

## PUBLIC HEALTH AND PEACE

# Refugee Crisis in Macedonia during the Kosovo Conflict in 1999

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The Kosovo refugee crisis in the Macedonia in 1999 was unique in terms of its unprecedented magnitude against its short duration (sharp increase and sudden decrease in refugee population), its high visibility in the world media, and attention received by donors. In the late March 1999, after the launch of the NATO air campaign against the Federal Republic of Yugoslavia, refugees from Kosovo began to enter Macedonia. Within 9 weeks, the country received 344,500 refugees. Aiming to provide an emergency humanitarian relief, United Nations, and international and national organizations together with the host country, donors, and other concerned parties coordinated and provided immediate assistance to meet the needs of refugees, including shelter in collective centers (camps) and accommodation in host families, nutrition, health care, and water/sanitation. The morbidity and mortality rates remained low due to the effective action undertaken by a great number of humanitarian organizations, backed up by strong governmental support. No significant epidemics developed in the camps, and there were no epidemic outbreaks during the crisis. Mortality rate of refugees was lower than in other emergency situations.

**Key words:** delivery of health care; food supply; health care; health services; Kosovo; Macedonia (Republic); quality of health care; refugees; war; water supply; Yugoslavia

By the beginning of 2001, the United Nations High Commissioner for Refugees (UNHCR) had identified 12 million refugees, 0.9 million asylum seekers, and 6 million internally displaced persons in the world. Forced migrations have specific health needs, which too often go unrecognized. The most important task for public health professionals is to assess current health needs and ensure their fulfillment (1).

Military activities on the Balkans during the last decade of the 20th century have caused massive migrations of civil population (2). The crisis in Kosovo, FR Yugoslavia, in spring 1999 has resulted in a major exodus of its inhabitants into Albania and Macedonia.

## Refugees from Kosovo in Macedonia

Macedonia has the total population of nearly 2,200,000. Its national health system had already been stretched to the limit before the crisis, trying to provide free health care services to its citizens (3). In the late March 1999, after the launch of the NATO air campaign against the Federal Republic of Yugoslavia, refugees began to enter the Republic of Macedonia. Within 9 weeks, the country received 344,500 refugees (4) – 15 times more than expected. At the beginning, the national health system was not able to react quickly and provide resources needed to cope with the increased needs in a relatively small part of the country overburdened with refugees.

During the Kosovo crisis, the relief operation in Macedonia ensured an appropriate assessment of the

needs, such as safety, shelter, water supply and sanitation, adequate food, health service delivery through outpatient clinics in all camps and through health centers for the refugees in host families, and secondary health care. UNHCR worked mainly on protection, shelter, legal support and community services. In June and July 1999, 223,000 refugees returned to Kosovo. UNHCR continued to assist 2,500 refugees who stayed in collective centers, as well as 10,400 refugees in host families.

Due to the UNHCR policy, which insisted on the acceptance of all refugees, the 1999 crisis put the country under great strain and alarmed the national Government (5). In the "post-emergency period" after August 1999, a new wave of some 2,100 refugees (mainly Roma refugees) entered Macedonia in September 1999. In addition, an estimated number of 8,000 unregistered Serbian, Roma, and Albanian refugees from Kosovo remained in Macedonia.

There was no asylum law in the country. UNHCR urged the Government to adopt an internationally sanctioned legal framework for asylum and statelessness. This resulted in Government granting a "Temporary Humanitarian Assisted Persons" status to the refugees from Kosovo.

Aiming to provide emergency humanitarian relief, UN and international and national organizations together with the host country, donors, and other concerned parties coordinated and provided immediate

assistance to meet the needs of the refugees, including health care and water/sanitation (6).

UNHCR established that the morbidity and mortality rates among refugees remained low due to the effective action by a great number of humanitarian organizations, backed up by strong governmental support (4).

The Kosovo refugee crisis was unique in terms of its unprecedented magnitude against its short duration (sharp increase and sudden decrease in the refugee population), its high visibility in the media, and attention received by the donors (6).

