Primary care in Bosnia and Herzegovina

Health care and health status in general practice ambulatory care centres

Marshall Godwin, MD, CCFP   Geoffrey Hodgetts, MD, CCFP   Elizabeth Bardon, MA   Rachelle Seguin, MA
David Packer, MED   John Geddes, MD, CCFP

abstract

OBJECTIVE To assess the health care and health status of patients attending primary care clinics in Bosnia and Herzegovina.

DESIGN Assisted administration patient survey.

SETTING Two ambulatory care clinics (ambulantas) in each of three cities in Bosnia and Herzegovina: Tuzla, Mostar, and Banja Luka.

PARTICIPANTS Patients attending the ambulantas during a 1-week period in March 1999; 885 answered questionnaires.

MAIN OUTCOME MEASURES Each patient listed demographic characteristics and answered questions on satisfaction with health care and with the physical and financial accessibility of health care services and medications. A validated health status questionnaire (EuroQoL), previously used in parts of the former Yugoslavia, was administered.

RESULTS Only 22% of patients were employed; 57% could not pay the nominal fee to see a physician; 71% walked to the clinic; mean distance from patients' homes to the clinics was 2.3 km; 63% could not get the medications prescribed (in 85% of cases because of cost, not availability); 80% to 90% of answers to satisfaction questions suggested high satisfaction with the care patients received from their doctors; 67% of the time patients were referred to a specialist by general practitioners; 33% had problems walking; 17% had problems with self-care; 36% had problems with usual daily activities; 72% had at least some pain or discomfort; and 62% described at least some anxiety or depression. The three cities showed significant differences; patients in Tuzla generally had lower health status and more problems with health care.

CONCLUSION Unemployment and financial considerations reduced health care access in Bosnia and Herzegovina. While only one third of patients had physical difficulties, two thirds had emotional problems or pain. Satisfaction with physicians' care was high.

résumé

OBJECTIF Évaluer l'état de santé et les soins qui y étaient prodigués des patients qui fréquentaient des cliniques de première ligne en Bosnie et en Herzégovine.

CONCEPTION Un sondage auprès des patients assisté sur le plan administratif.

CONTEXTE Deux cliniques de soins ambulatoires (ambulantas) dans chacune des trois villes de Bosnie et d'Herzégovine suivantes: Tuzla, Mostar et Banja Luka.

PARTICIPANTS Les patients qui ont fréquenté les ambulantas durant une période d'une semaine en mars 1999; 885 personnes ont répondu au questionnaire.

PRINCIPALES MESURES DES RÉSULTATS Chaque patient indiquait ses données démographiques et répondait à des questions sur sa satisfaction à l'égard des soins de santé et de l'accessibilité sur le plan physique et financier aux services de santé et aux médicaments. On a aussi administré un questionnaire validé (EuroQoL) sur l'état de santé, utilisé antérieurement dans certaines régions de l'ancienne Yougoslavie.

RÉSULTATS Seulement 22% des patients avaient un emploi; 57 % ne pouvaient pas payer les frais nominaux pour consulter un médecin; 71% s'étaient rendus à pied à la clinique; la distance moyenne entre le domicile du patient et la clinique était de 2,3 km; 63% ne pouvaient pas se procurer les médicaments prescrits (dans 85% des cas, en raison du coût et non pas de la disponibilité); de 80% à 90% des réponses aux questions sur la satisfaction faisaient valoir une grande satisfaction à l'égard des soins reçus par les patients de leur médecin; 67% du temps, les patients ont été aiguillés vers les services d'un spécialiste par les omnipraticiens; 33% avaient de la difficulté à marcher; 17% avaient des problèmes à prendre soin d'eux-mêmes; 36% avaient des problèmes avec les activités courantes de la vie quotidienne; 72% souffraient d'un certain degré d'inconfort ou de douleur; et 62% ont signalé une certaine anxiété ou dépression. Les trois villes accusaient des différences significatives; les patients de Tuzla étaient généralement en moins bonne santé et avaient plus de problèmes avec les soins de santé.

CONCLUSION Le chômage et les questions d'ordre financier réduisaient l'accès aux soins de santé en Bosnie et en Herzégovine. Si seulement un tiers des patients avaient des problèmes d'ordre physique, les deux tiers souffraient de douleur ou de problèmes émotionnels. La satisfaction à l'égard des soins prodigués par les médecins se révélait élevée.

