the age group of 21-22 years, followed by the age group of 18-20 years (Table-1). This means that most of the victims were of very young age, died in the beginning years of their married lives. Because of the trend of early marriage in India and probably because the person becomes mature enough, no cases of unnatural deaths was found in more than 30 years age group, having completed less than seven years of marriage.

**Table 2. Socio Economic Status**

<table>
<thead>
<tr>
<th>Socio Economic Class</th>
<th>No. of Cases</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower (Class V)</td>
<td>10</td>
<td>6.57</td>
</tr>
<tr>
<td>Lower Middle (Class IV)</td>
<td>81</td>
<td>53.28</td>
</tr>
<tr>
<td>Middle (Class III)</td>
<td>55</td>
<td>36.18</td>
</tr>
<tr>
<td>Upper Middle (Class II)</td>
<td>6</td>
<td>3.94</td>
</tr>
<tr>
<td>Upper (Class I)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>152</td>
<td>100</td>
</tr>
</tbody>
</table>

Most of the victims i.e. 53.28%, belonged to class IV (lower middle class) of the socio-economic classification followed by middle class i.e. 36.18%. Not a single case was found from the upper class (class -1) (Table-4).

**Table 3. Educational Status of victims**

<table>
<thead>
<tr>
<th>Education Status</th>
<th>No. of Cases</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>38</td>
<td>25.00</td>
</tr>
<tr>
<td>Primary</td>
<td>54</td>
<td>35.52</td>
</tr>
<tr>
<td>Junior High School</td>
<td>13</td>
<td>8.55</td>
</tr>
<tr>
<td>High School</td>
<td>33</td>
<td>21.71</td>
</tr>
<tr>
<td>Interediate</td>
<td>7</td>
<td>4.60</td>
</tr>
<tr>
<td>Graduate</td>
<td>6</td>
<td>3.94</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tech. Professional</td>
<td>1</td>
<td>0.65</td>
</tr>
<tr>
<td>Total</td>
<td>152</td>
<td>100</td>
</tr>
</tbody>
</table>

Low educational status has been found to be an important factor influencing such deaths (Table-6) as 60% of victims has no education or only primary level education.
It shows personal habits of the victims, as most of the victims belong to Hindu community, so is seen by their dietary pattern that most of them are vegetarian (80.92%). 19.07% cases were non-vegetarian either regular or occasional. Although such kind of dietary pattern is nothing to do with deaths, but it shows that most of the cases are occurring in Hindu families. 5 victims (3.28%) were regular smokers, while 15 of them (9.86%) were habitual of tobacco chewing. None of the victim was either alcoholic or drug addict. Personal habits reflect the mental status of the person. Most of the women were mentally normal (88.81%). Unstable personality and neurotic status were found in 3.28% and 2.63% cases respectively. 3 cases (1.97%) each, were found of hysterical behaviours and depressed mental condition. None of the females were drug addicted or had any other mental problem.

<table>
<thead>
<tr>
<th>Method</th>
<th>No. of Cases</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burning</td>
<td>67</td>
<td>44.07</td>
</tr>
<tr>
<td>Hanging</td>
<td>46</td>
<td>30.26</td>
</tr>
<tr>
<td>Poisoning</td>
<td>14</td>
<td>9.21</td>
</tr>
<tr>
<td>Throttling/Strangulation</td>
<td>16</td>
<td>10.52</td>
</tr>
<tr>
<td>Drowning</td>
<td>2</td>
<td>1.31</td>
</tr>
<tr>
<td>Others</td>
<td>7</td>
<td>4.60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>152</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Of the method used, to terminate the life of newly wedded wives (Table 4), burning topped the list with 44.07% cases. It is followed by hanging, of which 46 cases (30.26%) were seen. Poisoning and manual strangulation (Throttling) were present in 9.21% and 10.52% cases respectively. 2 cases (1.31%) of homicidal drowning was found. In 7 cases (4.60%) other method including throwing oneself in front of running train were used.

Family quarrel and marital disharmony was the most common reason behind such deaths (34.66%). In 25.33% cases, women made suicide because of dowry harassment. Rash and negligence was influencing factor in 21.33% cases, while torture by husband influenced in 10.66% cases, in combination with other reasons. Infidelity. Poverty and psychiatric illness affected in 6 cases (8.0%) each. Infertility was the reason in 3 cases (4.0%) while other and unknown reasons influenced in 7 cases. All these factors acted either singly or more commonly in combination with each other.

