

A comprehensive assessment of medical schools in Bosnia and Herzegovina

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OBJECTIVES To perform internal and external evaluations of all 5 medical schools in Bosnia and Herzegovina against international standards.

METHODS We carried out a 2-stage survey study using the same 5-point Likert scale for internal and external evaluations of 5 medical schools in Bosnia and Herzegovina (Banja Luka, Foča/East Sarajevo, Mostar, Sarajevo and Tuzla). Participants consisted of managerial staff, teaching staff and students of medical schools, and external expert assessors. Main outcome measures included scores on internal and external evaluation forms for 10 items concerning

aspects of school curriculum and functioning: 'School mission and objectives'; 'Curriculum'; 'Management'; 'Staff'; 'Students'; 'Facilities and technology'; 'Financial issues'; 'International relationships'; 'Internal quality assurance', and 'Development plans'.

RESULTS During internal assessment, schools consistently either overrated their overall functioning (Foča/East Sarajevo, Mostar and Tuzla) or markedly overrated or underrated their performance on individual items on the survey (Banja Luka and Sarajevo). Scores for internal assessment differed from those for external assessment. These differences were not consistent, except for the sections 'School mission and objectives', 'Curriculum' and 'Development plans', which were consistently overrated in the internal assessments. External assessments were more positive than internal assessments on 'Students' and 'Facilities and technology' in 3 of 5 schools.

CONCLUSIONS This assessment exercise in 5 medical schools showed that constructive and structured evaluation of medical education is possible, even in complex and unfavourable conditions. Medical schools in Bosnia and Herzegovina have successfully formed a national consortium for formal collaboration in curriculum development and reform.

KEYWORDS education, medical, undergraduate/*organisation & administration/standards; curriculum/*standards; schools, medical/*organisation & administration; educational measurement; Bosnia and Herzegovina; programme evaluation; multicentre study [publication type].

Medical Education 2006; **40**: 1162–1172
doi:10.1111/j.1365-2929.2006.02626.x

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Overview

What is already known on this subject

Medical education is undergoing a restructuring process at global and local levels.

There are many guidelines and standards for medical education but assessment practices are rarely carried out in a systematic and formalised way, especially at national levels.

What this study adds

Internal and external evaluation procedures for medical schools are feasible, even in complex and unfavourable conditions such as those of the current post-war and post-communist transition status of Bosnia and Herzegovina.

Suggestions for further research

Further research into external and internal determinants of curriculum reform is needed.

recently joined or are striving to join the European Union (EU), have specific problems related to the political and socioeconomic frameworks in which their medical curricula have been shaped in the past.^{5,10,11} Among these countries, Bosnia and Herzegovina (BH) carries the additional burden of destruction, population migration and stress caused by war,¹² which has also affected medical education.^{13–15} In order to assess the quality of medical education in the context of the new demographic, social, economic and political profiles of the country, we performed a structured evaluation of all 5 medical schools in BH. The procedure included the self-assessment of schools against the available standards, primarily the global WFME standards² and national standards in EU countries,⁶ followed by an external evaluation by EU experts.

METHODS

Participating schools

Bosnia and Herzegovina has 5 medical schools, which differ in size and traditions (Table 1). They work within different socioeconomic and political environments. The structure of the curricula is similar to those of other countries in the region. It is discipline-based and uses mostly traditional teaching methodologies, without much vertical or horizontal integration.⁵ Despite the political, ethnic and religious divisions that exist in today's BH, medical schools co-operated during and after the war, contributing towards a basis for peace building and confirming the positive experiences that have emerged from other political conflicts.¹⁶ All 5 medical schools in BH have collaborated to develop their curricula and harmonise them with EU practices. Within the framework of the Trans-European Programme for Co-operation in Higher Education in Central and Eastern Europe (Tempus), the schools have partnered with medical schools in Austria, Belgium, Denmark and Germany to undertake curriculum reform in BH (Tempus project 'Design of an Integral Curriculum to Undergraduate Medical Education in Bosnia and Herzegovina' [DICTUM]).¹⁵