*T*he Department of Family Medicine at Queen's University, with funding from the Canadian International Development Agency (CIDA), began a program in March 1997 to assist the Ministries of Health in developing the discipline of family medicine in Bosnia and Herzegovina (BiH). Program objectives include establishing family medicine teaching clinics within the newly established Departments of Family Medicine at each of the four faculties of medicine in BiH.[1]

When the war ended in BiH in late 1995, medical education infrastructure and the infrastructure for health care delivery was in disarray.[2,3] The Dean of the Faculty of Medicine at the University of Sarajevo, Professor Nedzad Mulabegovic, had come to Queen's University in May 1995 to seek assistance in establishing undergraduate and postgraduate family medicine training in BiH. By mid-1996 Dr Geoffrey Hodgetts of the Department of Family Medicine at Queen's University had made several trips to Bosnia and had established the connections needed to develop the project, which received final approval for CIDA funding in early 1997.

Primary medical care is currently provided by specialists in centralized polyclinics or health centres, and in smaller community-based clinics called ambulantas, staffed by general practitioners and nurses. Because the ambulantas often function essentially as triage centres, most conditions are referred to specialists at the health centres or hospitals. Treatment given at the ambulanta level is usually based on orders from a specialist. This situation reflects several factors including the level of training of physicians, restrictive regulations, inadequate equipment, many years of a specialist-based health care system that did not value primary care, and the expectations of patients who have received care in this system.

••

Dr Godwin *is an Associate Professor and Research Director of the Department of Family Medicine at Queen's University in Kingston, Ont.* **Dr Hodgetts** *is an Associate Professor and Director and* **Ms Bardon** *is a Research Associate in the Family Medicine Development Program in Bosnia and Herzegovina of the Department of Family Medicine at Queen's University.* **Ms Seguin** *is a Research Associate and Project Manager in the Department of Family Medicine at Queen's University.* **Mr Packer** *is Program Manager and* **Dr Geddes** *is a Lecturer and Clinical Educator for the Family Medicine Development Program in Bosnia and Herzegovina of the Department of Family Medicine at Queen's University.*

To get an objective assessment of the health status and health care needs of the people who would eventually benefit from establishment of a more effective primary care system in BiH, patients attending ambulantas in three Bosnian cities (Tuzla, Mostar, and Banja Luka) were surveyed. It is important to note that the study was conducted 6 months before official establishment of a family medicine residency program in BiH. By the time of writing this article, however, we established 11 Family Medicine Teaching Units in five cities in association with four faculties of medicine.

Assessing the medical or health care needs of a population must take into account the historical, cultural, social, economic, religious, and political realities of that population. Bosnia and Herzegovina has three distinct ethnic groups: the Croats (Catholic), the Serbs (Orthodox Christian), and the Bosniaks (mixed or Muslims). The 4-year war divided the nation geographically into three distinct regions, each region based on an ethnic group with minimal intermingling. Socially and economically the population ranges from refugees living in partially destroyed buildings (**Figure 1**) and collection centres, to war victims with disabilities, to those fortunate

Figure 1. Reminders of war: *Although the country is rebuilding, evidence of the war remains, such as these bombed and burned-out houses A) on the road between Tuzla and Banja Luka and B) in Mostar.*
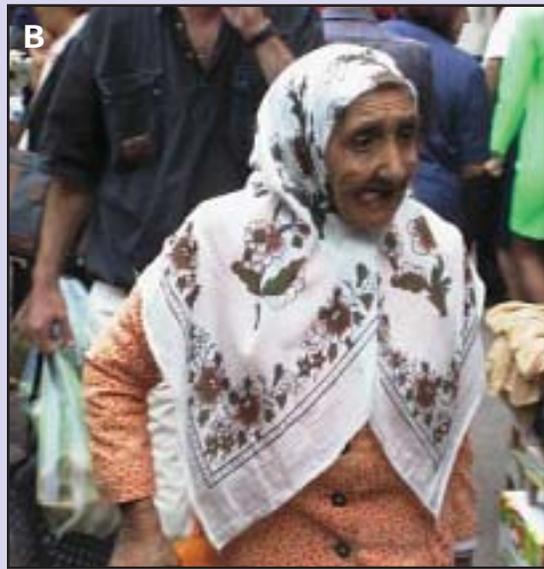
Figure 2. **Favourite target:** *This government building was a choice target of the Serbs shelling the city from the hills around Sarajevo. It is yet to be repaired and stands as a reminder of the destruction the war brought.*

Figure 3. **Refugees on the streets:** *A) To survive, this refugee woman sells nuts or popcorn to passers-by to feed the pigeons in the old Turkish-era market in Sarajevo. B) Many elderly, poor refugees live in Bosnian cities.*

enough to have well-paying jobs with the many international organizations working in the country.