## Characteristics of the Refugee Population

World Health Organization (WHO) Humanitarian Assistance Office in Skopje reported high fertility and birth rate of 2.5% among refugees (one of 7 women aged 15-45 was pregnant and needed obstetric care), that children under 5 constituted 10% of the refugee population, and that 4.3% of the refugee population were elderly (6).

#### Accommodation

The first group of 20,000-30,000 refugees was accepted by local families. During the crisis, some of the refugees were accommodated in host families (including their relatives) and some were accommodated in collective centers (camps). It was estimated that 150,000 (over 40%) stayed with host families and another 100,000 were accommodated in camps (Table 1). The number of accommodated refugees was highest in May 1999 (170,000 in host families and about 133,000 in camps).

The largest camps were Stenkovec 1 and 2 and Cegrane (42,000 refugees in May 1999) (Figs. 1 and 2). Stenkovec 1 and 2 were established in April. Stenkovec 1 was closed in July, whereas Stenkovec 2 received new refugees from Kosovo (Roma and Serbs) and was closed at the end of 1999 (Table 2).

**Table 1.** Approximate number of refugees from Kosovo settled in Macedonia from March to June 1999<sup>a</sup>

Description	March 1999	April-June 1999
Total number of refugees who entered Macedonia	350,000	300,000
Accommodated in host families	150,000	140,000
Accommodated in collective centers for refugees (camps)	100,000	120,000-140,000
transit camp Brazda		35,000
permanent camps		85,000
Left the country/went to a third count	ry 96,000	120,000
<sup>a</sup> The total number of refugees was changing daily. Ref. 8		

**Table 2.** Total number of refugees in Collective Centers in Macedonia in May 1999<sup>a</sup>

No. of refugees
30,000
32,000
4,700
<i>7,</i> 500
<i>7,</i> 500
42,000
9,800
133,500



**Figure 1.** Stenkovec refugee camp, Macedonia, 1999. Reception of refugees who just arrived from Kosovo.



**Figure 2.** Stenkovec refugee camp, Macedonia, May 1999. Accomodation of refugees from Kosovo.

#### **Health Care Services**

WHO Humanitarian Assistance Office conducted a survey of health needs of refugees in host families in June 1999. Five cities (Debar, Kumanovo, Skopje, Struga, and Tetovo), which hosted the majority of refugees, were selected for the survey. The sample included 500 families (2,936 individuals) of the total population of 142,414 refugees accommodated in host families in these 5 cities (7). The results of the survey showed that the average age of the refugees was 22 (younger than the average European population). The elderly comprised 3% of the total refugee population, and children under 15 more than 35%. The percentage of pregnant women was larger than expected: 1.5-2.0% of the women in fertile age (14-45 years). The proportion of pregnant women was the highest in Debar (over 4%) (Table 3).

Two different types of health care activities were organized for refugees, one through public health institutions (health stations, other units of the health centers, hospitals), and private physician's offices, and the other through health services in the camps. Health care in refugee camps was provided by the international community and supported the local health services (8). In some camps, secondary care

**Table 3.** Health needs assessment survey of refugees in host families<sup>a</sup>

Indicator	Value
Mean age (years)	22
Elderly	3%
Children under 15	>35%
Children younger than 12 months	2-3%
Pregnant women (out of the total number of fertile women)	1.5-2%
Pregnant refugee women in Debar	>4%
<sup>a</sup> Reference 7.	

was provided by mobile hospitals managed by international organizations (Table 4).

The main reasons for visiting a physician were chronic diseases, heart related problems, mental health problems, and need for antenatal care. Two thirds of the consultations in camps were due to untreated or poorly controlled chronic diseases.

In Debar and Tetovo, most refugees sought medical care in the nearest state health care facilities (physician's office), whereas in Kumanovo, Struga, and Skopje majority asked for the health services in private physician's offices (Table 5).