Internal and external assessment

The assessment of the 5 schools in BH was performed in 2 phases. During phase 1, which lasted from May to October 2004, each of the participating schools executed an internal self-assessment. The exception was Banja Luka Medical School, which joined the

INTRODUCTION

Medical education is undergoing a restructuring process, both at local and global levels.¹ At the global level, the World Federation for Medical Education (WFME) is developing global standards for medical education² and a global accreditation programme,³ both of which aim to promote curricular and evaluation practices across national boundaries. At the local level, universities and medical schools are well aware that they need to join the global process of restructuring medical education but that they must, at the same time, carefully consider the particularities of specific national, organisational, educational and socioeconomic issues.^{4–7} There is also growing recognition of the need to restructure and revitalise academic medicine.⁸

In Europe, medical curriculum reform is set in the context of the restructuring and harmonisation of higher education, defined in the Bologna Joint Declaration of the European Ministers of Education in 1999.⁹ Many central and eastern European countries in post-communist transition, which have

Table 1 Characteristics of medical schools in Bosnia and Herzegovina (data for the 2004–05 academic year)

Characteristic	Banja Luka	Foča/East Sarajevo	Mostar	Sarajevo	Tuzla
Year of establishment	1978	1994	1997	1944	1976
Number of students	756	335	260	1424	738
Women : men ratio	1.1	2.1	2.5	1.8	1.4
Applicant : freshman ratio	1.2	1.5	2.0	2.6	1.2
Total study time (hours) demanded by the protocol					
Year 1	750	721	765	795	1205
Year 2	795	855	795	840	1020
Year 3	825	900	765	825	960
Year 4	810	900	1040	900	1110
Year 5	345	900	990	885	990
Year 6	1150	905	1145	795	1195
Total	4675	5181	5500	5040	6480
Number of staff					
Full professors	33	22	26	33	11
Associate professors	31	26	47	26	20
Assistant professors	39	15	30	40	37
Instructors	189	48	110	43	40
Total academic staff	292	132	227	235	106
Non-academic staff	41	15	14	122	18
Age of academic staff, <i>n</i> (%)					
21–40 years	189 (64.7)	49 (37.1)	80 (35.2)	60 (25.5)	25 (23.6)
41–60 years	70 (24.0)	54 (41.0)	134 (59.0)	158 (67.2)	67 (63.2)
61–70 years	33 (11.3)	29 (21.9)	13 (5.8)	17 (7.3)	14 (13.2)
Full-time : part-time academic staff*	1 : 4	2 : 1	1 : 75	1 : 2	53 : 1
Student : academic staff	6 : 1	3 : 1	1 : 1	6 : 1	7 : 1
Teaching facilities					
Lecture room space (sq m/student)	10.1	12.9	5.4	4.7	4.0
Books in library, <i>n</i>	3650	4020	5488	8000	1917
Periodicals in library, <i>n</i>	50	55	46	17	8
Computers for students in library, <i>n</i>	35	12	5	20	6

* The discrepancies in the ratio of full- and part-time staff among medical schools is due to differences in their organisational structures, particularly regarding the mode of employment of teachers from clinical practice. This is especially true for the schools in Mostar and Tuzla. Mostar School is a newly established school, which relies mostly on guest teachers from other schools in Bosnia and Herzegovina, and Croatia. Tuzla School is fully integrated into Tuzla University and all teachers, including those in clinical practice, are full-time employees of the university.

project later and finished the self-assessment in February 2005.