The medical care system, like all other BiH institutions, is in a state of transition from the former communist system of full government funding to a partially public, partially private, system. The Queen's Family Medicine Program, as well as programs of other international health aid agencies,[4,5] are introducing new concepts and approaches to health care that are challenging and at times difficult for individuals to incorporate into their understanding of what it means to be a health care consumer or provider. The lingering stress of war (**Figure 2**); pervasive posttraumatic stress disorders; continued ethnic conflict; damaged or destroyed hospitals; large numbers of war victims (**Figure 3**); and lack of drugs, consumables, and diagnostic facilities must all be considered when determining the health care needs of this population.

This study, and its sister studies surveying physicians and students in BiH, helped us understand issues involved in establishing family medicine and its underlying principles in cultures and health care systems so different from where family medicine originated.

METHODS

Patients attending either of two selected ambulantas in each of the cities of Tuzla, Banja Luka, and Mostar were

surveyed. These cities were chosen to reflect the realities of ethnic division in BiH. The ambulantas were chosen based on opportunity and willingness to cooperate. Three years of experience visiting ambulantas and other health care institutions in BiH led us to believe the ambulantas we chose were representative of their cities and were not outliers. We have no data to confirm this, as this type of information is not easy to come by given the current situation.

Tuzla is a mainly Bosniak-Muslim city, Banja Luka almost entirely Serb, and Mostar is a divided city of Croats in the west and Muslims in the east. The survey was administered by medical students who approached patients, 18 years and older, in the waiting rooms of the six participating ambulantas during a 1-week period in March 1999. After explaining the study and obtaining consent, medical students helped patients complete the survey if needed. Assistance was often required because of the low literacy rate of participants. The students were instructed to read questions and explain the response process but not to influence answers in any way. The students were asked to approach all patients in waiting rooms; however, the flow of patients is such that some could have left while students were conducting a survey on other patients. It is difficult to know how this affected the survey results, but it presumably would have been random, and not a systematic bias.

Our survey included only people attending the ambulantas; it therefore represents only those seeking medical care. Specialists do not write prescriptions; when they see a patient and recommend treatment, patients must return to their general practitioners to get a prescription for that treatment. Thus, the population of patients in an ambulanta would likely represent varying levels of acuity and a variety of economic backgrounds.

Questionnaires had two distinct parts. The first part was designed by the investigators and asked questions about demographics, living and economic circumstances, access to health care, satisfaction with health care, and opinions on how the health care system could be improved. This part was written originally in English and tested for face and content validity through review by physicians and other people who had spent time in BiH working with the project. It was then translated into the local Bosnian language (formerly known as Serbo-Croatian) by one of the program assistants who was from the former Yugoslavia and had recently moved to Canada. He also reviewed it for context, ambiguity, appropriateness for the culture, and completeness. A second assistant who was located in Sarajevo and who had not seen the original English

Table 1. Demographic data, with city comparisons, for patients attending participating ambulantas in March 1999

PATIENT CHARACTERISTICS	FULL SURVEY POPULATION N=885	TUZLA N=302	MOSTAR N=293	BANJA LUKA N=290	P VALUE
Sex					NS
• Female	471 (53%)	171 (57%)	150 (52%)	150 (53%)	
• Male	404 (47%)	130 (43%)	140 (48%)	134 (47%)	
Mean age (SD)	52 (15.5)	57 (12.8)	50 (15.6)	50 (16.9)	.001
Living as a refugee	336 (38%)	154 (51%)	134 (46%)	48 (17%)	.001
Has an income (full time, part time, or pension)	538 (61%)	172 (57%)	187 (64%)	179 (62%)	NS
Mean number of people in household	3.1 (1.6)	2.9 (1.8)	3.3 (1.5)	3.1 (1.3)	.007

Numbers do not always add up to the stated N in the top row because of missing data.

version then translated the questionnaire back into English. This allowed us to determine that the sense of the questions had been maintained during translation.

