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Kształcenie na kierunku zdrowie publiczne w wyższych uczelniach medycznych w Polsce w aspekcie Procesu Bolońskiego

Streszczenie

Wprowadzenie. Niniejszy artykuł jest kontynuacją pracy poglądowej „Proces Boloński a kształcenie w zakresie zdrowia publicznego w Polsce”. Proces Boloński ciągle ewoluje. Od 2007 roku miały miejsce dwa kolejne spotkania: w Leuven/Louvain-la-Neuve w Belgii w dniach 28-29 kwietnia 2009 roku oraz w Budapeszcie/Wiedniu 11-12 marca 2010 roku.

Cel. Celem pracy jest analiza kształcenia studentów uniwersytetów medycznych (akademii medycznych) na kierunku: zdrowie publiczne w latach 2000-2009 w Polsce w aspekcie założeń Procesu Bolońskiego.

Materiał i metodyka. Do badania zakwalifikowano 11 wyższych uczelni publicznych, na których prowadzony jest kierunek zdrowie publiczne. Badanie zostało przeprowadzone w okresie od lipca 2009 do lipca 2010 roku przy pomocy autorskiego kwestionariusza ankiety. Pomimo wielokrotnych monitów uzyskano odpowiedzi z 8 uczelni medycznych w Polsce. Wyniki poddano analizie opisowej i przedstawiono w postaci tabel i rycin. Wartości analizowanych parametrów, mierzonych w skali nominalnej, scharakteryzowano przy pomocy wskaźników struktury.

Wyniki. W świetle przeprowadzonego badania okazało się, że w Polsce do roku 2007 obserwowany był dynamiczny rozwój kształcenia z zakresu zdrowia publicznego, natomiast w latach późniejszych nastąpiła nieznaczna tendencja spadkowa liczby studentów tego kierunku. Należy podkreślić, że większość włączonych do badania uczelni medycznych dąży do podniesienia jakości kształcenia zgodnie z zaleceniami Procesu Bolońskiego. Niepokojący jest jednak fakt, że nie wszystkie uczelnie dbają o mobilność swoich studentów i pracowników. Większość ośrodków akademickich upatruje zmiany jakie wprowadza Proces Boloński do nauczania w szkolnictwie wyższym jako pozytywną konieczność, zgłaszając jednocześnie fakt zbyt małego rozpowszechniania informacji na ten temat wśród ogółu społeczeństwa polskiego.

Wnioski. Nie wszystkie uczelnie realizują w ten sam sposób wytyczne standardów nauczania dla kierunku Zdrowie Publiczne. Świadczyć o tym może zróżnicowana oferta specjalności, jak również możliwość odbywania praktyk studenckich, czy stażu zawodowego.

Większość uczelni medycznych, w których było prowadzone badanie, podjęło wysiłek sprostania wymogom nauczania poprzez utworzenie jednostki organizacyjnej odpowiedzialnej za wprowadzenie i realizację założeń Procesu Bolońskiego.

Słowa kluczowe: Proces Boloński, zdrowie publiczne, kształcenie przeddyplomowe, Polska.

Education in public health major at Polish medical universities in the aspect of the Bologna Process

Abstract

Introduction. This article is a continuation of a review paper called “Bologna Process and education towards public health in Poland”. The Bologna Process is still evolving. Since 2007 two consecutive meetings have taken place: in Leuven/Louvain-la-Neuve, Belgium on 28-29 April 2009 and in Budapest/Vienna on 11-12 March 2010.

Aim. The aim of the work is to analyze the education of students of medical universities (medical academies) towards public health in 2000-2009 in Poland in the light of the Bologna Process guidelines.

Material and methods. Eleven universities were included in the study, all of which had public health majors introduced. The research was carried out from July 2009 to July 2010 using a specially designed survey. Despite numerous reminders, only 8 universities sent back their responses. The results were analyzed descriptively and presented in the form of tables and figures. The values of the analyzed parameters, measured in the nominal scale, were characterized using structure indices.