In October 2004, representatives from BH and EU partner schools attended a 2-day workshop on quality management procedures, held at the University of Heidelberg, Germany. The workshop was organised by licensed trainers from the European Foundation for Quality Management (EFQM). The participants from BH schools were later responsible for implementing the internal assessments in their respective schools, and the participants from the EU partner schools formed the external assessment team. Training in quality management of all assessment experts ensured that both external and internal assessments were implemented using the same assessment procedures. The external assessments were performed during January and February 2005, and in March 2005 in Banja Luka Medical School. All documentation relating to internal and external evaluation results is available from the DICTUM project website

(<http://med.uni-hd.de/DICTUM/>) or from the project co-ordinators (authors H-GS and VJS).

Internal assessment

Internal assessment was performed by an assessment team of 8–10 members in each school. The teams were appointed and led by the curriculum development officer appointed by the school's leadership at the beginning of the DICTUM project. The officers received specific training in quality management to ensure the uniformity of internal assessment procedures across medical schools. Individual teams included representatives of all levels of teaching staff, as well as representatives of administrative staff and students, and had a mandate to apply the questionnaire to a target group of students ($n = 120$) and teachers ($n = 80$) at each of the schools. Each local team was trained in the application of the survey and organisation of the self-assessment. They were also responsible for ensuring that survey participants took

their task seriously, as the objective of internal assessment was not to rank or grade the institution, but, rather, to generate insight into the work of the institution and to serve as an essential document for institutional development. They emphasised that the process of self-assessment would give meaningful results only if it were seen as the responsibility of the whole faculty. This meant the work should not be delegated to the management of the school, but that it should be undertaken by the teaching staff and students of the institution. All teams followed a unique checklist and detailed instructions in order to provide a common basis for external evaluation and formulate coherent development plans. A set of standardised questions was drafted for this purpose and report tables were created to facilitate the presentation of data (Appendix).

Individual teams performed the survey at classes held on previously determined days, with the aim of collecting 20 student questionnaires for each study year. Students present at practicals or seminars on those days were included in the survey, which was anonymous and voluntary. Teachers from all study years who were available on student survey days were also asked to fill in the questionnaire. If the number of students or teachers available on the survey days did not reach the target 200 participants, no attempts were made to recruit additional responders. The internal assessment teams and school administration were required to summarise the results in an internal assessment report and to provide data on their schools and curricula (Table 1).

External assessment

The team for external assessment comprised members of the Tempus project from each of the EU partner schools. Each of the BH schools was assessed by a different external assessment team, composed of a team leader from 1 of the EU schools and 2 members from other EU or BH schools. All team members received specific training in quality management to ensure the uniformity of assessment procedures across medical schools. The project co-ordinator (first author, VJS) joined each of the 5 external assessment teams and supervised the procedure closely to ensure that the same principles and assessment methodology were applied everywhere. The team received the final reports and statistical data prepared by the internal assessment team well in advance of their own assessment, and held a conference before each visit to the individual schools. At those meetings, the internal assessment report was analysed and discussed. The external assessment was

performed using the same questionnaire as for the internal assessment. Formulation of the final report on all features of institution was based on:

- 1 the self-assessment report;
- 2 statistical data collected and presented by the institution;
- 3 the institution's statute, regulations, decisions and by-laws;
- 4 data collected onsite through discussions with students, staff and management, and
- 5 data collected through direct insight during the fact-finding mission.

Questionnaire

The assessment questionnaire contained 100 items divided into 10 separate sections of 10 items each (Appendix). The same questionnaire was used for internal and external assessments. The questionnaire was constructed in English and was translated for the purposes of internal assessments at medical schools; back-translation by independent translators was performed to ensure the validity of the translation.

The respondents gave their answers on a 5-point Likert scale: the scores for each section were formed as a mean score for 10 items. The reliabilities (Cronbach's α) for each section of the internal assessment questionnaire were high, ranging from 0.90 for the 'Curriculum' section to 0.96 for the 'Development plans' section.