The second part of the survey consisted of a validated instrument called EuroQoL,[6-8] which was developed in Europe for assessment of health status and quality of life. It has been translated into many European languages including Serbo-Croatian; further testing and translation was not needed. We did, however, have our translators review the instrument to confirm the apparent appropriateness of wording. A short, easy-to-use scale, EuroQoL measures five dimensions of health (mobility, self-care, usual activities, pain or discomfort, anxiety or depression) by asking a single question about each. The instrument also asks patients to indicate on a 100-point visual analogue scale their current state of health with 100 being "best imaginable health state" and zero being "worst imaginable health state." Details on the EuroQoL scale can be found at **www.eur.nl/bmg/imta/eq-net/eq5d/EQ5D.htm.**

The study was reviewed and approved by the Queen's University Research Ethics Board. Similar formal ethics review processes do not yet exist in BiH; however, the research protocol was

Table 2. Physical and financial accessibility to the health care system

OBSTACLES TO MEDICAL CARE	FULL SURVEY POPULATION N=885	TUZLA N=302	MOSTAR N=293	BANJA LUKA N=290	P VALUE
Mean distance in km from house or apartment to ambulanta (SD)	2.3 (3.7)	2.6 (3.4)	1.2 (1.7)	3.0 (4.9)	.001
Patients who walk to ambulanta rather than going by motor vehicle	624 (71%)	201 (67%)	245 (84%)	178 (61%)	.001
Time from leaving house until finished seeing physician					.001
• 30 min or less	228 (26%)	142 (47%)	54 (19%)	32 (11%)	
• More than 30 min to 1.5 h	247 (28%)	34 (11%)	115 (40%)	98 (35%)	
• More than 1.5 h to 2.5 h	231 (27%)	56 (19%)	88 (31%)	87 (31%)	
• More than 2.5 h	165 (19%)	68 (23%)	31 (11%)	66 (23%)	
Able to pay the user fee (approximately $2.50) for each visit	325 (43%)	32 (13%)	114 (44%)	179 (68%)	.001
Physical difficulty getting into the building	88 (10%)	62 (21%)	9 (3.1%)	17 (6%)	.001
Able to get medications prescribed by physicians	331 (37%)	50 (17%)	143 (49%)	138 (48%)	.001
If unable to get the medication prescribed, what is the reason?					.001
• Cost	468 (85%)	244 (97%)	111 (76%)	113 (74%)	
• Availability	82 (15%)	8 (3%)	35 (24%)	39 (26%)	

Numbers do not always add up to the stated N in the top row because of missing data.

reviewed and approved by the administrators responsible for patient care at each ambulanta.

RESULTS

Questionnaires were completed for 885 patients attending six ambulantas in the three cities during a 1-week period in March 1999. We were not able to get exact denominator data because some patients were missed during busy times. The lack of a patient appointment system meant that many people would be crowded in the waiting room and there would be a good likelihood of missing the opportunity to interview some patients. Based on patient volume information provided by the ambulantas' staff members, we anticipated approximately 200 patients from each ambulanta. We obtained data from between 122 and 180 patients at each site, so we are confident that we surveyed between 60% and 90% of patients attending participating ambulantas during the survey week.

Demographic data on surveyed patients (**Table 1**) showed no difference between the three cities in sex distribution of patients nor in proportion of people with an income. People attending the Tuzla ambulantas, however, were more likely to be older, to be living as refugees, and to have fewer people living in their households. Refugees constituted 80% of patients in

Table 3. Patients' perceptions of care received from physicians*

QUESTIONS ABOUT CARE	FULL SURVEY POPULATION N=885	TUZLA N=302	MOSTAR N=293	BANJA LUKA N=290	P VALUE
Does your doctor listen to you when you talk about your problems?	870 (99%)	295 (98%)	293 (100%)	282 (98%)	NS
Does your doctor have enough time to spend with you when you visit?	843 (96%)	291 (97%)	286 (97%)	266 (92%)	.003
Do you see the same doctor each time you visit this ambulanta?	729 (83%)	244 (82%)	238 (81%)	247 (86%)	NS
Does your doctor understand your social situation (financial, accommodations, etc)?	221 (25%)	68 (23%)	139 (48%)	14 (5%)	.001
When you are examined by your doctor, does he or she respect your privacy?	852 (97%)	294 (99%)	288 (99%)	270 (94%)	.001
How often do you get referred to a specialist when you visit this ambulanta?	592 (67%)	219 (73%)	212 (72%)	161 (56%)	.001

Numbers do not always add up to the stated N in the top row because of missing data.

