ORIGINAL ARTICLE

Post-war development of emergency medicine in Kosovo

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Emerg Med J 2007;24:18–21. doi: 10.1136/emj.2006.035998

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Accepted 24 August 2006

Objectives: To (1) investigate emergency medical care priorities in Kosovo, (2) assess Kosovo's post-war development of emergency medical services and (3) identify expectations.

Methods: An instrument with seven open-ended questions, approved by the institutional review board, was designed for in-person interviews (preferred) or written survey. The survey was administered in October 2003 at the Kosovo University Clinical Center, Pristina, Kosovo, and one regional hospital. Targeted participants were emergency care providers, clinical consultants and health policy consultants. Surveys were conducted by interview with simultaneous interpretation by a native Albanian speaker, an orthopaedic surgeon or in written Albanian form. The responses were evaluated quantitatively and qualitatively.

Results: 13 respondents participated in the study: 10 gave interviews and 3 provided written response; 7 were emergency care providers, 4 were emergency care consultants and 2 were health policy consultants. Emergency care priorities were defined as trauma, cardiac disease and suicide. Most respondents believed that emergency medicine as a specialised field was a post-war development. The international community was credited with the provision of infrastructure, supplies and training. Most respondents denied any harm from international assistance. However, some respondents described instances of inappropriate international investment. Ongoing needs are training of providers and equipping of facilities and vehicles. Improved hospital management, political administration and international involvement are thought to be necessary for continued development.

Conclusions: Survey respondents agreed on priorities in emergency care, credited the international community with development to date, and identified administrative structures and international training support as the keys to ongoing development.

Kosovo is a region in southwestern Serbia. It has been under the United Nations joint governance since the North Atlantic Treaty Organization (NATO) conflict in 1999. Its ultimate political status is yet to be determined. It is currently governed as an independent entity, with the seat of governance in Pristina, Kosovo. Technically, it remains a part of the nation of Serbia. Kosovo has seen major changes in emergency medicine since the conflict. In the immediate post-conflict period, local governmental structures were non-existent and international organisations provided leadership for the development of emergency medicine.

Emergency medicine, a field relatively new to even the most developed societies, is in its infancy in Kosovo. In Kosovo, the roots of emergency medicine are the emergency care facilities and ambulance services developed during the communist years when Kosovo was part of the former Yugoslavia. Emergency care at the hospital level was based on unreliable triage to the appropriate specialist and the particular patient care room assigned to that on-call specialist. The development of an Anglo-American model of emergency medicine came post conflict, with the involvement of international governmental and non-governmental organisations. These organisations built or renovated hospital emergency departments, donated ambulances and equipment, and trained healthcare professionals. The British Department for International Development supported the construction of a new emergency department at the Kosovo University Clinical Center, Pristina, Kosovo. The Johns Hopkins University in cooperation with Samaritan's Purse developed an emergency medicine residency programme. Various other non-governmental organisations such as Die Johanniter, International Medical Corps and the Spanish Red Cross provided training to emergency medical service providers. The World Health Organization (WHO) assessed Kosovo's emergency medical services in 2000 and made

recommendations to the Joint Interim Administrative Structure—the United Nations/Kosovar government.¹

IMPORTANCE

International funding and involvement have markedly decreased since the immediate post-war period, as humanitarian aid organisations shifted their focus to areas of acute crisis. Longer-term development of emergency medicine will depend on Kosovar priorities and leadership structures. Further work by international organisations in Kosovo will require involvement and perspective of local healthcare professionals to outline directions and goals. Understanding the local perspectives on recent developments is useful for establishing priorities, particularly when local and international funding sources are limited. A post-conflict survey conducted in Bosnia in 1996 sought local feedback on humanitarian assistance, and highlighted the importance of evaluating the effectiveness of various forms of aid.² The application of assessment methods complementing humanitarian assistance in Kosovo have been explored previously in emergency medicine and public health efforts by Johns Hopkins and the International Rescue Committee.^{3–6}

From a broader perspective, in an era of increasing humanitarian and post-crisis intervention throughout the world, assessments before intervention and evaluations post intervention become increasingly important to donors, academicians, politicians and administrators.

GOALS OF THIS INVESTIGATION

This study sought to evaluate Kosovar views of medical professionals on the post-war development of emergency

Abbreviations: NATO, North Atlantic Treaty Organization; WHO, World Health Organization

medicine in Kosovo, determine their priorities for further emergency medicine development and assess their expectations for future international involvement in the development process.

