

Women Pose Innocent Victims of Landmines in Postwar Iran

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Abstract

Background: Although in the last few years there has been an increasing attention to the problem of landmines, to date, the implications of women being victims of landmine has not been duly dealt with in the world including Iran, which is estimated to be the second most landmine infested country in the world. Still, provinces by the west border of Iran, 18 years after cessation of Iraq-Iran war suffer from the burden of vast areas, highly infested with landmines. This study aimed to provide a gender focused insight into landmine accidents in Iran

Methods: In this retrospective study, women with documented deaths or injuries due to landmine and/or unexploded ordnances (UXO) explosions as documented in their medical records between Jul 1988 (after ceasefire) and Feb 2003 were studied in 5 western provinces of Iran. Data was analyzed by SPSS for Windows Version 11. *P* value under 0.05 was considered statistically significant

Results: During the 14-year study period, 252 women from 5 western provinces of Iran were reported to have injuries or death due to landmine and UXOs. All of the victims were civilians and the majority of them (47.6%) had one or more amputations. Most of them were injured in the period between 1994 and 1998. The majority of the patients were young.

Conclusion: Women who should take care of themselves as well as their families are more prone to sufferings inflicted by landmines and UXO.

Keywords: *Women, War, Epidemiology, Iran*

Introduction

Despite all efforts eliminate the burden of anti-personnel mines and unexploded ordnance (UXO), these weapons remain a menace and cause significant suffering among the civilian population in many parts of the world. They kill or maim thousands of men and women every year (1).

Women represent an important portion of these who directly or indirectly are affected by the consequences of such accidents, According to statistics provided by the International Committee of the Red Cross, women account for 10 to 15% of the total number of landmine victims. In some countries (e.g. Azerbaijan/Nagorno Karabakh, Afghanistan, FRY/Kosovo), women and girls account for between 5 and 10% of the total number of casualties (2). This can be explained mainly by the type of activities carried out by women, who do not spend as much time as men outdoors but tend to remain in or near their homes.

Figures, however, vary greatly from country to country, depending on the role women play in society and on whether their daily routine jobs are more likely to expose them to danger. In countries where women work more outside their houses, farming the land or fetching water or firewood, the number of female victims is likely to increase, as is the case with Angola, where the national percentage is approximately 20%. Bosnia also provides an interesting example, showing how the number of women involved in landmine accidents spiked immediately after the war as they were forced to take up traditionally “male” roles and tasks as their husbands and fathers had been killed or wounded in the conflict (3).

Women are particularly affected, as they comprise the majority of the world’s farmers and gatherers of food, water, and firewood. Landmines block access to farmland, food, water and shelter, and act as a major obstacle to the trans-

port and distribution of basic relief supplies, the repair of essential infrastructure, and the reconstruction of homes, schools and clinics (4). Injury and disability, in fact, are not the only ways landmines can affect women's lives. It is usually women and girls who are in charge of taking care of injured relatives and in many cases they have to take up the burden of supporting the family economically. In many countries, female victims of landmines and UXO have little opportunity to get married as their disability lowers their status within society. Moreover, some women may have difficulty in gaining access to medical care and physical rehabilitation if not accompanied by a male relative and treated by female health staff. Some women are abandoned by their husbands after the accident and not only have to cope with the trauma of what happened to them but also have to support their families (5).

When injured by landmines or UXO, women and girls who are victims face a greater chance than their male counterparts of being stigmatized and experiencing diminished marriage prospects: (6) Women who have been injured by mines are not only a burden on their families and communities, but are often no longer perceived as being productive members of society. Amputated women are often perceived as less desirable as wives because they are no longer able to work in the fields, which is their traditional role in many countries. Women suffer terrible psychological consequences associated with the presence of landmines and landmine-related injuries (7).

Particular difficulties faced by women and girls in gaining access to medical care for their injuries include limited knowledge of special services available to women and children; the burden of household tasks and care of the young, injured and elderly; inadequate access to transport; and in some countries, cultural restrictions that prevent women and girls from traveling or receiving treatment from medical personnel of the opposite gender (7).

To date, the implications of women being victims of landmine has not been duly dealt with in the world including Iran, which is estimated to be the second most landmine-infested country in the world. This study aimed to provide an initial insight on the gender issues surrounding landmine accidents in 5 western provinces of Iran.

Materials and Methods

The study population consisted of women and girls who were injured or died by landmine or UXOs during 1988-2003 in western and south-western provinces of Iran, namely west Azerbaijan, Kermanshah, Khuzestan, Ilam, and Kurdistan.

Records of 252 women, all being civilian residents of the mentioned provinces, who were injured or maimed after ceasefire in 1988, have been certified by the local authorities.

The hospital records of all subjects were reviewed with a focus on the following perspectives: demographic data, data pertaining to the incidence, pre-hospital care data, and type of injuries and outcome of hospitalization. Trained physicians completed a standardized questionnaire for all of them.

Only patients with true landmine or UXO injury as certified by the provincial governor were included in this study. An International Classification Disease- 10 (ICD-10) as a scaling system was used to characterize the scale of injury in all victims.