**Numbers are the number (percentage) of people who responded with always, almost always, or usually on a 6-point Likert scale.*

East Mostar but only 13% of patients in the West Mostar ambulanta. Like Tuzla, East Mostar is primarily Muslim. Although 61% of the overall population had an income, this was primarily due to pensions (which amount to the equivalent of $150 monthly and often go unpaid); only 22% were employed either part time or full time.

Table 2 presents data on aspects of physical and financial accessibility to the health care system. Mean distance from home to the ambulatory clinic is 2.3 km with many people living 6 or 8 km away. Most of these people walked from their homes to the clinic, and for many it was an outing of several hours. Less than half of patients could afford the user fee equivalent to $2.50 requested for each visit. Fortunately failure to pay this fee does not mean they will not be seen by a physician. Only 37% were actually able to get the medications prescribed, and this is more often because of the cost of the drugs than lack of availability. There was, however, striking variation in accessibility among the three cities.

Table 3 presents the responses to questions on patients' perceptions of the health care they received from their physicians. Patients were asked to respond to six questions about their health care. The possible responses were on a 6-point Likert scale (always, almost always, usually, sometimes, almost never, never). **Table 3** presents the proportion of responses to each question that were always, almost always, or usually. Generally patients seemed to have positive attitudes toward care provided by their physicians. Most patients, however, did not believe doctors truly understood their social situations. Patients' perceptions in Banja Luka also seemed to be less positive than in the other two cities.

Table 4 presents the results of the EuroQoL health assessment in the domains of mobility, self-care, usual activity, pain or discomfort, and anxiety or depression. These results are best understood by comparing them to other known scores. The results of the 1996 Health Survey for England provide the best data for understanding the meaning of the EuroQoL scale in a population from a developed country. Data from that survey are provided with the Bosnian data to allow comparison. The proportion of people with no problems was higher in the English population for all five domains. This is particularly true for the domains of pain or discomfort and anxiety or depression. Scores in Tuzla were worse than they were in the other two cities in all five domains.

Scores for self-assessed health status using the visual analogue scale in EuroQol (**Table 5**) were lower for Bosnians than for the English population. Scores were in the range generally assessed by people who felt their health was fair to bad. Participants in Tuzla again scored lower on self-assessed health status than those in Mostar and Banja Luka.

Table 4. Bosnian scores on the five domains of health measured by EuroQol, with comparison scores for the general population in England

DOMAINS OF HEALTH	FULL SURVEY POPULATION N=885 N (%)	TUZLA N=302 N (%	MOSTAR N=293 N (%	BANJA LUKA N=290 N (%)	GENERAL POPULATION IN ENGLAND 1996 (%)
MOBILITY					
No problems walking	580 (67)	159 (53)	203 (70)	218 (78)	81.6
Some problems walking	281 (32)	136 (46)	85 (29)	60 (21)	18.3
Confined to bed	8 (0.9)	4 (1.3)	1 (0.3)	3 (1)	0.1
SELF-CARE					
No problems with self-care	720 (83)	239 (80)	247 (86)	234 (83)	95.8
Some problems washing or dressing myself	121 (14)	44 (15)	37 (13)	40 (14)	4.1
Unable to wash or dress	27 (3)	16 (5)	4 (1)	7 (3)	0.1
USUAL ACTIVITIES					
No problems with usual activities	557 (64)	139 (47)	225 (77)	193 (69)	83.7
Some problems with usual activities	247 (29)	115 (38)	63 (22)	69 (25)	14.1
Unable to perform usual activities	63 (7)	44 (15)	2 (1)	17 (6)	2.1
PAIN OR DISCOMFORT					
No pain or discomfort	247 (28)	56 (19)	96 (33)	95 (33)	67.0
Moderate pain or discomfort	535 (61)	179 (60)	182 (63)	174 (61)	29.2
Extreme pain or discomfort	93 (11)	64 (21)	13 (4)	16 (6)	3.8
ANXIETY OR DEPRESSION					
Not anxious or depressed	329 (38)	39 (13)	126 (44)	164 (58)	79.1
Moderately anxious or depressed	395 (45)	137 (46)	150 (52)	108 (39)	19.1
Extremely anxious or depressed	144 (17)	123 (41)	13 (4)	8 (3)	1.8