Overall, the refugees seemed reasonably satisfied with the health care provided (>90% of the refugees in all regions were satisfied) and did not complain about being in any way treated differently from the local patients.

The regions that received the most refugees (Skopje and Kumanovo) reported half of the complaints regarding denied access to health care for bureaucratic reasons or ethnic problems.

The proportion of people who received drugs from the state was less than 10% (the only exception was Debar region, where the state provided drugs to more than 60% of the cases).

**Table 5.** Percentage of refugees in host families who visited different types of health facilities<sup>a</sup>

Health facility	Debar	Tetovo	Kumanovo	Struga	Skopje
Nearest state physician's office	85	40	11	27	25
State hospital	13	21	4	3	0
Private physician's office	2	24	58	58	61
Another state physician's office	0	2	7	0	8
Private physician	0	4	20	6	0
Other	0	9	0	6	6
<sup>a</sup> Reference 7.					

#### Mortality and Morbidity

Mortality rate in refugees was lower than in other emergencies: there were 107 deaths and 664 newborn babies registered.

The epidemiological profile was similar to the one reported in Kosovo in 1998 (pre-war period, relatively peaceful time) and not substantially different from the local one in Macedonia.

#### Prevalence of Chronic Diseases

Diabetes mellitus was diagnosed in 1% of the refugee population, chronic respiratory diseases in 5-10%, and cardiovascular diseases in 5%. Renal failure was found in 500 persons, and unclassifiable complaints, such as fatigue, exhaustion, undefined pain, and stress-related conditions (6) accounted for the rest of the health problems. The percentage of renal diseases (Balkan nephropathy) was estimated as very high – 2.2%.

Two thirds of the consultations in camps were due to the untreated or poorly controlled chronic diseases. Noncommunicable diseases, such as diabetes, cardiovascular diseases, chronic respiratory diseases, unclassifiable complaints (fatigue, exhaustion, unde-

Table 4. Health care providers in camps in Macedonia during the 1999 Kosovo crisis<sup>a</sup> (8)

Camp	Outpatient services	Inpatient services	Referral field hospital
May 3, 1999			
Brazda	MSF-H, Taiwan hospital, MDM (mental health), ICMC (community services)	GRC	
Stenkovec 2	IMC, FCS, MDM-G	IMC (in preparation), FCS, GRC (Brazda)	
Senokos	DOW USA		
Neprosteno	Die Johanniter		
Radusa	Bulgarian Army, MSF-H		
Blace	MDM-F		
Bojane	TRC, MRC		
Cegrane	MSF-H, German Army		
June 22, 1999			
Blace	MDM-F, IMC		GRC
Bojane	TRC, MRC		
Brazda	MSF-H, Taiwan hospital (dentistry), MDM (mental health) ICMC (vulnerable groups), MCI (mother and child)	GRC	GRC
Stenkovec 2	IMC, FCS, MDM-G, CARE int. (mother and child)	IMC, FCS	GRC
Senokos	DOW-USA, MCI (mother and child), MDM-G (gyn./obst.)	,	NRC (Cegrane)
Neprosteno	Die Johanniter	Die Johanniter	NRC (Cegrane)
Radusa	Bulgarian Army, SCF		GRC
Cegrane	MSF-H, CARE, ICMS-HI (vulnerable groups)	NRC	
August 3, 1999			
Stenkovec 2	IMC (medical care and dentistry)	IMC	
Neprosteno Cegrane	Die Johanniter, PSF (Dermatological clinic), MDM-E (mental health) MSF-H, ICMC-HI, MDM-E	Die Johanniter	NRC (until 24 July 1999)

<sup>a</sup>Abbreviations: MSF – Physicians without Borders; MDM – Physicians of the World; ICMC – International Catholic Migration Commission; IMC – International Medical Corps; FCS – French Civil Service; DOW – Doctors of the World; GRC – German Red Cross; MRC – Macedonian Red Cross; NRC – Norwegian Red Cross; TRC – Turkish Red Crescent; CARE – Cooperative for Assistance and Relief Everywhere; MCI – Mercy Corps International; SCF – Save the Children Fund; PSF – Pharmacists without borders; H – Holland; F – France; G – Greece; E – Spain; HI – Handicap International.

fined pain, and stress-related conditions) were most common diagnoses.

