

EDITORIAL

Sixty-five Years of the Journal Medical Archives

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This year journal Medical Archives celebrates 65 years of continuing publishing. It was one of the oldest medical journals in former Yugoslavia (established in the year 1947).

The first Editor-in-Chief of the Medical Archives was a academician Vladimir Cavka. That was a happy circumstance, because the professor Cavka at that time was one of the most famous world experts in ophthalmology. The high level of the journal Medical Archives issues from the very beginning, thanks to professor Cavka, was critical for inclusion in Index Medicus. It was a high award, which this journal carries even today. First Editorial board was consists of professors: Vladimir Cavka, Blagoje Kovacevic, Bogdan Zimonjic and Ibro Brkic (1947-1957), and that period was the golden years of Medical Archives. Articles were coming mostly from the clinics and institutes of the Faculty of medicine in Sarajevo, as well as by medical experts from the other cities in B&H (1). Also, Medical Archives accepted and published articles from other medical centers in former Yugoslavia. All this is clearly speaking about the great reputation of the Medical Archives in B&H and larger.

In the last war (1992-1995), in the middle of the aggression on B&H, at the time the great scarcity, misery and poverty and severe threat to the lives of all of us, the journal showed his toughness, perseverance and indestructibility. As Editor-in-Chief, by myself and with help of some other professors and physicians in Sarajevo I tried to continue printing this important journal as "window to the world" from sieged Sarajevo. It was one of the Sarajevo miracles - Medi-

cal Archives spread out "the medical truth" from Sarajevo and under these conditions and circumstances continued publishing "wartime articles" in the journal which were very interesting of experiences of war medicine used without normal conditions. Publishing house AVICENA provided continuous publication of the journal during wartime. So the Medical Archives, despite everything, is still regularly published, and some copies of journal published in Sarajevo during wartime are sent to PubMed/Medline, who confirmed his regular rise despite war actions.

We think that on this occasion we should thank to all the colleagues who were engaged in the Association of doctors and the publication of this journal, as well as those who give financial support. Special thanks belong to my predecessors, previous the Editor-in-Chiefs, good, honorable and honest people who have led this journal and contributed to its reputation, and who today are no longer alive, except prof Mirko Grujic. We need to mention

their names: Vladimir Cavka, Blagoje Kovacevic, Bogdan Zimonjic, Milos Aranicki, Jakob Gaon, Midhat Prcic, Seid Hukovic, Milorad Tomasevic, Irfan Zulic and Mirko Grujic. Four of them were academicians, one of them also the president of the Academy of Sciences and Arts of B&H - Seid Hukovic.

Today in the Medical Archives are published articles by all doctors from B&H, and not only outstanding teachers and researchers. Young doctors in our country have no other place to publish their work, but facing their journal and send the articles whose publication they require in the advancement of the profession or the choice of teaching and associate vocations. On Figure 1 is presented the list of published papers in Medical Archives (July 2011) - it is impressive number of 3477 articles. So many academics and researches started their academic or scientific career with references from published articles in Medical Archives. They are now famous professors in B&H, also at universities in abroad.