DISCUSSION

We set out to develop an understanding of the demographics, accessibility issues, and health status of patients attending primary care clinics in BiH. From a demographic perspective, sex and age distribution of Bosnia patients is different from those of Canadian patients. The usual ratio is about 65% female to 35% male patients in an average week in Canada.[9] This is usually explained on the basis that women seek health care more than men, especially women of childbearing age. In Bosnia the ratio is 53% female to 47% male patients. This could be partially explained because women do not get their Pap smears from general practitioners in BiH; gynecologists perform this screening procedure. Men were more likely to have been physically injured during the war and are seeking health care in relation to ongoing consequences of these injuries. Alternatively, there could be some cultural differences of which we are unaware.

The mean age of patients (52 years) is higher than we would see in developed countries, where it is generally between 45 and 50 years.[9] Two realities possibly explain this difference. Wars, such as the one in BiH, are generally fought by young men and women, many of whom are killed; and there has been an exodus of younger skilled or educated people from all parts of BiH to other parts of the world.

Table 5. Bosnian scores on the EuroQol visual analogue scale for health status with comparison scores for the general population in England

SCORE ON VISUAL ANALOGUE SCALE	FULL SURVEY POPULATION	TUZLA	MOSTAR	BANJA LUKA	GENERAL POPULATION IN ENGLAND 1996			
					FULL ENGLISH POPULATION	ENGLISH WHO ASSESS GENERAL HEALTH AS VERY GOOD OR GOOD	ENGLISH WHO ASSESS GENERAL HEALTH AS FAIR	ENGLISH WHO ASSESS GENERAL HEALTH AS BAD OR VERY BAD
Mean	53	44	52	65	80	91	72	38
Standard deviation	23	22	19	22	11*	15*	10*	30*

Figures approximated from percentile scores.

The large number of displaced people (38% of the population surveyed were refugees from another part of BiH) leads to social, psychological, and physical health problems with which the primary health care system will have to cope. The lack of income (only about 22% were employed, with a further 39% on a small pension) leads to problems with the costs of health care, especially the cost of obtaining medications. Fortunately people who cannot pay the nominal service fee are not refused medical care. Having sick people walk for many kilometres with disabling illnesses in all kinds of weather might also have a negative effect on health. These realities will have to be considered as we help to implement the curriculum for family medicine undergraduate and postgraduate (residency) training in BiH.

Despite their situation, patients seemed very happy with the care they were receiving from their doctors, although many did not believe physicians truly understood their social situation. The high referral rate to specialists (67%) is likely to be viewed positively by patients. The health care system in the former Yugoslavia was based on an eastern European model, which emphasized specialty care over primary care and allowed patients to refer themselves directly to specialists. The actual rate of specialist consultation is probably higher than 67% because of self-referral; we would not have captured this in the study. In addition to tradition and patient expectations, the lack of training and equipment to carry out certain procedures could contribute to the high referral rate. For example, general practitioners are not trained to do pelvic examinations or otoscopic examinations; any problems requiring these diagnostic techniques must automatically be referred.

The health status of the patient population is also worse than we would expect in a developed country.

Patients attending clinics in BiH were more likely than those in Canada to have problems with mobility, self-care, and usual day-to-day activities. They were also more likely to experience pain or discomfort and more likely to feel anxious or depressed. Overall health status was significantly worse than that of the English population and in fact is equivalent to bad or only fair health in a developed country. Unfortunately we were unable to find Canadian data using the EuroQol, nor could we find data where this instrument had been used in another country that had been recently war torn.

