

# Israeli Defense Forces Medical Corps Humanitarian Mission for Kosovo's Refugees

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**Abbreviations:**

DOW-USA = Doctors of the World - USA

IDF = Israeli Defense Forces

IMC = International Medical Corps

MD = Medical doctor

MDM = Natural Disaster

Management, the official commemorative volume for the International Decade for Natural Disaster

Reduction (IDNDR), 1990-2000

MSF = Medicines Sans Frontiers

(Doctors without borders)

MSF-H = Medicines Sans Frontiers Holland

NATO = North Atlantic Treaty Organization

NGO = Non-governmental organization

Ob/Gyn = Obstetrical/Gynecological

WHO = World Health Organization

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**Abstract**

In April 1999, during the crisis in Kosovo, the Israeli government launched a medical, field hospital in order to provide humanitarian aid to the Albanian refugees that fled from their homes in Kosovo. This facility was set up by the Medical Corps of the Israeli Defense Forces, in a refugee camp located in Northern Macedonia. During the 16 days during which the hospital functioned, the medical staff treated 1,560 patients and hospitalized >100. The field hospital served as a referral center for all of the other primary clinics that were hastily erected in the camp and its surroundings. This communication elaborates on the various aspects of the humanitarian medical aid that were provided by this medical facility and the conclusions that learned from such a mission.

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**Introduction**

The long-standing conflict in the Balkans in the 1990s resulted in international intervention by the North Atlantic Treaty Organization (NATO) in 1999. While the Serb offensive in Kosovo turned into a crusade of ethnic cleansing, >1 million Kosovar Albanians were expelled from their homes. With the Serbain takeover, the militia expelled thousands of newly made refugees out of the remains of their villages, burned down mosques, and destroyed homes. The refugees headed toward the borders of neighboring Macedonia and Albania. For one week, these crowds, comprised of persons of all age groups, gathered near the borders of the neighboring countries, crossed into their sanctuaries, and hastily built refugee camps guarded by local police.

**Operations**

*Deployment*

The Israeli government launched a

medical, humanitarian mission to provide specialized care using a field hospital. The medical delegation, from the Israeli Defense Forces (IDF) Medical Corps, was comprised of 76 service men and women, including 15 physicians: two surgeons, one anesthesiologist, one orthopedic surgeon, two gynecologists, four internists, three pediatricians, and two physicians who had immigrated from Albania several years earlier, and who were drafted in order to interpret Hebrew to the Albanians. Among the physicians also were specialists in infectious diseases that were veterans of previous IDF humanitarian missions to Cambodia, Rwanda, and Kenya.<sup>1</sup> Additionally, the mission also included two paramedics, seven nurses, army medics, a medical engineer, a preventative medicine specialist, a pharmacist, x-ray and laboratory technicians, along with a skilled logistic support team, including a carpenter, a plumber, a mechanic, and two electricians.



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**Figure 1**—Refugee camps in Albania and Macedonia<sup>1</sup>

Three hours after leaving Tel Aviv, the delegation landed in Skopje, Macedonia, and 20 hours later, the field hospital opened in the Brazda camp, in Northern Macedonia (Figure 1). The Brazda camp was one of the largest refugee camps in the area, and the IDF hospital became an integral part of a multinational medical support system comprised of medical facilities from the North Atlantic Treaty Organization (NATO) and several non-governmental organizations (NGOs). Due to the lack of hospital beds, the Israeli field hospital turned into a referral center for all the other primary-care medical teams; non-governmental clinics (such as *Medécins sans Frontières*) in all the other refugee camps in Northern Macedonia as well as NATO forces clinics that also were building their facilities.