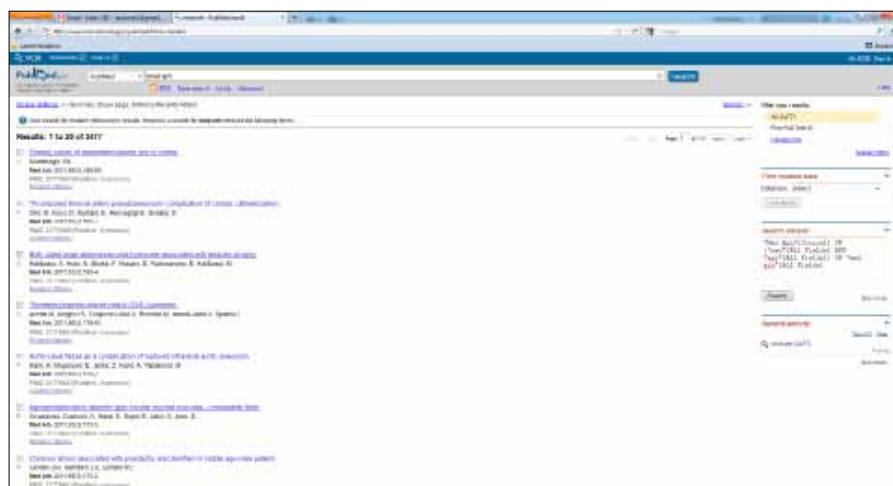


FIGURE 1. Total number of published papers in Med Arh, August 2011

But, in the former Yugoslavia first medical journal was „Domestic physician“ (Domaci ljekar): journal for cherishing and safeguarding public health, published in Pancevo 1971-73 and the first scientific journal was the Serbian archives for all physicians (established in Belgrade, 1874). In Croatia was established in 1877 the Medical News Journal (Medicinski vjesnik), as part of the Association of physicians in Slavonia and the Croatia Kingdom. In Ljubljana in 1929 was published Health News (Zdravstveni vestnik), and in Sarajevo in 1947 the Medical Archives (Medicinski arhiv), Journal of the Society of B&H physicians. The oldest medical journal in B&H was Jahrbuch des Bosnian-herzegowinischen Landesspitaales in Sarajevo - Annual of the National Hospital in Sarajevo which was established in 1897 (published in German language).

In 1987 in the former Yugoslavia 140 scientific and professional journals was published in the field of medicine and similar disciplines, of which in Bosnia and Herzegovina 39. From this number only 30 of them were involved in secondary and tertiary indexed publications (from B&H only Medical Archives and Folia Anatomica Jugoslavica). According to ISI in Philadelphia, which each year publishes the publication „Who is publishing in science - WIPIS“ in 1979 from former Yugoslav countries, was registered more than 60 authors who have their works published two or three times in the indexed journals, and in Garfield list of 1000 most cited authors until 1984 there was not an author from the former Yugoslavia. Also, out of 1000 researchers was about 0.18 journals or one journal on 5000 researchers, while the number in developed countries was 1.2 journals on 1000 researchers. In December 2009 within the databases of indexed biomedical literature were recorded

Name of journal	ISSN number	Publisher	Editor-in-Chief	Web site	Founded	Per year	Peer reviewed	Type of journal	Language	Indexed in
Acta Informatica Medica	0353-8109	Avicena Sarajevo	Izet Masic	www.amn.ba	1993	4x	Yes	Scientific	English	EBSCO, IC
Acta Medica Academica	1840-1848	ANUBiH	Berislav Topic	www.anubih.ba	2008	4x	yes	Scientific	English	EBSCO, IC, CAB Abstracts
Acta Medica Salmiana	0350-364X	UKC Tuzla	Harun Brkic	www.ukctuzla.ba	1972	4x	Yes	Scientific	Bosnian/English	EBSCO, IC
Bosnian Journal of Basic Medical Sciences	1840-4812	Association of Basic Medical Sciences of FBiH	Bakir Mehic	www.unsamf.ba	1998	4x	Yes	Scientific	English	PubMed, EBSCO, IC
Folia Medica Facultatis Medicinae Universitatis Saraviensis	0352-9630	Faculty of medicine Sarajevo	Nedžad Mulabegovic	www.mfuns.ba	1966	2x	Yes	Scientific	Bosnian/English	IC
Health Med	ISSN 1840-2291	Faculty of Health Sciences Sarajevo	Mensura Kudumovic	health_med@yahoo.com	2007	4x	Yes	Scientific	Bosnian/English	SCI, ISI Web of Science, EBSCO, IC
Materia Socio Medica	1512-7689	Avicena, Sarajevo	Izet Masic	www.amn.ba	1978	4x	Yes	Scientific	English	EBSCO, IC
Medicinski Arhiv	0350-199X	Avicena, Sarajevo	Izet Masic	www.amn.ba	1947	6x	Yes	Scientific	English	Medline, EBSCO, IC
Medicinski Glasnik	1840-0132	Medical Association of Zenica-Doboj Canton	Selma Uzunovic-Kamberovic	www.ljkzedo.ba	2004	4x	Yes	Scientific	Bosnian/English	Medline, EMBASE, SCI
Medicinski zurnal	1512-5866	Clinical center of University of Sarajevo	Mirza Dilic	institutnir@bih.net.ba	1995	4x	Yes	Professional	Bosnian/English	EBSCO
Medicinar	1840-3697	Medical Association of SBK, Travnik	Nedžad Hadzic		2004	2x	NO	Professional	Bosnian	NO
MediCom	0480-2551	MediCom, Banja Luka	Momir Pusac	www.medicom.com	2004	4x	NO	Professional	Serbian	NO
Pedijatrija Danas	1840-2968	Pediatric clinic of University of Tuzla	Husef Tahirovic	Husef.tahirovic@untz.ba	2005	4x	Yes	Professional	Bosnian/English	EBSCO, CAB Abstracts
Pharmacia	0480-2551	Association of Pharmacists	Miroslav Sober	Miro.sober@gmail.com	1990	1x	NO	Professional	Bosnian/English	NO