We recognize that this study has several limitations: the opportunistic sampling of ambulantas; difficulty with the denominator and with missing patients in the waiting room; difficulty in interpreting responses to certain questions, such as satisfaction (were they all satisfied because they were all referred?); and the cultural and language barriers between the investigators and those collecting and providing data. Despite these difficulties the study is a rare look at health care in a county whose fabric has been ripped apart by war, and whose people are struggling to grasp and incorporate Western methods and values while dealing with the reality of poverty, displacement, and recent loss of untold numbers of friends and family (**Figure 4**).

CONCLUSION

As family medicine training programs are developed in BiH, organizers must recognize that the demographics and health status of the population served are different from those anticipated in a developed country. Patients are likely to be older, as likely to be male as female, and likely to have very few financial resources. Many will be living as refugees, away from the places they consider home. They will have trouble getting around, both because of mobility problems

Figure 4. Widespread death: *On the site of a 1984 Olympic sports facility, tombstones commemorate the thousands of people, young and old, who died in 1992 and 1993.*

from ill health and injury and because of lack of motorized transportation. They will have disabilities affecting self-care and activities of daily living. They will be more likely to have pain and more likely to suffer from psychological illness than we would expect in a developed country. The overall health of the whole clinical population is more likely to resemble that of our sickest patients. It is in this environment that the infrastructure for a well trained, well equipped primary care level of health care is being developed based on the four principles of family medicine and recognizing the unique characteristics of the people and the country. ❧

Contributors
Dr Godwin, **Dr Hodgetts**, **Ms Bardon**, **Ms Seguin**, **Mr Packer**, *and* **Dr Geddes** *participated in the conception and design of the study, critical revision of the article, and approval of the version submitted.* **Ms Bardon** *and* **Ms Seguin** *participated in acquisition of data.* **Dr Godwin** *and* **Dr Hodgetts** *participated in analysis and interpretation of data.* **Dr Godwin** *drafted the article for approval.*

Editor's key points
- This survey examined health status and care provided by primary care clinics in Bosnia and Herzegovina as part of postwar development of family medicine by Queen's University.
- The aftermath of war is reflected in health status considerably below European standards, in high unemployment, and in financial hardship.
- Primary care is very specialist-based with general practitioners providing mostly triage services. Despite this restriction, patients were highly satisfied with general practitioners' care.

Points de repère du rédacteur
- Ce sondage examinait l'état de santé et les soins prodigués dans les cliniques de soins de première ligne en Bosnie et en Herzégovine, dans le contexte du développement après-guerre de la médecine familiale entrepris par la Queen's University.
- Les répercussions du conflit se traduisent dans l'état de santé considérablement en deçà des normes européennes, dans le taux élevé du chômage et dans les difficultés financières.
- Les soins de première ligne sont très fortement centrés chez les spécialistes, tandis que les omnipraticiens exercent surtout un rôle de triage. En dépit de cette restriction, les patients étaient très satisfaits des soins reçus de la part des omnipraticiens.

References
1. Godwin M. Family Medicine Development Project in Bosnia and Herzegovina [news]. *Can Fam Physician* 1999;45:1098-103.
2. Acheson D. Health, humanitarian relief, and survival in former Yugoslavia. *BMJ* 1993;307:44-8.
3. Alderslade R, Hess G, Larusdottir J. Sustaining, protecting and promoting public health in Bosnia and Herzegovina. *World Health Stat Q* 1996;49:185-8.
4. Carballo M, Serdarevic D, Zulic I. Development of an essential drug list for Bosnia and Herzegovina. *J R Soc Med* 1997;90(6):331-3.
5. McMaster P, McMaster HJ, Southall DP. Personal child health record and advice booklet programme in Tuzla, Bosnia Herzegovina. *J R Soc Med* 1996;89(4):202-4.
6. Brooks R. EuroQol: the current state of play. *Health Policy* 1996;37(1):53-72.
7. Van Agt HM, Essink-Bot ML, Krabbe PF, Bonsel GJ. Test-retest reliability of health state valuations collected with the EuroQol questionnaire. *Soc Sci Med* 1994;39(11):1537-44.
8. Hakim Z, Pathak DS. Modelling the EuroQol data: a comparison of discrete choice conjoint and conditional preference modeling. *Health Econ* 1999;8(2):103-16.
9. Sabir S, Godwin M, Birtwhistle R. Men and women residents' experience with women's health care in a family medicine centre. *Acad Med* 1997;72(4):293-5.