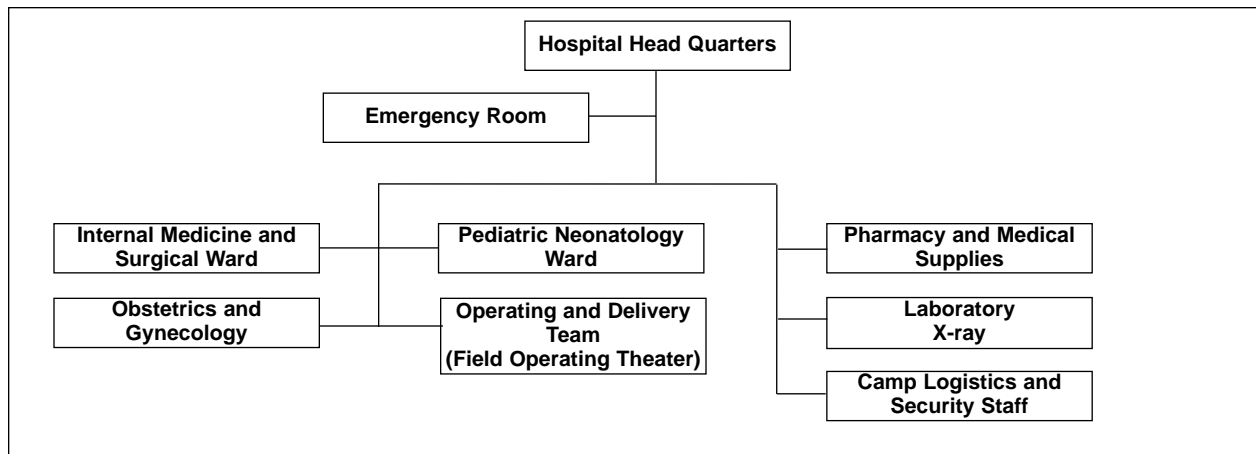
#### *Medical Practice*

A hospital in a refugee camp follows special rules—rules that are not taught in any medical school. One does not ask for a patient's residence; home is a tent providing shelter from the cold that is shared with other displaced families. A review of medical history is taken cautiously, and many times excluding important questions concerning parents, children, and/or siblings that are missing. Recommendations for the provision of basic commodities such as heating and nutrition may

be suppressed. Sometimes the young mother you have discharged from the obstetric ward is sent with her newborn baby back to their freezing tent. How can you expect a throbbing back pain to be relieved, if the elder, who does not know what happened to his children that were left behind, is sleeping in a tent on the cold ground? How long do you or can you hold a patient after an operation? When access to a pharmacy is lacking, you must provide the necessary drugs for several days. The patients also must receive follow-up in the field hospital, as often, no primary health care is available in the region.

Operating a field hospital in such conditions required the cooperation of many local, civilian, and military authorities. In a country in which health facilities and medical supplies are scarce, providing resources to an additional population of hundreds of thousands of refugees is extremely difficult. Therefore, transferring patients to local hospitals required coordination by the Macedonian Deputy Minister of Health.

As the camps were erected, the NATO first-aid clinics provided elementary medical assistance. After a few days, more diverse medical teams and provisions arrived that covered many of the primary medical care needs; yet, an urgent need for hospitalization remained without a proper solution.



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**Figure 2**—Structure of field hospital<sup>2</sup>*The Field Hospital*

The Israeli Army Deputy Surgeon General was in command of the operation and designed four medical wings that composed the hospital (Figure 2). An emergency room treated adult patients with traumatic injuries (orthopedic and surgical), those with medical emergencies, and those patients who required primary care flooded other NGO clinics within the camp.

An internal medicine and surgical ward, with a capacity of 30 beds each, provided room for many patients who needed an overnight stay in the hospital. Pediatric and obstetric care (including hospitalizations) was provided in a pediatric ward of a similar size. The pediatric ward included intensive care and neonatology facilities.

An operating team conducted surgical, obstetric, and gynecological procedures. All services, including laboratory and imaging (x-ray and ultrasound) technicians, pharmacists, and logistical personnel provided 24-hour services. The hospital supplies, kitchen, hygiene facilities, energy, and accommodations, including heavy vehicles, were brought from Israel rendering the entire project maximum logistical independence.