## Communicable Diseases

The proportion of children with diarrhea lasting more than 3 days was high (5-15%), but the percentage of infectious diseases in general was not particularly high (0.4-1.2%).

In registration of communicable diseases (potentially dangerous), WHO gave priority to bloody diarrhea, suspected cholera, acute hepatitis, suspected meningitis, and measles (Table 6). The rate of sexually transmitted diseases was not increased.

**Table 6.** Number of registered patients with communicable diseases from the beginning of the crisis until June 20, 1999 (6)

Communicable disease	No. of cases	
Hepatitis A	12 (7 laboratory confirmed)	
Bloody diarrhea	45 (7 investigated, 3 confirmed)	
Tuberculosis	40	
Watery diarrhea	4,279	
Acute respiratory infections	8,787	

There were no epidemic outbreaks in camps during the crisis, except a small-scale epidemic of hepatitis A in Cegrane and Neprosteno camps in November 1999.

#### Mental Health

It was very difficult to provide psychological support and mental health services during the initial phase, due to the huge number and constant transfer of refugees and urgent food, habitation, and physical needs. Group identification led to a prolonged denial of reality and past events and continuous fantasy that the losses could be canceled by revenge (8).

Mental health problems accounted for 5-8% of the consultations (sometimes classified under "other problems"). In some camps, 80% of total consultations for noncommunicable diseases were due to symptoms of undefined illnesses, such as fatigue, pain, anguish, and fear. Mental health support became a part of the health services for the refugees, supervised by the WHO. Psychological support was arranged by different nongovernmental organizations (NGOs) and United Nations International Children's Emergency Fund (UNICEF).

#### **Medical Evacuation**

The tasks of the International Organization for Migration (IOM) were the following: 1) developing and setting up a medical data base linked to IOM/UNHCR Humanitarian Evacuation Program database; 2) setting up a referral system for medical cases from the refugee camps; 3) organizing mobile medical screening teams; 4) registering incoming medical reports; and 5) referring the medically prioritized cases asking for acceptance and evacuation to the National delegates. A total of 1,032 medical cases were evacuated for medical treatment to 25 host countries all over the world (10).

It was surprising that several of the most challenging health situations arising from the crisis were not caused by acute communicable diseases. The number of reported tuberculosis cases was lower then expected (<1%).

Psychotrauma-related conditions were very frequent and the number of refugees suffering from epileptiform convulsions (probably nonorganic, caused by psychotrauma) was very high; 24% of all evacuated refugees were classified in the group of persons with neuropsychiatric diseases (9,10).

The proportion of cardiovascular diseases, including coronary heart diseases, was not as high as in other regions of Central and Eastern European countries (9-11).

#### **Health Care**

WHO, UNICEF, UNHCR, World Food Program (WFP), NGOs, Macedonian Red Cross, and the Ministry of Health were engaged in solving health issues and delivery of health care to the refugees. Refugees received blue cards for health care and the expenses were covered by the UNHCR. Under the guidance of WHO, UNHCR had regular health coordination meetings and provided information through regular dissemination of health bulletins. These actions sometimes proved inefficient and could not prevent the confusion and overlap created by the presence of too many small NGOs working in camps.

WHO was supposed to 1) perform rapid health assessment; 2) establish public health and nutritional surveillance; 3) advise on basic nutritional requirements; 4) advise and assist in ensuring clear water, proper sanitation, and vector control; 5) establish preparedness for epidemics (investigation, laboratory capacity, guidelines for epidemic control, and case management); 6) provide immunization guidelines; 7) promote the essential drug management and advise on emergency relief items; 8) promote tuberculosis control; 9) facilitate reproductive health guidelines; 10) participate in establishing preparedness for sexually transmitted diseases and AIDS; and 11) promote physical and psychological rehabilitation (12).