METHODS

Study design

A qualitative study was conducted using a survey designed for in-person interviews or written responses. In-person interviews were preferred to encourage greater detail in response and clarification as necessary. The University of Rochester Research Subjects Review Board approved this study as exempt from review. There is no institutional review board in Kosovo, but conduct of the study was approved by the Director of the Emergency Center at the University Clinical Center of Kosovo.

Setting and selection of participants

The survey was translated into Albanian by a native speaker and administered in Kosovo in October 2003. Respondents were selected in a purposive and convenient fashion to sample the opinions of a spectrum of emergency care providers, medical consultants and health policy makers. The University Clinical Center in Pristina was the main site for the survey; a regional hospital in Gjilan was the secondary site. The University Clinical Center is the seat of academic medicine in Kosovo, the sole tertiary care centre, the teaching institution for the only medical university and the primary source of clinical expertise for governmental ministries and other agencies. It has been the focus of development efforts in emergency medicine, including the formation of a residency. Administrative leaders involved in the development of emergency medicine and doctors training in the newly established residency were targeted as respondents.

Interventions and methods of measurement

The survey tool (box 1) used seven open-ended questions to allow latitude in individual responses. The questions aimed to assess the past development and future directions of emergency medicine in Kosovo. The WHO Assessment of Emergency Medical Services in 2000 provided a background for survey development. The WHO assessment had documented the lack of standards and certifications for emergency care providers and facilities throughout Kosovo, and provided recommendations for standardisation. The survey was designed to elicit information potentially beneficial to the further development of emergency medicine in Kosovo at a time of diminished international assistance and increased local responsibility for the process. The seven-question survey tool was administered to each of the respondents either verbally or in written form.

Box 1: Survey tool

1. What are Kosovo's medical emergencies?
2. How has emergency medicine evolved in recent years?
3. Which aspects of international assistance have been most helpful?
4. Have any involvements of international assistance been harmful?
5. What are the current needs for emergency medicine?
6. How should these needs be addressed?
7. What involvement of the international community would be helpful for the future?

Data collection and processing

For respondents who completed the survey verbally, a native Albanian speaker read each question to a single respondent as he or she followed along on a copy of the Albanian survey instrument. Clarifications were made when requested. The native speaker was an orthopaedic surgeon, fluent in English, with employment experience as an attendant at the University Center; and as a mobile clinic physician for Kosovar refugees in Albania under the auspices of an international humanitarian organisation. The principal investigator (KPO'H) was present at each interview for simultaneous interpretation of all communications between the respondent and translator. The translated interview responses were recorded verbatim in English. For respondents who completed the survey in writing, each respondent was given the survey instrument and asked to write their responses in Albanian directly on the instrument. These responses were then translated to English by the same translator who conducted the verbal interviews. No personally identifiable data were recorded; however, professional position and employment site were recorded.

Primary data analysis

All responses were analysed for recurring trends, terms and concepts as well as notable outlying responses. The themes defined by the analysis were correlated with the respondent's role in emergency care. This analysis relied partly on qualitative methods previously summarised in paediatric emergency medical research in Bolivia conducted by doctors and public health professionals.⁷

RESULTS

Characteristics of study participants

We selected 13 respondents to obtain a spectrum of opinions. They were chosen for their varying roles in emergency care and emergency medical services development. Five emergency resident doctors, one emergency department physician director (an anaesthesiologist), one emergency nurse, two consultant specialist physicians, two consultant resident doctors and two health policy consultants agreed to participate in the study. Nine of the clinician respondents were employed at the University Clinical Center of Kosovo, located in Pristina, the capital of Kosovo. The remaining four clinicians worked at the regional hospital in Gjilan. The two health policy consultants worked in the main city of Pristina. In-depth interviews were conducted with 10 of the respondents; written responses on the survey tool were provided by the remaining three respondents.

Main results

This small group of respondents, dominated by clinicians, agreed that emergency medicine as a specialty has developed in Kosovo since 1999. Clinical priorities were repeatedly identified by similar description. Post-war humanitarian assistance was thought to be instrumental to the emergence of the field, even though it was occasionally misguided. Respondents identified processes key to further development.

The participants identified Kosovo's leading emergencies as trauma, cardiac disease, and ingestions or suicidality. Motor vehicle collisions, assaults, occupational falls and paediatric falls were identified as common types of trauma. Other emergencies identified were respiratory disease, infectious disease and the needs of those feeling scared or threatened. The two health policy consultants cited Kosovo's leading medical emergencies as public health issues, including high neonatal mortality, care of the mother and child, development of the specialty of family medicine, lack of diagnostic methods, lack of tertiary care services, deficiencies in the education of

health professionals, of nurses in particular, need for management expertise and need for a stable pharmaceutical supply.