*Emergency Department Visits*

As soon as the hospital was erected, it attracted a large number of refugees and other observers. Rumors about the facilities spread rapidly through the camp. Less than an hour following the opening of the gates, young Albanian students offered translation services that facilitated and smoothed the handling of the stream of people that passed through the gates. During the first days after the hospital's opening, many exhausted children and elders recovered after a warm meal and a good night of sleep within the hospital tents.

In total, 1,560 patients were treated in the emergency room tent. The age distribution was skewed; due to the type of the disaster, a quarter of the patients (24.9%) who came to the facilities were <5 years of age. A large proportion of Albanian families have more than six children. Yet, even this fact cannot account for the finding that only a minority of the emergency room patients were >65 years of

age (7.2%) (Table 1). A more likely explanation is that the elderly could not stand the hardships of the long journey to the border of Macedonia and may have been left behind.

The victims were civilians, people who were driven from their homes. Most of the visits to the field hospital were for medical purposes. Exhaustion, inter-current infectious diseases, patients with chronic illnesses such as ischemic heart disease, diabetes, or chronic renal disease who ran out of their medications and treatment, comprised most of these medical visits. However, several patients with multiple, trauma-induced injuries also were evaluated and treated (some who had been beaten by members of the Serbian militia prior to their entrance into Macedonia).

*Medical Department*

In the adult medical department, 76 patients were hospitalized during the 16 days the hospital was active (Table 2). Most of the patients were referred to the hospital by the primary-care clinics operating within the refugee camps in the vicinity. Most of the adult patients were admitted due to infectious diseases, yet despite the poor sanitary conditions within the camp, the low temperature at night might have helped to prevent outbreaks of diarrheal diseases. Four elderly patients presented with acute myocardial infarctions and/or pulmonary edema. Although they were treated successfully, these experiences were a major concern to the staff because there was no available facility to replenish the oxygen required as part of their treatment. Of the 76 adults who were hospitalized, two-thirds (64.5%) came from the resident tents and 4% were transported directly from the border by bus. The remaining patients were referred from other clinics (Table 2). Sixty percent of those hospitalized were female.

Half of the patients admitted required antibiotics for infections. The scope of therapies required in the operation of such a field hospital varies in the response to complex emergencies; therefore, the treatment options must be broad. Of a total of 161 hospital days provided, three-fourths of the patients (76.3%) required hospitalization for two days or less. Another 14 patients required hospitalization for only three days. One patient each required hospitalization for four, five, seven and nine days. Ninety-one percent were discharged

Age group (years)	n	(%)
<1	159	(10)
1-5	230	(15)
6-18	262	(17)
19-45	528	(34)
46-65	269	(17)
>65	112	(7)
<b>TOTAL</b>	<b>1560</b>	

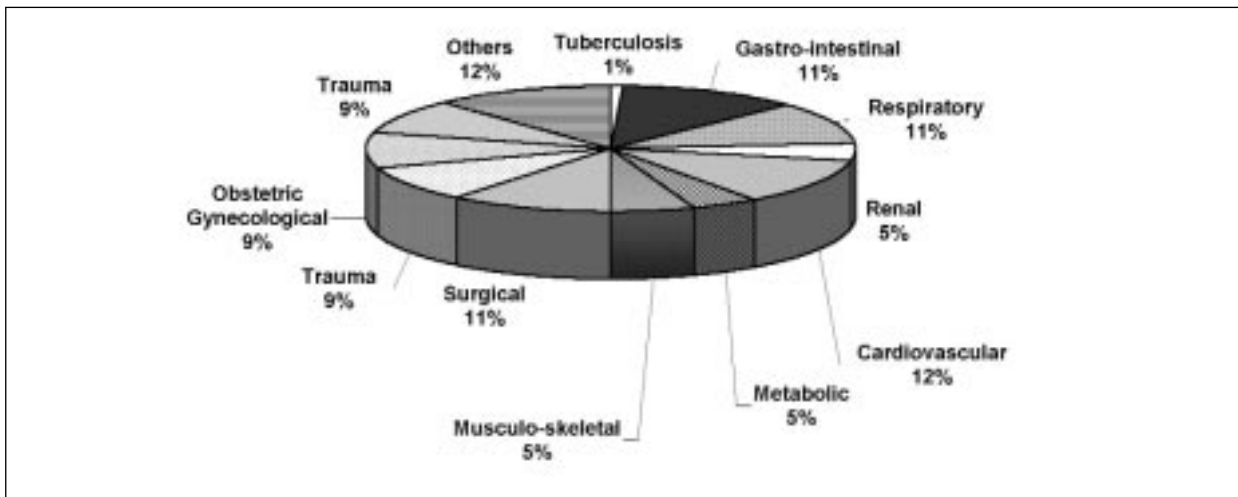
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**Table 1**—Age distribution of people arriving at the emergency room pursuing medical aid