Statistical analysis

Principal components analysis limited to 10 orthogonal factors with Varimax rotation was used to investigate the potential latent structure of the internal assessment instrument. This analysis was not possible for the external assessment instrument because it was completed as a single composite, using the consensus score of the whole assessment team for a particular school. The internal assessment questionnaire was filled out independently by individuals from teacher and student target groups and the scores for each section of the internal assessment were presented as the mean score and 95% confidence intervals (CI) for scores from all respondents. As the external and internal assessment questionnaires used the same items, it was possible to compare the external assessment summative score with average internal assessment scores for each survey section.

RESULTS

A total of 815 internal assessment survey forms were available for analysis ($n = 113$ from Banja Luka, $n = 182$ from Foča/East Sarajevo, $n = 200$ from Mostar, $n = 112$ from Sarajevo, and $n = 208$ from Tuzla).

Total self-assessment scores ranged from 1.9 (95% CI 1.8–2.0) in Banja Luka to 3.3 (95% CI 3.2–3.4) in Mostar (Fig. 1). Generally, the schools gave the highest scores on the section 'School mission and objectives' (3.1, 95% CI 3.0–3.2). Scores on the sections 'Curriculum', 'Management', 'Staff', 'International relationships', 'Internal quality assurance' and 'Development plans' were significantly lower, followed by the scores on the sections 'Students', 'Facilities and technology' and 'Financial issues' (repeated measures ANOVA, $F_{1,808} = 144.2$, $P < 0.001$). Varimax rotation revealed that items from sections 3 ('Management') and 4 ('Staff') were saturated by the same latent variable. The same was found for sections 9 ('Internal quality assurance') and 10 ('Developmental plans') (data not shown). This finding indicated that internal assessors might not have made a clear difference between these section pairs. When we merged the pairs, the resulting 8-factor solution explained 60% of the overall variance. The full 10-factor solution explained 62.8% of the overall variance.

External assessment scores differed from self-assessment scores on almost all sections in all schools (Fig. 1). The schools either consistently overrated their structure and functioning (Foča/East Sarajevo, Mostar and Tuzla) or markedly either overrated or underrated individual sections in their self-assessment. However, there were no consistent differences between the internal and external assessments, except for the sections 'School mission and objectives', 'Curriculum' and 'Development plans', which were consistently overrated in the internal assessments (Fig. 1). In 3 of 5 schools, external assessment was more positive than internal assessment for the sections 'Students' and 'Facilities and technology' (Fig. 1). Summarily, the schools in Foča/East Sarajevo, Tuzla and Mostar gave higher scores in internal assessment than they achieved in external assessment (scores for 10 sections in Foča/East Sarajevo, 8 sections in Tuzla and 6 in Mostar), whereas the schools in Sarajevo and Banja Luka had similar numbers of overrated or underrated sections in the internal assessment in comparison with the external assessment (3 underrated and 4 overrated sections

for Banja Luka and 3 underrated and 4 overrated sections for Sarajevo).

DISCUSSION

Our study showed that carrying out evaluation procedures is feasible for medical schools even in complex and unfavourable conditions such as those in Bosnia and Herzegovina, if these procedures are prepared carefully and have clear goals. Despite the many economic, ethnic and political tensions evident in the country, which exists under an international protectorate, its medical schools have successfully formed a national consortium for formal collaboration in curriculum development and reform. Bearing in mind the very traditional structure of the academic and medical community,^{5,15} such an effort represents an important accomplishment, measuring up to the successful collaboration of medical schools in much more developed settings.¹⁷

Accreditation processes are considered to function best when the 2 evaluation procedures, internal and external, give similar scores.¹⁸ This was not the case for medical schools in BH, where external and internal scores differed for some or all survey items. Experience from other settings, including the developing world,⁴ shows that it is as difficult for a school to compare itself against international standards as it is for international assessors to understand the standards and specifics of local health and education systems. This was the main limitation of our study. Although the internal and external assessments were performed according to the same methodology, they were carried out by different individuals, whose expectations and expertise in assessment procedures varied greatly. Moreover, internal and external evaluation had different goals: whereas the internal assessment was structured as an introspective procedure for the school and as preparation for the external assessment, an important goal of the external assessment was to provide recommendations for the improvement of each school, which may have affected the evaluation. We addressed this limitation by ensuring that all local self-assessment team leaders underwent the same training as external experts, as well as by appointing trained self-assessment team members as external experts evaluating other BH schools. We also ensured that the survey procedure was structured and closely followed by all teams in BH schools, and the co-ordinator of the assessment exercise (VJS) was a member of all external

