THE INCIDENCE RATE OF ACCIDENTS AND DOMESTIC ACCIDENTS IN ZABOL

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Introduction and aims: Accidents are the greatest problems and health dilemma in the world today and they are one of most important causes for morbidity, mortality and disability. For decreasing the rates of accident especially domestic accidents, you have to teach the community appropriate to documents to targeted groups. Perquisites for these teaching is determining accidents incidence in community. Then the researchers intended to determine the incidence of domestic accidents in Zabol.

Materials & Methods

This is a cross-sectional study a kind of retrospective one which it has conducted from April 2014 to April 2015 in Zabol City. The convenience method was used for sampling. All injured people with domestic accidents who were referred to Home of Health assessed and they were 916. The collecting data was a formal checklist a related forms at the Home of Health. Collected data were analyzed using descriptive and inferential statistics such as Chi-square Test.

Findings

According the obtained results, males were 46.8 and the females were 53.2.
There was a significant relationship between age, gender, job and education (P<0.05). Among of accidents kinds, burning had the most frequency (61%). The it had been occurred at Kitchen (51.4%). From location of accidents, the majority of accidents were happened at kitchen (51.4%). From treatment outcome of accident, majority of injured were cured, under gone treatment(16.3%) and 0.04% had disability and 1.2% were expired.

Discussion and Conclusion

Given that obtained results, the considerable percent of accidents were related to burning at home that the researchers suggested teaching programs must be scheduled to eliminate the rates of accidents and their outcomes.
Considering that the majority of injured people were under 20 years, adolescents and mothers, the teaching program must be fit with ages group.

Key words: Domestic accidents, accidents, prevention, Home of Health, Zabol.

Introduction

Who identifies the accident as an event without precedent that causes detectable damage (WHO, 2013). An event is a unpredictable incidence by individual that it resulted in recognized losses, in other hand, accident is an event that it causes by human and resulted in diagnosable losses. Also, accident generally refers to the fast emerging phenomenon (kang et al., 2015). Damages destroys millions of human and families lives. WHO Estimated that more than 16000 children die of unintentional accidents daily (WHO, 2014). The findings of UNICEF’s community-based studies have conducted recently, have shown that these figures are more and more. Tens of millions of children suffer from non-fatal injuries which they demand for hospital care. For whom remain alive, losses of damages, care and needed rehabilitations in community have many sequences on children future in terms of health, teaching and acceptance in society and parent’s life (WHO, 2013). Emerging industrial revolution and entrance of industry and technology into human life, on the one hand has caused control of communicable diseases, in turn it caused rising life expectancy, and besides it has caused prevalence and increased rate of non-communicable diseases which they are direct and indirect outcomes of these evolutions. In these disturbances, one of the most health- social dilemma is accidents (Stanhope and Lancaster, 2015). According conducted researches, accidents are the third leading cause of death among all ages, and the first cause of death in people under 40 years. The sum of lost active years of life lost due to accidents is further than other causes of mortality and morbidity. For example, this rate is more than 1.4 million years in the US. (Harper et al., 2015). The annually rate of accidents is 8-10% in Iran. Based some information, (accidents are the second causes for morbidity and mortality after cardiovascular disease (Barry et al., 2009).

Based on research, 13.5% of deaths are related to accidents, and 17% of male deaths due to accidents are occurred in the population of the village. More than 74% of deaths in 15-30 years group are due to accidents. The results of researches showed that 50% of accidents in rural population is burning in under five years old population. Children under four years old was consisted of 20%. As ever less comprehensive and systematic study about incidence of domestic accidents has conducted in this region on the evaluation of a variety of events in this region. However, comparative study about longitudinal trends in these events in different years have not performed and, the morbidity and mortality rate and the losses and physical debilitating due to these accident have evaluated and assessed less,
and it is not unknown whether health-care system cares has been effective in decreasing accidents, and finally, what are the priorities of affaires in order to effectively control accidents. Therefore this study has conducted to responds to these problems and the aim of this research was determining domestic accidents rate in Zabol.

Materials and Methods

This is a cross-sectional study a kind of retrospective one which it has conducted from April 2014 to August 2015 in Zabol City. The obtained data about the number and kinds of home accidents and the rate of domestic accidents and determining of epidemiological indices have investigated at the homes of Health and health–cure centers in rural regions in Zabol city between April 2014 to August 2015. The convenience method was used for sampling. All injured people with domestic accidents who were refereed to Home of Health assessed and they were 916. Health information that it is needed for this research has been routinely reported and completed in health system was used. These forms and check lists have approved by experts in ministry of health. Some variables such as the presence or lack of guard rails on the roof, balconies, staircases, windows, pools, wells, ponds and safety in heating devices, the whereabouts of drugs, pesticides, oil and flammable liquids, electrical equipment safety, electrical wire and socket height, the brightness of different parts of the building, kitchen safety, presence or lack of first aid kits, as well as safety training to family members were evaluated and assessed. Personnel involved in the project oriented and justified during several training sessions. Required information collected based on forms and related checklist at Home of Health level. Finally, the data were entered in SPSS version 21.0 and analyzed through appropriate statistical descriptive and inferential tests. The significant level was considered P<0.05.