Stankovac I (Brazda)	MSF, MD, Taiwan Hospital IDF Field Hospital (5-18 April) German Red Cross
Stankovac II	IMC, French Civil Service
Blace	MDM
Bojane	Turkish Red Cross
Neprosteno	Die Johanniter
Senokos	DOW-USA
Radusa	Bulgarian Army, MSF-H
Cegrane	MSF-H, German Army

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**Table 2**—Health services in Macedonian refugee camps (MD = medical doctor; IDF = Israeli Defense Forces; MDM = Medicos Del Mundo; MD = Medical doctor; MSF = Medicines Sans Frontiers (Doctors without borders); DOW-USA = Doctors of the World -USA)



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**Figure 3**—Distribution of Hospitalization Diagnosis

back to where they came from, three patients were transferred to Macedonian hospitals, and four died (5.3%).

#### *Pediatric Department*

All pediatric medical activities took place within the Pediatric Department, including ambulatory and emergency-based care. There were 446 interactions involving children up to the age of 15 years; of these 80 were admitted (17.9%). It was an extreme challenge to treat children with severe respiratory symptoms in such poor environmental conditions. Equipment included two incubators to keep the appropriate temperature and oxygenation levels for the infants with severe bronchitis and for the newborns. A pair of preterm twins was a particularly extreme case. Their parents took them to the mountains shortly after their birth to seek refuge from Serbian brutalities. After two weeks of drinking ice water, eating biscuits, and living in the open without shelter, this destitute family reached the camp. Their twins were severely ill and malnourished, and the mother collapsed of exhaustion. After several days of intravenous antibiotic treatment for pneumonia, nasogastric feeding, and preservation of proper body temperature and oxygenation, the twins were transferred safely to a local hospital for further medical treatment.

Seventy percent of the patients suffered from medical problems. Gastrointestinal, respiratory, cardiovascular, obstetrical-gynecological (Ob/Gyn) complaints and traumatic injuries each comprised between 9% and 11% of the total patient population. Of the total patient encounters, 11% required a surgical procedure. Two patients required an emergency appendectomy.

#### *Gynecological/Obstetrical Department*

A total of 66 patients had gynecological/obstetrical problems. Fourteen were pregnant, and of these, 10 women presented in labor. Six presented for post-natal follow-up. The average age of patients evaluated for Ob/Gyn complaints was  $28 \pm 7.3$  years.

Many women in the camp were pregnant. The obstetrical facilities in the field hospital (such as ultrasound imaging) seemed luxurious to these women, many of whom never had participated in prenatal follow-up prior to this visit. Most of the gynecologists' time was consumed with providing prenatal care using ultrasonic system review with the clients. In addition, they delivered 12 healthy babies from 12 healthy mothers. The deliveries took place in the operating theater, which twice served as a classical operating room for two appendectomies.