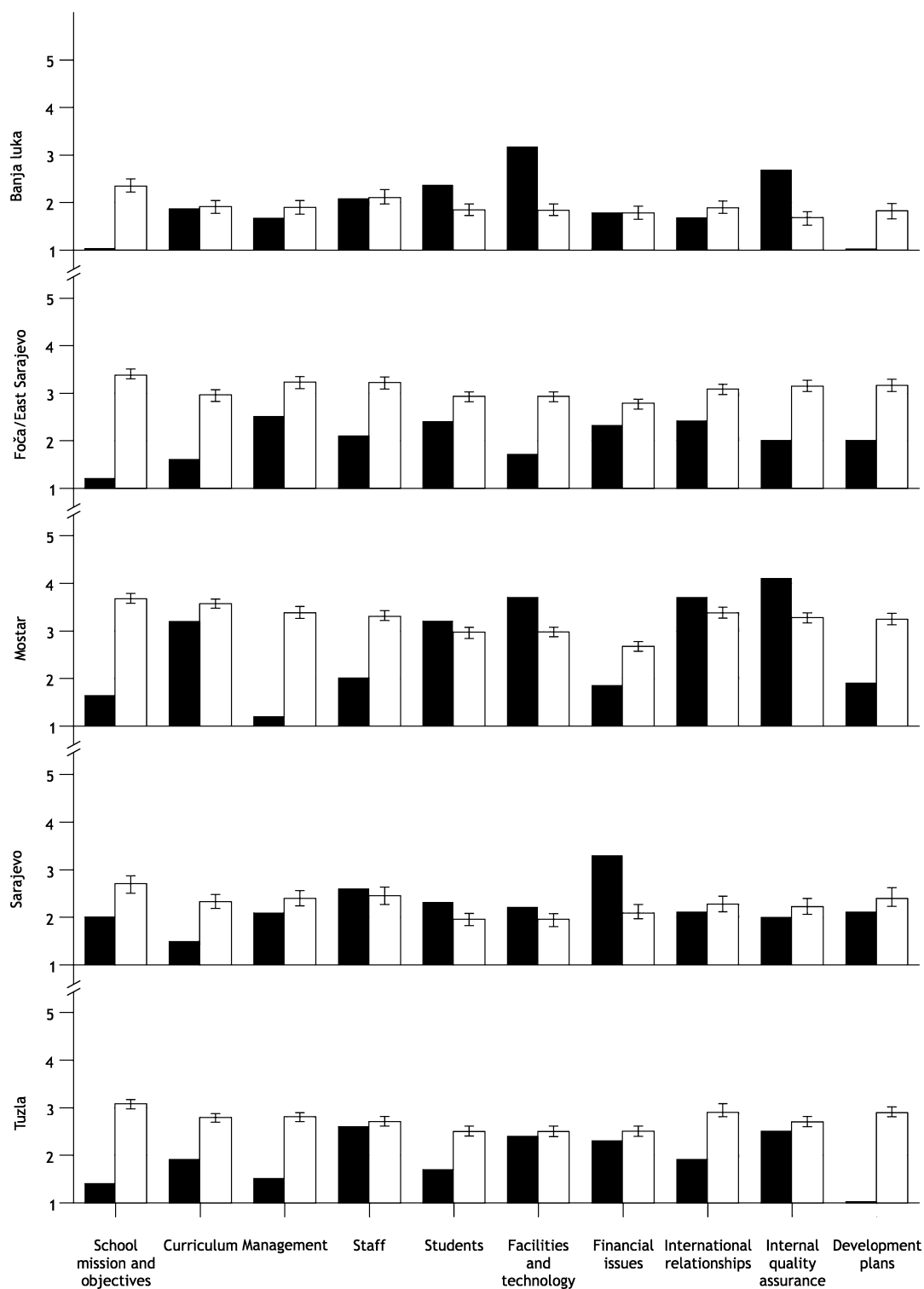


Figure 1 Internal and external assessment scores for 5 medical schools in Bosnia and Herzegovina. Ten questions in each of the 10 sections were scored on a Likert scale of 1–5 (1 = poor or strongly disagree, 2 = unsatisfactory or disagree, 3 = good or undecided, 4 = very good or agree, 5 = outstanding or strongly agree). Open columns represent scores on the internal assessment form (mean score and 95% confidence interval [CI]); closed columns represent scores on the external assessment form (single score given by the expert group). Sample size for internal assessment: Banja Luka, $n = 113$; Foča/East Sarajevo, $n = 182$; Mostar, $n = 200$; Sarajevo, $n = 112$; Tuzla, $n = 208$.

evaluation teams in order to ensure the uniformity of the evaluation procedure and reporting structure. Under those conditions, structured and planned assessment procedures allowed for a general comparison of the data from the 2 assessments, but not for any rigorous statistical evaluation.

Probably the most important aspect of the evaluation process, both internal and external, was the stimulation of creative insight into all elements of medical education in a given setting, including into resources, both human and material, curriculum content and delivery, and internal and external relationships.¹⁸ What we learned from our assessment exercise was that there was a need for student and faculty development in terms of professionalism,¹⁹ which should include education in modern teaching methodologies. Particularly instructive were the differences in the assessment of the 'Management' and 'Staff' sections. They received consistently high and very similar scores during the internal assessment. By contrast, whereas the 'Staff' section received favourable scores from external evaluators, the 'Management' section was more often less positively evaluated. In addition, whereas all schools thought they had good development plans, the external evaluators awarded poor scores on this item. These findings possibly reflect a specific inheritance from the previous political system, where development plans were never taken seriously because communist governments always used planned production targets but rarely achieved the set goals. In addition, the rigid hierarchical system of the academic world and lack of management education and resources probably explain why medical schools did not differentiate well between the 'Management' and 'Staff' sections. Professors and department heads actually held the most significant positions of power and independence within these medical schools and were thus also identified as being within the management structure. This attitude reflected the loose structure of universities in BH, where individual faculties have financial and organisational independence.

