Landmine injuries: experience in the West Azarbaijan Province

After 17 years of cessation of the Iran-Iraq war, the West Azarbaijan Province, located in North-West of Iran, suffers from many high-risk areas infested with landmines causing many civilians to be injured by them. The victims usually live in high-risk areas and work on lands as farmers or shepherds. There may be even a curious child who finds a suspicious object. Some of the victims are among smugglers, using obsolete borderland paths to transfer their commodities.

Landmines are unaffected by cease-fire or peace. When the conflicts end, these deadly remnants still kill and maim civilians, children, and animals. The contaminated areas are inaccessible for agricultural and economical activities. The high number of landmine injuries after cease-fire might be explained by the freedom of people to move into areas that had been inaccessible before.

Most war-wounded patients are young and healthy soldiers. Nonetheless, injuries affecting civilians affect all age groups. Moreover, morbidity is higher among civilians than the combatants. Children are more likely to die of landmine injuries than adults—their smaller size means that their vital organs are closer to the blast of a detonating mine. Children are also less able to survive sustained blood loss than adults. The average hospitalization period, blood transfusion, and number of operation is higher for landmine victims than any other war wounds. It is estimated that one-third to one-half of the victims die within hours of the blast, many of them never reaching medical care.

The victims not only suffer from dirty wounds contaminated with mud, grass, and shrapnel fragments, but also suffer from an intensive blast injury, which causes neurological and psychological impairment. In addition to severe contamination, there is often a delay in presentation to treatment facility, and the victim may die of hemorrhage. Transport of victims to the first aid medical centers may take several hours to several days. Their wounds develop severe infection, which needs higher rate of amputation than that thought based on the first wound assessment. Physical and functional impairment is not the only problem of these patients. They have also many psychological, social, and economical problems.

About one-third to one-half of the victims have problems with their amputation. They need a revision surgery due to osteomyelitis, inappropriate stump, and formation of neuroma. A major problem is that all prosthesis, like shoes, wears out and needs to be replaced.

Janbazar Affairs Organization covers 441 victims of the landmines in West Azarbaijan. This group comprises of 403 males and 38 females. Eighty-nine of them are under 15 years of age. For 57 injured upper limbs and 325 injured lower limbs Janbazar Affairs Organization provides prosthesis. Eye injury, often enucleation, has occurred in 84 victims. About one-fourth of these victims suffer from osteomyelitis and have complaints from their stumps. It is estimated that there have been 110 martyrs because of mine blast. Unfortunately, these figures are increased every month (personal communication).

The impact of this huge number of maims impose a serious problem on public health and their families. They usually cannot support their families and have a dependant economical life. A woman who has sustained an amputation of the lower limb, would probably never get married and find it difficult to get a job. They will be a burden on their families or the society. Unfortunately, the exact number of the victims is not known. All the numbers presented are just estimations. This is because some of these victims might have been transferred to the neighboring countries, or some may have never sought medical attention due to minor shrapnel injuries, and some might have been died far from help.

It is estimated that Iran is the second most infested country, with 16 million scattered mines. This problem is faced, more or less, by all of our five western provinces.

These observations support that most of the landmine victims are civilians and the actual number is higher than previous estimates. Injuries,
in most of the victims, result in an upper or lower limb amputation. These experiences confirm a substantial toll in physical, mental, social, and economical disability from the widespread use of landmines.

Suggestions

- By precisely weighing the human, social, and economical costs against the probable defensive benefits, the use of landmines could decrease and stop.
- Prompt clearing of the mine fields and high risk areas.
- Better surgical skills should be performed to confront war victims, especially victims of mine injuries, to prevent further complication. Some old lessons need to be relearned.7, 9
- Provision instruction to civilians who live in high-risk areas is the most preventive care. Mine awareness programs are conducted in order to inform the person as how to avoid, how to recognize, and what to do if one is found.2, 4
- Rehabilitation of amputees, who are in need of preprosthetic and prosthetic rehabilitation.8, 10
- Emotional, social, and economical support of the victims, in an attempt to increase the quality of their lives.8, 10
- At last, we strongly recommend further epidemiological investigations to be carried out in order to better understand the impact of this serious problem and its consequences on our social and public health, and better take care of the victims of the landmines.

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References: