Autopsy Study of Unnatural Deaths among Study Population

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Abstract
Background: Unnatural deaths are the leading killer of today’s young generation, as the patterns have changed from infections towards social etiologies during the last decades. The unnatural deaths may be due to unintentional or intentional injuries. The present study was conducted to assess the type of unnatural deaths among young adults.

Materials & Methods: The present study was conducted in the department of forensic sciences. It included 84 cases of unnatural deaths. General information such as gender, age, methods and causes of deaths were assessed.

Results: Males were 38 and females were 46. The difference was non-significant (P=0.1). Age group 13-15 years had 12 males, 7 females, age group 16-18 years had 18 males and 26 females, age group 19-21 years had 8 males and 13 females. The difference was significant (P=0.05). The methods of suicides were hanging (12), burn (20), poisoning (42) and jumping from height (10). The difference was significant (P<0.05). The reasons for suicides were failure in examination (16), love affairs (22), mental illness (12), family problem (20) and dowry (14). The difference was non-significant (P>0.05).

Conclusion: Unnatural deaths are quite common in youngsters. The most common methods of suicides were hanging, burn, poisoning and jumping from height. Reasons for suicides were failure in examination, love affairs, mental illness, family problem and dowry.

Keywords: Forensic, Love, Unnatural deaths.

Introduction
A significant number of young people die each year due to unnatural causes. Unnatural deaths are the leading killer of today’s young generation, as the patterns have changed from infections towards social etiologies during the last decades. The unnatural deaths may be due to unintentional or intentional injuries. Unintentional injuries are mainly accidents and homicides. Intentional injuries are mainly suicides. Road traffic accidents and poisoning are a major problem all over the world.\(^1\)

Unnatural death is a category used by coroners or medical examiners and vital statistics specialists for classifying all human deaths not properly describable as death by natural causes. It includes events such as: accidents, drug overdoses, executions, murders, deaths by misadventure, animal attacks, complications of surgery, suicides, acts of terrorism and war.\(^2\)

The burn fatalities are not just related with accidents but also become a social calamity in India. The prevailing system of dowry, is a product of emerging capitalist ethos - the offshoot of an
unequal society, a result of rampant consumerism, aided and abetted by the black market economy. Its increasing incidence is symbolic of continuing erosion and devaluation of women’s status in independent India. Suicide is most common in unnatural deaths and most common method used to commit suicides is by hanging. According to various studies method of suicide is dictated by what is convenient and readily available, though the acceptance of various suicide methods can change over time.  

Cluster suicides occur in the young and are often initiated by direct communication. As it is possible that internet-based social sites may facilitate this phenomenon, investigations should include an evaluation of the victim’s Internet access given the potential risk of similar actions by peers.  

The present study was conducted to assess the type of unnatural deaths among young adults.

**Materials & Methods**

The present study was conducted in the department of forensic sciences. It included 84 cases of unnatural deaths. Ethical clearance was obtained before starting the study.

**Results**

**Table I Distribution of cases**

<table>
<thead>
<tr>
<th>Total</th>
<th>Males</th>
<th>Females</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>84</td>
<td>38</td>
<td>46</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Table I shows that among all cases, males were 38 and females were 46. The difference was non-significant (P=0.1).

**Table II Age wise distribution of deaths**

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>Males</th>
<th>Females</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-15</td>
<td>12</td>
<td>7</td>
<td>0.05</td>
</tr>
<tr>
<td>16-18</td>
<td>18</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>19-21</td>
<td>8</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

Table II shows that age group 13-15 years had 12 males, 7 females, age group 16-18 years had 18 males and 26 females, age group 19-21 years had 8 males and 13 females. The difference was significant (P=0.05).

**Graph I Methods of suicides**

Graph I shows that methods of suicides were hanging (12), burn (20), poisoning (42) and jumping from height (10). The difference was significant (P<0.05).
Graph II Reasons for suicides

Graph II shows that reasons for suicides were failure in examination (16), love affairs (22), mental illness (12), family problem (20) and dowry (14). The difference was non-significant (P>0.05).

Discussion

The other means of unnatural deaths - include hanging, drowning, jumping from height, etc for suicidal purposes. This is so because methods used by individuals bent on self-destruction depend upon the availability of the lethal instruments. Snake bites, electrocution, anaphylactic deaths, etc categorized under “others” constitute a substantial number of unnatural deaths in this part of the world because of the lack of infrastructural facilities for timely management of such patients. Undiagnosed and sudden deaths are registered to be under suspicious circumstances and inquest proceedings initiated by the police, only to find on postmortem examination, that in most of such cases a disease process was responsible for the death.\(^5\) The present study was conducted to assess the type of unnatural deaths among young adults.

We found that males were 38 and females were 46. Maximum cases were seen in age group 16-18 years had 18 males and 26 females, age group 13-15 years had 12 males, 7 females and age group 19-21 years had 8 males and 13 females. This is similar to Gupta et al.\(^6\) We observed that methods of suicides were hanging, burn, poisoning and jumping from height. Reasons for suicides were failure in examination, love affairs, mental illness, family problem and dowry. This is in agreement with Unnikrishnann et al.\(^7\)

A four pronged attack to combat suicide suggested in a 2003 monograph was reducing social isolation, preventing social disintegration, treating mental disorders and regulating the sale of pesticides & ropes. Additionally, a set of state led policies are being enforced to decrease the high suicide rate among farmers of Karnataka. The method of suicide is dictated by what is convenient and readily available, though the acceptance of various suicide methods can change over time. Drowning remains a significant public health concern, as it is a major cause of disability and death, particularly in children.\(^8\)

Poisoning is one of the preferred means of committing suicide among males and females in India. The relatively high ratio of teenage poisoning deaths to hospital admissions and the recent increases in teenage death rates from
suicide underscore the importance of identifying causal factors and developing preventive measures that will reduce not only the morbidity from poisoning but the fatal outcomes for several hundred teenagers each year. The commonly used poisons to commit suicide in India are Organophosphorus compounds, Opium, Barbiturates, Oleander, Oxalic acid, Copper sulphate, Combination of two or more. These poisons are considered as ideal suicidal poisons because it is easily available, cheap, either tasteless or agreeable taste, can easily be consumed with food, drinks, highly toxic and will be certain in action, and will cause painless death.

Conclusion

Unnatural deaths are quite common in youngsters. The most common methods of suicides were hanging, burn, poisoning and jumping from height. Reasons for suicides were failure in examination, love affairs, mental illness, family problem and dowry.

References