The external evaluation team not only formally 'graded' the schools, but provided written recommendations. These recommendations were made on the basis of consensus between team members, whose intention was to be open-minded and frank. The consensus of the evaluation team was that medical schools in BH generally lacked clear mission statements and educational objectives, so that most staff and students were not informed about the goals and values of their school. The team suggested joint

activity on the part of the schools to draft the missing documents, in line with national priorities.

'Management' and 'Development plans' were the items that received the lowest grades from the external evaluation team. Although the management of some schools was praised for its drive and determination, all schools were advised to promote the involvement of staff and students in decision processes. In addition, smaller schools, in which the top management positions were only part-time, had to deal with the problem of 'visiting' management. The external evaluation team proposed creating full-time positions of co-ordinators for teaching and research, an initiative that would contribute to the stabilisation of the school structure, efficient funding acquisition, development of scientific research, better co-operation with teaching hospitals and effective representation to the public, all of which are basic prerequisites for medical schools that aspire to national and international acknowledgement. These issues are closely related to the financial management of schools, the area most affected by the post-war transition period and tradition of communist financing. Most schools did not have a clear annual budget plan because they had little influence on financing from university, local, federal or national sources. Funding for research projects on all levels was poor or non-existent. Moreover, schools had no defined tuition policies and some enrolled too many students for the existing facilities. The external evaluation team suggested making full use of the existing expert professionals in each school to generate additional income, as well as taking a systematic approach to obtaining available grants within the EU and bilateral co-operation frameworks.