### Orthopedic Treatment

Of the total patients evaluated, 21.4% required no treatment and 7% required wound care. Six required casting for fractures. Most of the orthopedic cases sought care for acute and chronic lower-back pains.

### Discussion

The importance of this medical mission was the formation of a medical facility shortly after recognizing that a large scale, complex human emergency had occurred. Two days after the opening of the field hospital, surgical, medical, obstetrical, and pediatric services were provided in the Centers. Furthermore, scheduled visits were organized to the clinics in other camps, in order to assist with the transportation difficulties, which were common due to local military and logistical restrictions. This international cooperation required coordination between all of the various organizations, both military and civilian. A Medical Coordinating Committee was set up quickly, including representatives of all of the healthcare-providing teams and agencies in the camps. The Committee convened once each day in a hotel in Skopje in order to discuss the medical activities in which each would be engaged during the coming days. This collaboration enabled the gradual distribution of the patients and of medical and humanitarian supplies between the various medical teams working in the camp. A week following the opening of our facility, a well-equipped, German Red-Cross clinic and a Taiwanese field hospital were erected in the camp to provide longer-term medical care.

One of the main issues faced was how to plan the departure from the setting. After filling the vacuum that existed prior to the deployment, NATO medical units left the camp. Within the two weeks that elapsed, many other NGO and United Nations' humanitarian delegations arrived. In a way, the presence of the IDF field hospital provided the necessary time they needed to organize, which led to an orderly transfer of patients from the IDF hospital to the German Red-Cross hospital, ascertaining proper continuation of care. Due to the characteristics of this political crisis, the medical missions in the camps faced an immediate need to provide primary care and hospital beds to a large number of civilians that were forced out of their homes, and within a day, turned into residents of large refugee camps.

The medical activity of this field hospital differed in many ways from other missions in which the IDF medical corps took part. In contrast to other large scale disasters there were relatively few cases of trauma. In Goma, (Rwandan crisis-1994) the Israeli field hospital faced disastrous conditions; a traumatized and starved population of

Rwandan refugees needed basic supplies as well as shelter from the rain and a solution for devastating sanitary conditions. The medical team performed around 60 surgical interventions including amputations, reduction of fractures and skin grafts.<sup>2</sup> Following the earthquake disaster in Adapazari, Turkey, an Israeli field hospital was deployed in an area that suffered 2,680 fatalities with approximately 5,300 injured. These findings had a direct impact on the way the medical team was comprised; relatively more general, orthopedic and plastic surgeons took part in the medical activities and indeed a different distribution of medical problems was noticed. Of the 1,205 patients treated in that occasion, 32% had medical problems, whereas 13% were treated by general surgeons and 21% by orthopedic surgeons.<sup>3,4</sup>

### Conclusion

Many lessons have been learned from this Kosovo experience:

1. It is crucial to assess the situation on-site prior to the deployment of such a mission. Information regarding the scope and type of the disaster and a needs evaluation is essential for planning and for the mission's success.
2. Medical teams have to be equipped and fitted to the expected requirements, in order to provide the necessary medical care.
3. There are occasions in which a vanguard team in advance of the mission is of great importance. This can be done either by other medical teams already deployed, contacting friendly foreign forces in the area, by diplomats, or, as a last resort, by dispatching professionals in order to acquire medical and logistic intelligence. In the Kosovo crisis, the Macedonian government welcomed our deployment, and the local ministry of health cooperated with all the requests we addressed.
4. Deploying medical missions to conflict areas must take into account a high degree of logistic independence, including energy, medical, food and water supplies.
5. Providing security to the patients and medical staff often turns such operation into a military operation.
6. Cooperation with local authorities and coordination of the diverse medical teams that arrive to such areas must be established as soon as possible. Such contacts facilitate the adaptation of the medical services to the existing needs and prevent unnecessary outlay of resources.
7. Medical teams must operate along existing routine procedures, including using medical records facilitating patients' treatment and follow-up and will enable epidemiological and medical research.

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