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Mine Injury Casualties Report from the Iraq-Kuwait DMZ

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This article is dedicated to the victims we were unable to help in spite of all our efforts.

Introduction

After the implementation of the UN Iraq-Kuwait Observation Mission (UNIKOM) at the end of the first Gulf War in 1990, a medical team was set up in 1991 to support the UN troops in their difficult tasks in the demilitarized zone (DMZ), a remote desert area between Kuwait and Iraq. 1 The medical team was designed to take care of the medical treatment for the UNIKOM members and the nomadic people living in the DMZ as pointed out in UN Secretary-General reports S/2001/287 and S/2001/913 on the official UN website. 2

Despite the continuing mine clearance and the UN Mine Awareness Program on both sides of the DMZ, the management of mine injuries remained a challenging task for our medical teams. In addition to these major problems, the usual day-to-day outpatient department (OPD) visits for the military and local staff personnel, dehydrations, scorpion bites, infectious diseases and road traffic accidents also had to be managed. 3 During the first few years, the medical duties and responsibilities for the troops from 33 nations were carried out by an Austrian and later a Norwegian Medical Team (NORMED). In October 1995, this role was given to Germany, and since then, 15 voluntary German Medical Teams (GERMED 1 to 15), equipped and managed by the Foreign Service of the Knights of Malta from Cologne, were responsible for providing the emergency medical service (EMS) in the desert of the DMZ between Kuwait and Iraq until the second Gulf War began in March 2003. 4

Mine Injury-Related Experiences During the Missions From 1990 to 2002

The rescue area included 3,800 sq km of the DMZ and the remote desert surroundings. Five ambulances from three rescue stations with seven paramedics equipped with necessary supplies provided 24-hour service for the 1,200 UN personnel and the nearby nomadic population. During 2001, there were about 4,000 regular OPD visits and about 50 calls for casualty evacuations (CASEVACs). 5 Forty percent of the CASEVACs were mine-related and most of these injuries happened on the Iraqi side of the DMZ. Therefore, this problem was greater than the road accident problem and had a political component as well because the injuries happened in the Iraqi territory.

In 1996, a medical team was greater than the road accident problem and was referred to their country. Based on the reports of the former medical teams, the figures of the missions were as shown in Table 2.

It is interesting to note that the number of mine incidents increased within the years of interest in spite of the improving mine clearance conducted by the ARGENG demining team.

TABLE 2: UNIKOM: Mine Injuries

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Mine Injury Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>6</td>
</tr>
<tr>
<td>1997</td>
<td>8</td>
</tr>
<tr>
<td>1998</td>
<td>5</td>
</tr>
<tr>
<td>1999</td>
<td>3</td>
</tr>
<tr>
<td>2000</td>
<td>30</td>
</tr>
<tr>
<td>2001</td>
<td>24</td>
</tr>
<tr>
<td>2002</td>
<td>N/A</td>
</tr>
<tr>
<td>2003</td>
<td>N/A</td>
</tr>
<tr>
<td>TOTAL</td>
<td>78</td>
</tr>
</tbody>
</table>

A median of 1.8 mine casualties were reported in the UNIKOM's Mine Injury Casualties Report from the Iraq-Kuwait DMZ during the mission years. The number of mine casualties increased every year, with the highest number in 2000. The number of mine casualties in 2002 was the lowest, with 78 cases reported. These figures are based on the official reports of the UNIKOM and the Mine Awareness Program. The number of mine casualties is expected to decrease in the future, but still remains a significant problem in the region.

In summary, mine-related injuries remain a significant problem in the region. The number of mine casualties has decreased in recent years, but still remains a significant concern for the UNIKOM and other organizations working in the region. The efforts of the ARGENG demining team and other organizations are helping to reduce the number of mine casualties, but more work needs to be done to completely eliminate this problem.

TABLE 3: Average Times for GERMED 12’s CASEVACs

<table>
<thead>
<tr>
<th>Range</th>
<th>Access Time</th>
<th>Response Time</th>
<th>Scene Time</th>
<th>Transport Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-85 min</td>
<td>5-40 min</td>
<td>10-75 min</td>
<td>2-125 min</td>
</tr>
</tbody>
</table>

* The UN official reports only mention the fatalities. For comparison, read Hassan and Stroud’s 2002 report on measuring injury severity. 6

In spite of the large number of injuries in the lower extremities, some individual patient injuries patterns were found. For example, injuries in the upper part of the body gave evidence that some of the patients had been handling UXO or mines before the explosions of Haarad No.

TABLE 5: Fatalities Report (according to the UN documents)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>N/A</td>
</tr>
<tr>
<td>1998</td>
<td>N/A</td>
</tr>
<tr>
<td>1997</td>
<td>N/A</td>
</tr>
<tr>
<td>2003</td>
<td>6</td>
</tr>
<tr>
<td>2002</td>
<td>6</td>
</tr>
<tr>
<td>2001</td>
<td>7</td>
</tr>
<tr>
<td>2000</td>
<td>2</td>
</tr>
</tbody>
</table>

* These figures extracted from the official UN documents are to be seen as minimal figures. Some dead-on-site-scene patients from accidents outside the DMZ didn’t get access to the help from the UN medical teams in time. The follow-up for patients mostly referred to care from the BAFB hospitals with limited resources, which at that time were not accessible to UNIKOM authorities.