Another important area of recommendations addressed student issues. Although all schools demonstrated positive attitudes towards addressing and solving student problems, the lack of coherent examination policies created confusion among students, with the result that they were unclear about the relationships between what they were taught, what they should study, and what they would be examined in. The position of teaching staff often contrasted with that of students, because staff did not identify low passing grades as a problem. The experts recommended that teaching hours per week should be adapted to international standards and modern teaching methodologies should be introduced (Fig. 2). They also emphasised the need to integrate scientific research into the curriculum²⁰ to provide students with opportunities for academic careers. The team also highly recommended establishing a

One of the recommendations of external assessors to all medical schools in Bosnia and Herzegovina was that teachers be trained in modern teaching methodologies, required by the Bologna Declaration process in Europe.

The first step in addressing this recommendation involved a 5-day workshop on problem-based learning and other innovative teaching methodologies. The workshop was organised by the Heidelberg School of Medicine. Participants came from all 5 schools in Bosnia and Herzegovina (4–5 participants from each school), as well as from Ljubljana School of Medicine in Slovenia and Budapest Semmelweis University in Hungary. The aim of the workshop was to train the trainers in teaching methodologies, so that the trainers could then translate this knowledge to their schools. So far, trainers have organised local workshops in Sarajevo, Tuzla, Mostar and Foča/East Sarajevo.

The trainers have also prepared a manual on teaching methodologies, which will be published in English and local languages. The manual describes the theory and practice of learning in medicine, and provides practical directions for successful implementation of modern teaching methodologies. Topics include: sandwich design of teaching and learning; learning styles; visualisation techniques; training in communication skills; microteaching; technical skills training; problem-based learning; e-learning, and monitoring and implementing the learning process.

The manual was prepared under the ongoing Tempus project, INTEL M ('Integrated Teaching and Learning in Medicine'), successor of the DICTUM project described in this study. INTEL M is focused solely on teaching methodologies, and will continue the implementation of training activities to increase the critical mass of teachers in Bosnia and Herzegovina skilled in innovative teaching technologies in medicine.

Figure 2 Case study. Realising recommendations of external assessment: training in teaching methodologies.

student counselling office at all schools, which might help to address students' personal problems in a more systematic way.

The evaluation procedure in BH influenced not only the 5 in-country medical schools, but also their EU partners. Evaluation procedures in medical schools are becoming more and more common in western European countries and are used as a basis for financing medical education, but many schools do not have extensive experience of structured curriculum evaluation. For example, the Medical University of Vienna (at that time still the Medical Faculty of the University of Vienna) performed a test run of internal/external evaluation, which met with no acceptance and the results were never used. The EU partners of the DICTUM project recognised the internal and external assessment of the 5 medical schools in BH as an important step towards the development of high-quality medical education in other settings.

The objective of both the internal and external assessments was not to rank or grade the institution in question, but to generate an objective insight that could serve as a document for institutional development. The exercise of evaluating medical schools in BH proved to represent a nexus for the development

of academic medicine as an important part of the rebuilding of society after the devastating trauma of war.¹⁴ The schools learned more about each other, and the international academic community learned about the specifics of their situation, all of which resulted in the continuation of joint curricular reform in BH. This exercise will hopefully influence existing attitudes in a wider academic medical community.^{11,21,22}

Contributors: all authors made substantial contributions to the conception and design of the study, and/or acquisition of data, and/or analysis and interpretation of data. All authors contributed towards critical revisions of the article for important intellectual content and approved the final version. Regrettably Professor Jens Dørup died between submission of the manuscript and its publication.