Table 5. Place of Death

<table>
<thead>
<tr>
<th>Place of Death</th>
<th>No.of Cases</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Husband’s House</td>
<td>10</td>
<td>6.57</td>
</tr>
<tr>
<td>Parental House</td>
<td>10</td>
<td>6.57</td>
</tr>
<tr>
<td>In Laws house</td>
<td>63</td>
<td>41.44</td>
</tr>
<tr>
<td>Hospital</td>
<td>65</td>
<td>42.76</td>
</tr>
<tr>
<td>Others</td>
<td>4</td>
<td>2.63</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>152</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

While deaths of the most of victims (42.76%) happened in hospital (Table 5) followed very closely by deaths in in-laws’ house (41.44%). Deaths in husband’s house and parental house were found in 10 cases (7.57%) each. In 4 cases (2.63%) deaths happened at other places including railway tracks and on the way to the hospital.

Table 6. Period of Survival after incident

<table>
<thead>
<tr>
<th>Period</th>
<th>No. of Cases</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the spot</td>
<td>72</td>
<td>47.36</td>
</tr>
<tr>
<td>&lt; 24 Hrs</td>
<td>27</td>
<td>17.76</td>
</tr>
<tr>
<td>24-48 Hrs</td>
<td>12</td>
<td>7.89</td>
</tr>
<tr>
<td>2-7 Days</td>
<td>27</td>
<td>17.76</td>
</tr>
<tr>
<td>8-15 Days</td>
<td>9</td>
<td>5.92</td>
</tr>
<tr>
<td>16-30 Days</td>
<td>3</td>
<td>1.97</td>
</tr>
<tr>
<td>&gt;30 days</td>
<td>2</td>
<td>1.31</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>152</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Most of the victims (47.36%), did not survive for significant period of time or died immediately after the incident (Table 6).

Discussion

The high incidence of unnatural death in young Hindu females belonging to rural areas, within 3 years of their marriage was most probably due to unending demands of dowry by their husbands and/or in-laws, for which they sometimes kill or torture the bride in such a way that she commits suicide, which is consistent with other authors findings1-8.

However, the study of Srivastava showed that incidence of death in married females was higher in lower-middle socioeconomic and middle socioeconomic strata and this dissimilarity with our findings could be due to more urban population in their study1.
With respect to the duration of married life, our findings were similar to the findings of Ambade & Aggarwal\(^2,3\).

The higher incidence of unnatural death in illiterate and low-standard educated population was due to the more number of cases belonging to rural areas\(^7,8\) and lower as well as lower middle socio-economic strata\(^3,4\). Agnihotri et al found 94.9% Hindus, 4.22% Muslims, 0.53% Sikhs, and 0.35% Christians in their study which is consistent with our findings\(^1\). Burns as a major cause of death in females was also concluded by other authors in their study\(^2-6\). The fact that in our study, more victims belonged to rural areas and constitute a major chunk to lower sections of the society. The high incidence of burn deaths, especially among young females is often attributed to cooking on open unguarded flames. Loose, highly inflammable, synthetic garments/saris of the victims are alleged to catch fire suddenly while cooking\(^9\).

In India, many deaths are not registered as suicide due to fear of social and legal consequences associated with the same (IPC 306 and 309). The same was the opinion and findings of Batra, Ambade & Godbole\(^2,5\). Drowning was found as a cause of death in 1.31% cases, which was in variance with that noticed by Agnihotri et al in 0.7% cases and this variation can be attributed to the fact that Kanpur is situated at and near the banks of rivers the Ganges and festivals like Ganga Mela, chhatth, etc., making people more prone for accidental and suicidal drowning\(^1\).

Quarrel with husband/in-laws and dowry demand by the husband or his family members were two important reasons behind suicidal as well as homicidal deaths and this finding was consistent with other authors\(^2\). Prajapati et al and Kailash et al observed that dowry demand, ill-treatment by in-laws, rash and negligent behavior of husbands and infidelity were the most common reasons for unhappy married lives in all such cases\(^6,7\). The findings of the present study were similar to the findings of many other authors as far as age, community, habitat, and manner of alleged dowry death were a concern\(^7,8\). India’s National Crime Records Bureau reported that 8,233 Indian women were killed in 2012 in dowry-related violence or nearly one per hour\(^8\).

**Conflict of Interest:** There is no conflict of interest.

**Source of Funding:** None

**Ethical Clearance:** Ethical clearance number is 158/IEC LKO/16. Ethical clearance taken from Independent Ethics Committee, KGMU, Lucknow.

**References**

3. Aggarwal NK, Bhatia MS, Agarwal BBL: “Pattern of Suicide in Delhi, Indian Medical Gazette. 1998 August 211-213.