Conclusion

From the end of the first Gulf War (1991) until the beginning of the second Gulf War in March 2003, UNIKOM attempted to guarantee the feasibility of this post-conflict area between Kurdistan and Iraq. Mine-related injuries remained the major problem for the EMS. Most victims were young Iraqi civilians who had been entering through the southern part of the former DMZ to get basic med-
Appendix: Anaesthesia in the Field During the GERMED-12 Mission

During the GERMED-12 Mission anaesthesia was started in the field. According to the recommendations of the UN Peacekeeping Mission, the patients were the basic-level medical support. An ambulance car was at hand at this level of primary care. The treatment included cardiovascular resuscitation, haemorrhage control, fracture immobilisation, wound dressing, casualty transport and evacuation. There was the possibility of communication and reporting by radio, so the paramedic had to report the emergency situation to the doctor on duty at the operations centre. The medical treatment was coordinated on the advice of the emergency physician.

For treatment and evacuation of casualties the tactical operation, caudally the WAFACO, was started. Especially under the conditions of the United Nations Iraq Kuwait Observation Mission (UNIKOM), a Forward Medical Team (FMT) was sent to provide short-term medical support in the field. The FMT was transported by helicopter as an ambulance car to the emergency scene. Both were equipped with modern emergency appliances and medical material.

The task was to perform emergency resuscitation procedures, maintenance of airway, breathing, and circulation and advanced life support, haemorrhage control, and life-saving emergency procedures. Especially in GERMED-12 the physicians were trained to use Ketamine in combination with inhalation and ventilation. Ketamine could be used in most wounded patients without problems. Proven to be very safe and had only a few side effects:
- Hyper ventilation: Atropine is necessary.
- Hypotension: Diamox or midalozam was given to prevent these.
- Increased blood pressure: Preferred medicine for hypertensive patients.

The transportation time was sometimes over one hour (see Table 5 on previous page) before arriving at the Level-One medical support facilities.

In our field hospital, it was possible to do surgery under general anaesthesia. We used an apparatus from the Drager Company. We have administered general anaesthesia with nitrous oxide and oxygen in combination with Ketamine. One physician was the anaesthetist and two surgeons, one nurse, and one paramedic were on duty daily.

At this level, we could perform limb and life-saving surgery. It includes ligation, thoraecoracoid, wound exploration, and debridement, fracture fixation and amputation.

For post-operative monitoring at our ward, we have used emergency medical equipment like mobile ECG and transportable resuscitators. A nurse or paramedic did the post-operative observations.

Literature
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JORDAN'S
Military in Mine Action

Jordan is a country rich in history and beauty. Throughout the years, with the increase of tensions in the Middle East, Jordan has been forced to protect its borders. As a result, Jordan has become a major actor in the mine action community and has taken a different approach by promoting the use of its military for demining and its non-governmental organizations (NGOs) for rehabilitation and mine awareness.

History

The first mines were laid in Jordan in 1948 during a war with Israel. Later, during the Six-Day Arab-Israeli War in 1967, when Israel occupied the West Bank and developed a new cease-fire line, Jordan began planting more mines along its western border. In the 1970s, Jordan experienced a Syrian threat, and numerous internal problems led to more mine planting. Thus, Jordan quickly moved from a mine-free country to a kingdom burdened with minefields along its western and northern borders.

Over 15,000 acres of land, bountiful in natural resources and sacred sites, quickly became consumed with mines. The total number of landmines stretched beyond 300,000, of which over 225,000 were laid by the Jordanian Armed Forces (JAF) and over 70,000 by Israel.2

Before his death, His Majesty King Hussein called for the clearance of all minefields by the year 2000. In March 1993, the Jordanian government implemented its first phase in a three-phase demining plan. In 1998, Jordan signed and ratified the Ottawa Treaty. Today, the government continues to support numerous mine action conventions and conferences, and submits updates on the status of its stockpile destruction program.3

King Abdullah I commissioned the National Demining and Rehabilitation Committee (NDRC) in March of 2000. This committee participates in various demining aspects from mine risk education (MRE) to mine clearance. New associations continue to emerge in Jordan, such as the Hashemite Society for Soldiers with Special Needs, Landmine Survivors Network, the International Committee of the Red Cross (ICRC), and the Al Hussein Foundation for the Habilitation and Rehabilitation of the Disabled, and Queen Noor still plays an active role in demining. However, the Jordanian army’s Royal Engineers Corps (REC) remains the key force in demining.4

Through the REC’s success in Jordan, the army has begun to stretch its boundaries. Currently, the REC is working in Afghanistan in an effort to demine the country and return the land back to the Afghan people. Aiding Afghanistan in its move to rebuild a country torn apart by the Taliban is not only noble, but it will also provide the REC with more experience in battling its problem at home.

by Kristen Frahler, MAIC