TABLE 1. Indexed journals in Bosnia and Herzegovina in 2011

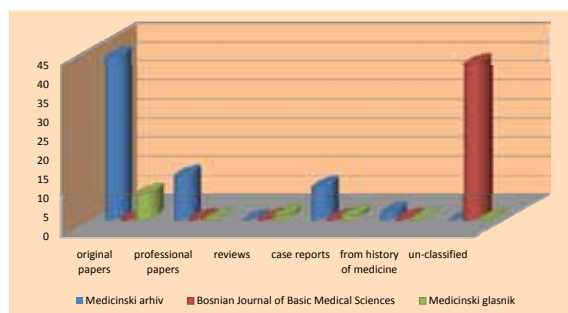


FIGURE 1. Published papers in indexed journals in Medline in 2010

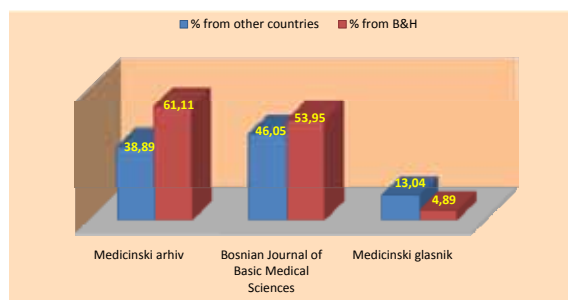


FIGURE 2. The ratio of published papers in B&H and other journals

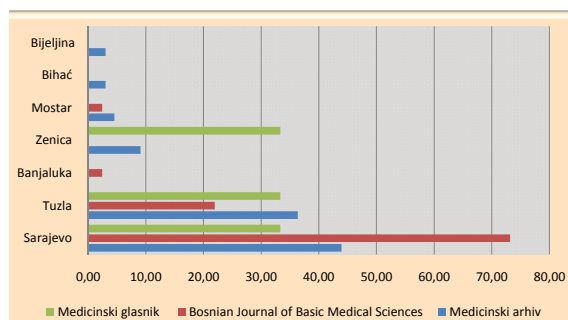


FIGURE 3. The ratio of authors from different B&H health centers

19.3 million cited papers (2). From the cities of the former Yugoslavia was cited the articles of scientists and researchers in the following figures: Zagreb - 5002, Ljubljana - 4097, Beograd - 2598, Nis - 959, Rijeka - 687, Split - 609, Sarajevo - 563, Skopje - 332, Maribor - 301, Osijek - 297, Tuzla - 240, Kragujevac - 231, Subotica - 93, Pristina - 75, Mostar - 70, Banja Luka - 20, Podgorica - 9, Bihać - 5. So it means, from the following cities: Sarajevo, Tuzla, Banja Luka, Mostar and Bihać - five university centers in B&H, in PubMed/Medline database in late 2009 there was 898 cited articles from the primary scientific journals, which is 7.3 times less than in Croatia, 4.9 times less than in Slovenia and 4.3 times less than in Serbia. Currently in B&H is published 14 scientific and professional journals and to 3 are indexed in PubMed, 3 in ISI Web Knowledge, 1 in EMBASE, 9 in EBSCO database, 8 in Index Copernicus - IC database, 2 in CAB abstracts, etc. (Table 1).

During 2006 in the oldest, Sarajevo School of Medicine, worked 32 full time professors (they had 543 articles cited in PubMed, of which 508 were published in local languages and 35 in English and international journals, which is in average 16 papers in domestic or 1.1 articles in international journals (2). Associate professors of the Medical Faculty

Faculty of medicine in:	Number of authors	Total No. in MEDLINE	Total No. in Med Arh	% of papers published in the Med Arh	Published papers in Med Arh as author	Published papers in Med Arh as co-author
Banja Luka	45	425	19	4,47	6	13
Foca	11	236	4	1,69	2	2
Mostar	12	289	72	24,91	47	25
Sarajevo	24	683	491	71,89	236	255
Tuzla	48	736	332	45,11	85	247
Europe/USA	11	961	25	2,60	14	11
Total	151	3330	943	28,32	390	553