Results. In the light of the conducted study, it turned out that in Poland till 2007 there had been a dynamic development in education towards public health, whereas in the following years there appeared a slight decreasing tendency in the number of students who chose this subject. It ought to be stressed that majority of the universities included in the study pursue to improve the quality of education according to the recommendations of the Bologna Process. However, alarming is the fact that not all universities take good care of the mobility of their students and employees. Majority of the academic centers perceive the changes introduced by the Bologna Process in higher education system as a positive necessity, at the same time postulating that there is too little information about it in the Polish society in general.

Conclusions. Not all institutions implement the guidelines of education towards public health in the same way. Evidence of that can be a varied offer of specializations and a possibility of pursuing students' training. Majority of universities in which the survey was carried out made the effort to meet the demands of education by creating an organizational body responsible for introduction and implementation of the guidelines of the Bologna Process.

Keywords: Bologna Process, public health, undergraduate education, Poland.

INTRODUCTION

This article is a continuation of a review paper entitled “Bologna Process and education towards Public Health in Poland” [1].

Educating towards public health is based on the definition that health problems important on social scale can be solved through collective work and involvement of many institutions. According to many authors, medicine of the future is made up by social medicine and public health [2-5].

The Bologna Process keeps evolving. Since 2007 two consecutive meetings took place: in Leuven/Louvain-la-Neuve, Belgium on 28-29 April 2009 and in Budapest/Vienna on 11-12 March 2010.

In the final statement of the first of the listed conferences, priorities for higher education that should be realized in the forthcoming decade were pointed out [6]. These are social aspect of higher education, long-life learning, introducing national frameworks of qualifications, employment and co-operation of universities and labor market, making higher education an international subject, to name a few. Further mobility increase was also recommended, so that by the year 2020 twenty per cent of the post graduates from the European Higher Education Area will have participated in international student mobility. Attention was drawn to the fact that higher education institutions ought to be controlled. The first *Bologna Policy Forum* took place after the formal ending of the Leuven/Louvain-la-Neuve conference in Belgium. The participants of that meeting were ministers of higher education from countries that participated in Bologna Process and ministers from 15 countries from beyond Europe who showed some interest in the Bologna Process assumptions [7].

The other of the mentioned meetings – Budapest/Vienna 2010 was of a special anniversary character and in a form of a conference that summarized the achievements of the Bologna Process so far. It resulted in opening a European Higher Education Area and joining a new country to the process – Kazakhstan. At present, 47 countries participate in the process [7,8]. Furthermore, a decision was taken to continue introducing the conference assumptions in the following years. Similarly as it was done after the conference in 2009, there was another *Bologna Policy Forum*, during which representatives of 25 countries participated. It was decided that there would be an international website of the European Higher Education Area and that the Bologna Process would be conducted in the so-called co-operation with a country not included in the European Union. During its presidency in the EU, Poland co-operated with Armenia as part of this process. Another conference of the ministers was scheduled for 26-27 April 2012 in Bucharest [8]. Further conferences of the ministers will most probably take place in 2015, 2018 and 2020.

AIM

The aim of the work is to present the results of the research concerning education of students at medical universities (medical academies) in public health majors in the years 2000 – 2009 in Poland in the light of the Bologna Process.

MATERIAL AND METHODS

Eight out of 11 state universities in which the public health majors had been introduced took part in the study, which was conducted from July 2009 to July 2010 using an originally prepared survey containing 14 questions. Some of the questions were open, some closed. The surveys were sent via traditional and electronic mail to the Deans of the Health Science Faculties together with a request to complete the form according to their competences and to send them back to the Social Medicine Department at the Medical University of Lodz. The following universities took part in the study:

- Jagiellonian University in Krakow,
- Nicolaus Copernicus University, Toruń,
- Ludwik Rydygier Collegium Medicum, Bydgoszcz,
- Medical University of Gdańsk,
- Pomeranian University in Szczecin,
- Medical University of Białystok,
- Medical University of Lublin,
- Medical University of Lodz,
- Poznan University of Medical Sciences.