When questioned about the evolution of emergency medicine in recent years, most respondents believed that the field had emerged and developed as a specialty since the end of the NATO bombing campaign in 1999. The developments were interpreted generally as achievements of the international community. Two consultant physicians—one a specialist and one a resident—described the advances since the war's end as cosmetic and not functional. One respondent, a consultant specialist physician, thought that emergency care had been more effective during the 1980s, when Yugoslavia was intact.

International assistance was credited with providing emergency department renovation and structural development, equipment and supplies, and training. Respondents thought that a key international contribution was the physical renovation of the emergency departments in each of the six Kosovo hospitals. Most respondents emphasised that the international efforts had not harmed any of the targeted emergency medical services, but specific instances of inappropriate investment were noted. Inappropriate investments were described as development of specialised services at inappropriate locations, including a surgical suite in an urgent care facility, an obstetric facility at the primary care level in a village and a new 600-bed hospital in a small municipality within easy reach of an existing hospital. Other inappropriate investments were the creation of additional, unnecessary infectious disease beds at the University Clinical Center, importing expired drugs and items not on the WHO Essential Drug List and loss of funds through corrupt channels. Several respondents noted that increased involvement of local experts would have decreased the level of inappropriate investment.

Respondents identified current needs for emergency medicine as training, and equipping emergency departments and prehospital vehicles. Respondents stated that these needs should be considered by improved hospital management, improved political administration and increased international assistance. Specific assistance desired from the international community included initial training at all levels of provider as well as continuing professional education, exchange opportunities and equipping of facilities.

Five of the six consultants thought that their specialties were not appropriately involved during the post-war development of emergency medicine. These concerns were raised even in the absence of specific questioning in this regard.

LIMITATIONS

Although responses to the interview questions often exhibited strong consensus, the study is limited by several factors. Firstly, the interviews were conducted by an international investigator with a native physician translator. The presence of the international investigator during the interview may have biased responses. Priorities noted by respondents reflect their individual desires rather than data-driven interpretations. Respondents were selected because of their awareness or involvement with the development of emergency medicine. However, most of them were more familiar with activities at the University Clinical Center than in the outlying areas. The views of the limited number of respondents may not be representative of healthcare professionals throughout Kosovo or even at their respective institutions. The study is further limited by the small group of respondents and the convenience method of sampling.

DISCUSSION

This qualitative assessment gathered consistent data and notable outlying responses when sampling a limited number of respondent view points of emergency medicine development

in Kosovo. Emergency providers exhibited strong agreement on clinical priorities. Most respondents identified emergency medicine as a new specialty that had been developed after the NATO conflict by the efforts of the international community. The notable international contributions were structural renovation, equipment donations and training of providers. Although none of the respondents found lasting harm to services targeted by international assistance, some of those interviewed described specific instances of inappropriate investment.

Training of providers was identified as the most important current need in further development of emergency medicine. Equipping of facilities was also cited as a current need. Respondents thought that further progress will require stronger administrative and managerial structures, as well as the continued involvement of the international community. Further advances in emergency care may require a more inclusive process with involvement of clinical consultants, policy consultants, and hospital and political administrative structures.

The healthcare providers and health policy consultants interviewed in this study credit the international community with the development of emergency medicine as a specialty in Kosovo. This development occurred over several years in the post-war period, but has slowed with reduced international involvement. According to these respondents, stronger administrative structures and enhanced managerial capability at the hospital and ministerial levels may be required to further resolve the priorities of traumatic injury, cardiac disease, and ingestions or suicidality. Continued international involvement will possibly be needed for training and exchange opportunities.

The responses to this survey may be useful to the ongoing process of the development of emergency medical services in Kosovo. A standardised, and potentially validated, assessment instrument may be useful in Kosovo and in other places before the initiation of developmental interventions by foreign organisations. Defining local needs and involving all stakeholders may be necessary components of these assessments. The inappropriate investments identified by our study participants may have been more appropriately directed with a greater participation of local stakeholders.

ACKNOWLEDGEMENTS

We thank Doctor Uc Gjonbalaj for interpretation and translation, and Gregory P Connors, MD, MPH, MBA, for assistance in the preparation of this manuscript.

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Funding: This study was financially supported by the Department of Emergency Medicine, University of Rochester, Rochester, New York, USA.

Competing interests: None.

Part of this study was presented as a poster at the National Association of Emergency Medical Services Physicians, Annual Meeting 2005, Naples, Florida, USA, January 2005.

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