Our analytical approach involved SPSS Version 11 (SPSS Inc, Chicago, IL, USA) for Windows. Pearson χ^2 test was used for categorical data, *t*-test for continuous variables, and Wilcoxon nonparametric test for continuous variables with a non normal distribution. A value of $P < 0.05$ was considered statistically significant.

Results

From 20th Aug 1988 to 20th March 2003 a total of 252 women and girls in Iran were reported to be injured or killed by landmines and UXOs.

All of the victims were civilian dwellers of the western border towns of Iran.

The mean age of the victims at the time of accidents was 19.04(\pm 14.26 SD).most of them were illiterate (51.9%), and only 17.6% had primary education of up to 5 yr. Women accounted for 6.8% of total accidents in those provinces.

The number of victims was highest in the province of Kurdistan; however, there was not a significant difference the five provinces' respective figures. Khuzestan had the greatest female/male ratio at 9.3%, while Kermanshah had the smallest ratio (5.4%).

As summarized in Table 1, the activity of the victims at the time of the blast is significantly

different according to the provinces of the victims ($P < 0.05$). About 25.8% of all accidents happened at homes, on the roads and farms and the rest happened in mountains and deserts.

Only 6% of total victims received pre-hospital care, and the mean of times between accident and medical services admission was 3 h length, which was significantly higher than men ($P < 0.05$).

The mean length of the survivor's admission was 6.5 wk. In evaluation of outcome of accident in women, amputations with (47.6%) of all accidents were higher than death (21.8%) or disability (7.5%).

Table 1: Number and percent of Landmine victims according to the provinces of living

Gender	provinces of living	Azarbayejan gharbi n (%)	Khoozestan n (%)	Kermanshah n (%)	Ilam n (%)	Kordestan n (%)
Male		495 (92.7)	391(90.7)	1163(94.6)	539(94.1)	868(92.3)
Female		39(7.3)	40(9.3)	67(5.4)	34(5.9)	72(7.7)
Total		534(100)	431(100)	1230(100)	573(100)	940(100)

Discussion

The way men and boys are affected in conflicts, their post-conflict situations differ from the way women, and girls are affected. Research on experiences with landmine has shown that while men and boys are more likely to be injured by landmine 43% women and girls will die of their injuries as compared to 29% of men and boys (8). Mortality from landmine accidents amongst women in our study was 21.8%, which may devote better treatment facilities at their disposal as compared to previous study (9). The mean age of female victims was also less at 19.04 yr as compared to 23 yr for males and females altogether (9, 10). Female members of their households typically care for survivors of landmines and UXO: their wives, mothers, daughters or other female relatives. This work is often unrecognized, undervalued and unremunerated, and can lead to negative household coping mechanisms such as withdrawing girls from school to care for injured relatives.

This role however, makes women a better target for mine awareness and rehabilitation programs as they can also spread these messages within their communities and families.

Rural communities in Iran often lack basic survival facilities especially designed for the handicapped, which may lead to serious adverse consequences. For example, inaccessibility of roads and buildings for wheelchairs may block the victims' access to care or economic opportunities, rendering them socially isolated.

In conclusion, women who should take care of themselves as well as their families are more prone to sufferings inflicted by landmines and UXOs. Focusing mine awareness efforts on women is likely to yield better results as they can also pass on the messages to their families.

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References

1. Nicolas E, Wendy S (2003). Rehabilitation of landmine victims-the ultimate Challenge. *Bull World Health Organ*, 81(9): 2-9.
2. Anonymous (2002). Mine/UXO-awareness Programmes and Women. International Committee for the Red Cross. Available from: <http://www.icrc.org/Web/Eng/siteeng0.nsf/iwpList74/4D866E216B10396241256C6100395DFE>.
3. Barber M (2001). Gender perspectives on Landmines, UN Mine Action Service (UNMAS). Available from: <http://disarmament.un.org/gender/14marunmas.htm>
4. UNIFEM. *Issue Brief on Landmines*, New York: UNIFEM. Available from http://www.womenwarpeace.org/issues/landmines/landmines_pfv.pdf
5. Ruberry M (2001). The Effects of Landmines on Women in the Middle East, *Journal of mine action*. Available at : www.maic.jmu.edu
6. Mitchell S (2003). *Gender Report, UXO Clearance and Community Development in Thua Thien Hue Province*, Melbourne
7. Anonymous (2007). Women, War, Peace and Landmines, United Nations Development Fund for Women. Available from: <http://www.womenwarpeace.org/issues/landmines/landmines.htm>
8. Huckerby G, Takeshita M (2007). The hidden impact of landmines: points to enquiry for a research into a significance of gender in the impact of Mines and mine action. *Swiss campaign to ban land mines*: one
9. Soroush AR, Falahati F, Zargar M, Soroush MR et al. (2008). Amputations Due to Landmine and Unexploded Ordnances in Post-war Iran. *Arch Iranian Med*, 11 (6): 595-97.
10. Soroush AR, Falahati F (2007). *The human costs of landmine and UXOs*. Janbazan Medical and Engineering research center, 1st ed. Janbazan Medical and Engineering Research Center, Iran: P. 49.