Findings

| Table 1 Frequency distribution of Domestic accidents in terms of age. |
|--------------------------|--------------------------|--------------------------|
| Age (years) | Number | Percentage |
|<5 | 100 | 10.9 |
|6-15 | 224 | 24.4 |
|16-25 | 195 | 21.3 |
|26-35 | 99 | 10.8 |
|36-45 | 114 | 12.4 |
|>46 | 184 | 20.2 |
|sum | 916 | 100 |

The timing of events during the study, 412 patients (45%) of domestic injuries were in 2014 and 504 patients (55%) accidents happened in 2005. In sum, 916 people have accidents and men (46.8%) and (53.2%) have occurred in women. There has been a significant relationship between gender and incidence of accidents (P<0.002).
As it showed in table 1, the most frequency of domestic accidents are in age group 6-15 years old (24.4%) and the least frequency is related to age group 26-35 (10.8%). Statistical test confirmed that there is a significant relationship between age and incidence of accident (P<0.001).

About variable of job, it can said that percentage of domestic accidents is 30.2% and in students was 25% which they had the most frequency in comparison of other jobs. Statistics test showed a significant relationship between job and incidence of domestic accidents (P=0.001).

**Table 2: The frequency distribution of domestic accident in term of Education.**

<table>
<thead>
<tr>
<th>Education level</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>414</td>
<td>45.2</td>
</tr>
<tr>
<td>reading &amp; writing</td>
<td>97</td>
<td>10.6</td>
</tr>
<tr>
<td>Primary</td>
<td>156</td>
<td>17</td>
</tr>
<tr>
<td>Guidance</td>
<td>101</td>
<td>11</td>
</tr>
<tr>
<td>Diploma</td>
<td>76</td>
<td>8.3</td>
</tr>
<tr>
<td>Higher than diploma</td>
<td>72</td>
<td>7.9</td>
</tr>
<tr>
<td>Total</td>
<td>916</td>
<td>sum 100</td>
</tr>
</tbody>
</table>

As it has shown in table 2, the illiterate people has the most domestic accidents (45.2%) and who have higher than diploma had the least domestic accidents (7.9%). It means that whatever the education of people is less, the incidence of domestic accidents are more. Statistics test showed that there is a significant relationship between education level and incidence of domestic accidents (P=0.001).

**Discussion and Conclusion**

The results of this research showed that the 916 domestic accidents have occurred; 504 cases, the most cases related to year of 2014 and the 412 cases related to 2015. It seems the increasing of domestic accidents over the 2 years (annual increase of 10%) to be caused by several factors such as increased reporting regular, timely recording of injuries in the first level of service provision including Home of Health and health-cure centers rather than increased incidence of accidents in the study population. In addition, the findings of study showed that more women than men are vulnerable for household accidents and this can related to be somewhat more women to stay at home and do household chores and assigned child care responsibilities (Sarani...
This result is consistent with the research of Neghab et al. (2008) which its aim was determining the rate of domestic accidents in Shiraz. In this study, according to age groups classification, the highest rate of accidents have been in the age group of 15-6 (24.4%). In the Neghab Et al., study, the most reported incidents related to age groups of under 5 years, 9-5 years and 19-15 years and in the Zargar et al. study, the most vulnerable age group have been 0-14 years old (Zargar et al., 2003).

In the Trefan et al. (2016), there was a significant relationship between age and accident type and the cause of accident. The most frequency was related to domestic accident in age group 10-19 years. The rate of domestic accident has reported 19.5% in age group under 15 years old. The majority results of these studies are consistent with the results of our study. The result is most likely due to hyperactivity and high mobility of children in this age range. It seems that if is effective the inclusion of courses in the curriculum of sixth grades students, such as safety at home or principles of effective prevention of home injuries in this vulnerable group. Also in this study, most injuries resulting from home accidents in housekeeper jobs was 30.2% and 25% were accounted of students. This finding is consistent with the results of 5-year study which it has conducted in Turkey (Evci et al., 2006). The finding of more of events in household jobs in our study is consistent with the obtained findings of conducted studies in Ankara (Hamzaoglu et al., 2002). The consequence of the fact that people who are working at home more at risk of domestic accidents from contact with hot liquids, hot dishes, cooking, flame lights or stove. This confirms that there is a need for housekeepers health education and school in-charges and staff about the safety of work place, work environment and school safety environment (Hu et al., 2015). The results also reflect the fact that the domestic accidents and injuries were reduce in educated people as the findings of this study showed that 45.2 of illiterate people were injured and 7.9% of Diploma and higher were injured. Then it concluded whatever less literacy, more accidents has seen. This finding is consistent with an Indian research which it has conducted by Sudhir et al. (2014).

In a study, the results showed that there was a relationship between illiteracy and poverty and accident incidence (Altundağ and Oztürk, 2007) and these results are consistent with our study. It seems that education programs and interventional education programs for these groups is essential.

References


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