Acknowledgements: we thank the students and academic staff who participated in internal assessment activities and the administration of all medical schools for support and help in data gathering. We are grateful to Spomenka Matić and Sonja Šunjić, who collected and organised the data for entry into the database.

Funding: this study was performed under the framework of the Tempus project 'Design of an Integral Curriculum to Undergraduate Medical Education in Bosnia and Herzegovina' (DICTUM; AC_JEP 17095/2003).

Conflicts of interest: none.

Ethical approval: no ethical approval was required as the study was part of the official assessment of the medical schools and their curricula. All students and academic staff interviewed during internal assessment were informed of the aims of the study and their participation was voluntary.

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Received 8 December 2005; editorial comments to authors 2 June 2006; accepted for publication 27 July 2006

APPENDIX

Structure of self-assessment and external surveys completed by respondents from 5 medical schools in Bosnia and Herzegovina and external experts

Structure of the survey

Ten sections, each with 10 questions to be scored or commented on. The maximal score for each section was 50 points (100%), and the minimal score 10 points.

Scoring scale: 1 = poor/strongly disagree; 2 = unsatisfactory/disagree; 3 = good/undecided; 4 = very good/agree; 5 = outstanding/strongly agree

Survey sections

- 1 School mission and objectives: explicitly formulated educational mission and objectives; awareness and support of students and staff for mission and objectives; involvement of professional associations in mission formulation; translation of objectives into curriculum, and adaptation to the requirements of modern medicine and society.
- 2 Curriculum: in line with contemporary trends in medical education; changes in past 3 years; internal consistency of mandatory courses; teaching technologies in line with objectives; ratio between core curriculum and elective courses; use of communication and information technologies; use of formative assessment, and catalogue of essential clinical skills.
- 3 Management: explicit communication of vision for education and quality control; transparent assessment of staff; regular evaluation of the management by staff; active contribution to government policies or legislation, and involvement of staff in formulating longterm educational objectives.
- 4 Staff: desirable outputs clearly defined for all positions; systematic consultation on tasks and responsibilities; personnel policy based on performance indicators; staff development programmes, and encouragement of curriculum-development activities.
- 5 Students: entrance requirements and admittance procedures transparent and controlled; clear assessment and graduation criteria; follow-up of students' progress; adequate student counselling and structured support, student satisfaction with the curriculum, and extracurricular and research opportunities.
- 6 Facilities and technology: maintenance and budget for maintenance of facilities; Internet availability to students and staff; laboratory equipment; library; teaching tools, and clinical skills laboratory.
- 7 Financial issues: financial indicators used for formulating institutional policies; state and local budget support; tuition; research funding, and generation of additional income.
- 8 International relationships: international student exchange as a part of the curriculum; participation in international projects and activities; international teaching staff, and systematic support for application to international research programmes.
- 9 Internal quality assurance: systematic recording of student performance; records of grants and publications; systematic evaluation of education, and involvement of students in the evaluation process.
- 10 Development plans: development plan for institutional objectives; curriculum; management, staff- and student-related issues; institution financing and quality assurance, and global strategy plan.

Structure of self-assessment report

- 1 Introduction: team composition; description of how answers and comments were collected; survey participants, and problems in conducting the survey.
- 2 Body of the report: form and tables on school characteristics.
- 3 Conclusions: strengths and weaknesses, plans for remedy.

Self-assessment check-list

- All questions answered?
- All necessary comments included?
- All items organised in uniformly prepared tables?
- All items graded?

Self-assessment team composition

- 1 Small group.
- 2 Person nominated as the co-ordinator by the DICTUM project acts as chairperson.
- 3 Team consists of academics and students (no representatives of school management).

Responsibilities of team chairperson

- 1 To plan activities and co-ordinate the work.
- 2 To ensure that standardised procedures are followed and standard forms and check-lists completed.
- 3 To supervise the collection and reporting of data.
- 4 To inform appropriate school/university bodies of preliminary findings.
- 5 To act as the contact person during external assessment.