TABLE 2. The ratio of published papers in indexed journals in Medline in Med Arh and other journals

in Sarajevo published during the same year 495 scientific and professional articles, cited in PubMed, of which 31 in international journals. Assistant professors (33 of them) published 374 articles cited in PubMed, of which 15 published in international journals. Analyzed are three B&H journals indexed in MEDLINE in 2010 (2): Medical Archives (Medicinski Arhiv), Bosnian Journal of Basic Medical Sciences and Medical Gazette (Medicinski Glasnik). As shown in Figure 1 the largest number of original papers was published in the Medical Archives (Chi square - 130.646, DF 10, significance level $p < 0.0001$).

there is a statistically significant difference in the number of papers published by local authors in relation to international journals in favor of the Medical Archives (Chi-square - 11.644, DF-2, Significance level - $p = 0.0030$). True, the Journal BJBMS does not categorize the articles and we could not make comparisons. Journal Medical Archives and BJBMS by percentage published the largest number of articles by authors from Sarajevo and Tuzla.

Social networks, especially scientific social network of experts provide significant opportunities to researchers, scholars and professors at medical faculties. Although scientists are by nature not inclined to social interaction, rather hide in their labs trying to find some next great discovery, there are numerous scientific social network. Some of them are specific to the biomedical sciences, the most famous among them is BioMedExperts. BioMedExperts is an

online community of biomedical scientists, which shows the essential features related to their work, cooperates on projects and areas of interest. It is these characteristics are of great help

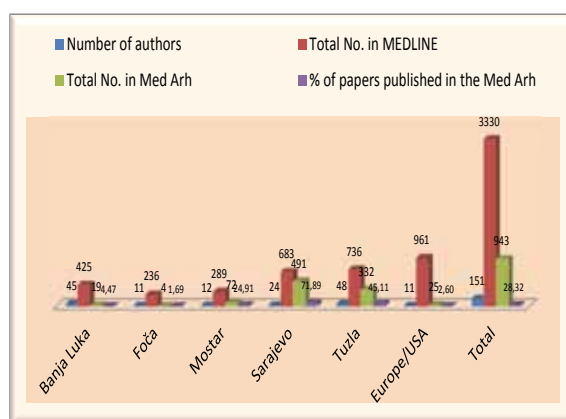


FIGURE 4. The ratio between authors and coauthors in Med Arh

to analyze the use of social networks by biomedical scientists with 5 faculties of medicine in B&H, and their comparison with a group of eminent Bosnian-Herzegovinian medical scientists who are now working around the world.

In July 2011 we analyzed randomly 151 (Table 2) full and part time professors from 5 medical university centers in B&H, which published their papers in journals indexed in Medline including also papers published in Medical Archives. The same study group was analyzed their participation within other social network base. We have sought the Facebook profile of teachers and found that only 14.6% of domestic scientists use Facebook, while this percentage is significantly higher for those who work outside of B&H (54.5%). Profiles of scientific workers in B&H are generally not public, are available to certain members of the network. On BioMedExperts 72 scientists (47,7%) have pro-

file, and there is a significant difference among the faculties. Most of them who have the profile are from the Medical Faculty in Sarajevo, and the least number from the Medical Faculty in Banja Luka. The specificity of this scientific social network is that it provides a number of collaborators on the research presented, and the number of research areas that deal with the scientists. Average values of these parameters showed no significant differences among the faculties. On average the least associates on research projects have had professors from Banja Luka, and most professors from Sarajevo. It should be noted that in all faculties there are professors who did not have associates for the published research projects, but there are rare cases that they even had 79 associates. Unlike professors who work in B&H, a group of scientists who work outside the B&H are significantly more likely to use scientific social network. They have the in 90.9% of cases profile on the BioMedExperts network, have on average considerably more associates in research projects (55.18), and on average significantly more papers published on Medline (83.36). Number of published papers of scientists working in B&H, indexed to the greatest international database of biomedical literature Medline shows no significant differences among the faculties. The least average number of papers is published by the Banja Luka Medical faculty, and most from Sarajevo Medical Faculty. We should emphasize here that all faculties have laid down rules on the number of papers published in indexed databases for the promotion of professors. But looking at the relevant bibliography 32% of professors does not meet these criteria. The vast majorities of them is from the Medical Faculty in Banja Luka, but present also at all other faculties. As we see on Table 2 most of professors in Sarajevo and Tuzla published their papers in Medical Archives if we compare it with other indexed journals in Medline.

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