Despite many reminders, three of the universities did not send the filled in questionnaires. The collected material was prepared using descriptive methods and later presented in the form of tables and figures. Values of the analyzed parameters were measured in nominal scale and characterized using structural indices.

RESULTS

In the light of the completed surveys, it turned out that the public health major was first introduced by Poznan University of Medical Sciences. In the following years other universities accepted students at this major, the universities being: Collegium Medicum of the Jagiellonian University in Krakow, Medical University of Białystok, Ludwik Rydygier Collegium Medicum in Bydgoszcz, Medical University of Lodz, Medical University of Gdańsk, Medical University of Lublin, and Pomeranian University in Szczecin (Figure 1, Table 1).

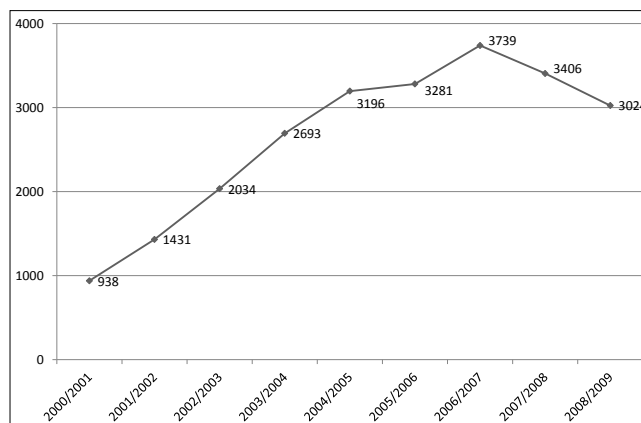


FIGURE 1. Students majoring in public health of the studied medical universities in Poland, broken into academic years.

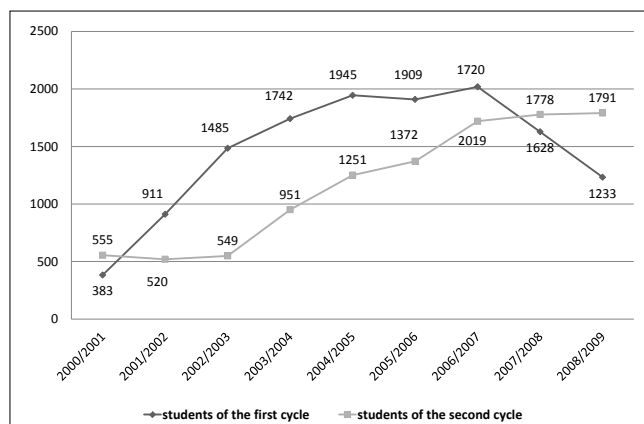
Source: own study

TABLE 1. Students of the first and second cycle majoring in public health of the studied medical universities in Poland, broken into academic years.

Name of university	1 st cycle studies	2 nd cycle studies	Total
Collegium Medicum of Jagiellonian University	797	967	1758
Collegium Medicum of Bydgoszcz	3693	1396	5330
Medical University of Gdańsk	324	183	528
Pomeranian University in Szczecin	90	0	111
Medical University of Białystok	1367	381	1751
Medical University of Lublin	357	280	637
Medical University of Łódź	2730	4901	7635
Medical University of Poznań	3897	2379	6246
Total	13255	10487	23996

Source: own study

Between the years 2000-2007 the number of students majoring in public health at Polish medical universities was systematically increasing. In the academic year 2006/2007 public health was studied by 3,700 people. However, since 2007 a lower number of students has been noticed and that may be the result of population drop in Poland (Figure 2).

**FIGURE 2. Students of the first and second cycle majoring in public health of the studied medical universities in Poland, broken into academic years.**

Source: own study

In the academic years 2000/2001, 2007/2008 and 2008/2009 the number of students of the second cycle majoring in public health was higher in comparison to the first cycle students. In the academic year 2008/2009 people completing their Master degree constituted 60% of all the public health students. A contrary situation took place in other years that were included in the research. For instance, in the academic year 2002/2003 there were almost three times as many students of Bachelor degree course than there were of Master

degree course. This was related to the ending of the education process by the first cycle students.

