A SHORT HISTORY OF MEDICAL INFORMATICS IN BOSNIA AND HERZEGOVINA

Izet Masic, Ahmed Novo, Haris Pandza, Almir Dzananovic, Zlatan Masic
Medical Faculty, University of Sarajevo, Bosnia and Herzegovina

SUMMARY

Health (Medical) informatics as a separate scientific discipline began to be effective in academic institutions at the end of the 70's by the presentation of actual accomplishments in this area in under and postgraduate education at biomedical faculties in Bosnia and Herzegovina (B&H). As a specialized discipline, Health informatics has its rudiments in B&H in the beginning of the 20th century when physicians, engineers, economists, physicists and others were multidisciplinary involved in the area of health informatics and statistics and started in the application of health technologies in health science (1,2).

In 2007, the Health informatics profession celebrates five jubilees in Bosnia and Herzegovina:

a) Thirty years on from the introduction of the first automatic manipulation of data. In Sarajevo 1977, under the supervision of Fuad Secerbejovic, MD, Chief of the Department for Health Statistics, Republic Institute for Public Health BiH in, the company - “Energoinvest” Ltd. Carried out the first analysis of summary and periodic health data reports about the network, capacities and performance of the healthcare service in Bosnia and Herzegovina, this analysis was previously performed manually in the above Institute. In 1982, in the Regional health station “Visnjik”, Sarajevo for the first time in the history of health within Bosnia and Herzegovina an Information System was tested, this was named the ‘Local Health Information System’ (LZIS). The creators of LZIS were Izet Masic (the pioneer of Medical informatics in B&H) and Arif Agovic (engineer of electronics in “Energoinvest” Ltd. in Sarajevo). Health data on services provided to 6000 users of healthcare who were treated by four teams of physicians was analysed in a software package Archive in an original Sinclair QL personal computer.

b) Twenty years on from the establishment of the Society for Medical Informatics BiH. In October 1987, the above named Society was established by a group of enthusiasts and pioneers of health informatics in BiH (Izet Masic, Irfan Zulic, Arif Agovic, Marijan Dover, Mladen Novak, Zoran Kontic and others). On May 26th 1988, during the 3rd STC Conference of Medical informatics in Zagreb, Croatia, presidents of the similar societies from Croatia (Gjuro Dezelic), Slovenia (Stefan Adamic) and from Serbia (Rajko Vukasinovic) at the meeting held in the School of Public Health “Andrija Stampar” in Zagreb, signed a common memorandum of understanding and established the Association of Societies for Medical Informatics of Yugoslavia, this Association was officially registered and started to work on February 16th 1989, and in 1990 (December 6-8th) organized the First Congress of Medical Informatics in Yugoslavia, which was held in Belgrade. After the dissolution of Yugoslavia, the Association of Societies ceased to exist and in 1992 a BiH Society was registered as the Society for Medical Informatics of Bosnia and Herzegovina.

c) Fifteen years on from the establishment of the Scientific and Professional Journal of the Society for Medical Informatics of Bosnia and Herzegovina „Acta Informatica Medica”. The first editorial board of this journal comprised of: Izet Masic (editor-in-chief), Zoran Ridjanovic (assistant of editor-in-chief), Amra Redzepovic (secretary), Ljubomir Kravec (technical editor), Georgina Janjic (lector) and Tatjana Prastalo (English translation). The Editorial board members were: Kenan Arnaoutovic, Meho Basic, Mahmut Djapo, Zoran Hadziahmetovic, Dragan Huml, Mehmed Kantardzic, Mustafa Kulenovic, Nedzad Mehic, Miroslav Polomik, Nikola Rukavina, Borisa Telebak and Irfan Zulic. In 1993, in impossible war conditions, the first issue of the journal was published. So far, approximately 35 issues of „Acta Informatica Medica“ have been published. From this year AIM is indexed in EBSCO data basis.

d) Fifteen years on from the establishment of the first Cathedra for Medical Informatics on Biomedical Faculties in Bosnia and Herzegovina. In October during the War year of 1992, by decision of the board of cathedra-chiefs in the Medical faculty, University of Sarajevo, and signed by dean Professor Borisa
Starovic, the first Cathedra for Medical Informatics was established. Cathedra staff at the time comprised of the following: Asst. Professor Izet Masic, Chief of Cathedra and teaching assistants - Zoran Ridjanovic, MD and engineer Safet Jakupovic, and associates Amra Redzepovic and Ljubomir Kravec). Later cathedras for medical informatics at medical faculties in Tuzla (1994), Banja Luka (1994), Foca and Mostar (1997) were established. In past years the curriculum was modified and harmonized, but the basic one was the Program of Sarajevo cathedra for medical informatics.

e) Five years on from the introduction of the method of “Distance learning” in medical curriculum. In December 2002, at the Cathedra for Medical Informatics, Medical Faculty, University of Sarajevo a symposium was organised under the name “Tele-education in Biomedicine” organized to celebrate the ten-year anniversary of the establishment of the above cathedra; participants at the symposium were health informatics experts from both Bosnia and Herzegovina and Croatia. During the symposium, for the first time in the history of the University, an intra-university network was tested, this was prepared by the University Tele-information Centre – UTIC. The leader of this activity was electro-engineer Safet Jakupovic, UTIC manager. On this occasion the tele-lectoring had a duration of 90 minutes. It was the start of the project “Learning from distance in biomedicine”. Izet Masic was the leader of this project at the Medical faculty in Sarajevo, and the project was financed by funds of the cantonal Ministry of Science and Education and the Federal Ministry of Science and Education. Experiences from this project were presented at a number of world and European scientific events.

During last thirty years several activities in the area of health informatics had special importance and gave appropriate contributions to the development of health informatics in Bosnia And Herzegovina. The Society for Medical Informatics of Bosnia and Herzegovina gathered the most eminent experts, mostly medical doctors with various specialties. Society of Medical Informatics of B&H became a member of European Federation of Medical Informatics – EFMI during the war in 1994, and in the same year, a member of the International Medical Informatics Association – IMIA. In 2005 the Society for Medical Informatics of Bosnia and Herzegovina were given the opportunity to organize the 22nd European Congress of Medical Informatics in Sarajevo and in 2009 a prestige event and merit to BiH experts in medical informatics.

It should especially be pointed out that the professionals and experts of health informatics in Bosnia and Herzegovina have given important contributions to the promotion of this medical discipline through several studies and projects, from the building and realization of information systems at certain levels of healthcare to introducing modern education models in biomedicine using contemporary information technologies.

Key words: Medical informatics, History, Bosnia and Herzegovina

REFERENCES