The involvement of the public health services was significant, especially on the secondary care level.

# **Drug Supply**

Almost 50% of the drugs that arrived in Macedonia and Albania as drug donations were unnecessary and had to be destroyed (13). Refugees received the medicines on the Medical Insurance Reimbursement List free of charge (with their identity card) Other medicines were provided within the health care framework of the NGOs programs.

#### **Evaluation of Health Care**

An NGO workshop of NGOs, held in Skopje in April 2000, focused on the following issues: 1) management of the crisis in health related sectors; 2) cooperation with host Government and strengthening of national institutions; 3) weaknesses, strengths, les-

**Table 7.** Overall evaluation (Skopje NGO Workshop, April 2000) of health assistance to Kosovo refugees during the 1999 Kosovo crisis in Macedonia<sup>a</sup>

Evaluation of	Strengths	Weaknesses
Water:		
Source protection	adequate supply	delay of completion of bore holes/resources
Provision/distribution	more than minimum required (25 L/person/day), enough water containers, pipes, distribution points	lack of clear directions about winterization
Treatment	daily quality control and analysis of water quality	complaints about the taste of chlorine
Preservation	enough containers	water wastage
Sanitation:		
Garbage collection	daily disposal, good cooperation with local company, enough containers	untrained collectors
Latrines	away from tents, easily accessible, clean	lack of space for new latrines
Sewage disposal	timely removal, good drainage, pipelines, septic tanks	bottles and pampers inside latrines
<sup>a</sup> References 12 and 13.	•	

sons learned; and 4) assistance to residual refugees in post-emergency period. The Group for Health Care and Medical Evacuation emphasized the following strengths and weaknesses of the system.

#### Strengths

The strengths of the crisis management system were 1) good cooperation between camps and hospitals; 2) commitment of local health workers; 3) substantial aid from abroad; 4) presence of inpatient services in camps; 5) improved interaction between international and local staff; and 6) high quality of care in camps.

#### Weaknesses

The weaknesses of the crisis management system were 1) deficit of drugs in camps and hospitals and deficit of staff and equipment in hospitals; 2) weak coordination between camps and hospitals; 3) refusal of referred cases due to the lack of funds; 4) poor mental health support (communication problems); 5) overlapping roles of international NGOs; 6) poor management of chronic diseases; 7) lack of transportation from Blace and Jazince to hospitals; 8) higher standard of care for refugees in comparison with resident population; and 9) delayed responses of international NGOs.

The reasons for the lack of major problems in the health sector were the following: 1) good health conditions of refugees since before; 2) short duration of the crisis; 3) relevant support received by the host families; and 4) effectiveness of the international aid.

#### **Water and Sanitation**

Public health and disease control, water supply, and sanitation are among the most important areas of interventions in emergencies. The initial step in dealing with water supply is immediate protection of water sources from contamination and provision of sufficient quantities of water, followed by improvement of the physical and biological quality of the water and access to supplies (improved distribution network and storage facilities). In accordance to the Sphere recommendations (14), an overall minimum of 7-8 liters per person daily is required for consumption. The conclusions of the Workshop evaluation are summarized in Table 7.

#### **Final Evaluation**

Major weaknesses of the refugee crisis management in Macedonia, identified by WHO, were the following: 1) inability to foresee potential scope of the crisis; 2) lack of preparedness; 3) inability of health system to absorb the burden; 4) difficulties in communication; 5) slightly delayed actions of national decision makers; and 6) no asylum law.

The recommendations for future were 1) to strengthen the local health services in case of sudden increase in demands by providing them with the equipment, material, and manpower, and 2) to ensure that health care in camps be delivered by health service instead of managed in parallel by various international organizations.

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Received: January 2, 2002 Accepted: February 4, 2002

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