It is worth noting that at all medical universities in Poland at which public health was introduced as a major, ECTS points were introduced in the first place and Medical University of Lublin attempted that challenge in the academic year of 2004/2005 (Table 2).

TABLE 2. Graduates of the studied medical universities in Poland majoring in public health, broken into the diploma supplement and the academic years.

Academic years	Students who received a diploma supplement		
	Only in Polish	In Polish and in English	Total
2008/2009	677	469	1,146
2007/2008	689	661	1,350
2006/2007	932	696	1,628
2005/2006	588	399	987
2004/2005	587	257	844
Total	3,473	2,482	5,955

Source: own study

In Table 2, there is a number of students majoring in public health who received a diploma supplement in Polish or in Polish and in English. A greater number of students received their diploma supplement only in Polish. Pomeranian University in Szczecin was not included in the above data as such document was not issued there.

In the Bologna Process international student mobility plays an important role. International exchange program for public health students started in the academic year 2005/2006. Not all universities provide such an opportunity for their students. At Collegium Medicum of the Jagiellonian University and at the Medical University of Łódź such exchange was carried out with Germany. People studying at Collegium Medicum in Bydgoszcz had a chance to go to Finland, Italy or Turkey. Other medical universities did not run international student mobility programs.

According to the obtained data, students participating in the mobility programs came to Poland for the first time in 2007/2008. The number of students who arrived in Poland as part of mobility program is significantly higher than the number of students leaving Poland. However, there were four times fewer people studying public health who came to Poland than those who left the country. Collegium Medicum in Bydgoszcz accepted students from Turkey, whereas Collegium Medicum of Jagiellonian University undertook the challenge of exchanging students with Germany (Figure 3, Table 3).

The number of students majoring in public health who participated in the international student mobility program is very low in comparison with the number of students majoring in other subjects. This may be the result of the programs on offer, but also of little interest in such exchange programs on part of the students.

It turned out that paramedics specialization is very popular with the students of public health and in 2005/2006 it was chosen by about 71% of students. At present, there are fewer and fewer people who decide to undertake this specialization (about 35% of students in 2008/2009). The highest

TABLE 3. Students majoring in public health of the studied universities who participated in the international student mobility programs, broken into the countries and academic years.

Academic years	Countries and number of students leaving as part of the international student mobility programs					Countries and number of students arriving as part of the international student mobility programs		
	Finland	Germany	Turkey	Italy	Total	Germany	Turkey	Total
2008/2009	0	2	1	5	8	1	3	4
2007/2008	0	3	0	2	5	0	1	1
2006/2007	0	0	0	2	2	0	0	0
2005/2006	5	1	0	0	6	0	0	0
Total	5	6	1	9	21	1	4	5

Source: own study

interest was connected with electroradiology, the popularity of which increases steadily every year. This is a specialization chosen by public health students more and more willingly. In 2008/2009 there was about 15% of overall number of students at public health who chose that field. As opposed to 2004/2005 when electroradiology was introduced into curriculum, only few students chose this subject as their leading one; this is a major achievement.

Management in public health sector is a popular specialization and quite willingly chosen by students (about 11% of public health students chose it in 2008/2009). Furthermore, students have a chance to study such subjects as: epidemiology, social insurance, health inspection, dietetics and other. It is worth pointing out that only some universities have a wild selection of specialities from which their students can choose (Table 4).

Relatively many people do their training at Sanitary and Epidemiological Stations, about 23% in 2005/2006. This ratio has a decreasing tendency unfortunately and in 2007/2008 it was about 15%, whereas in 2008/2009 only about 11%. Students were also willing to do their practical training at the NHS, about 12% in 2007/2008. A large group was composed of other institutions where students of public health had a chance to gain experience. Some of the most popular are: public and non-public health care institutions, town halls and offices of a starost, educational institutions

TABLE 4. Students majoring in public health, broken into selected specialization and the academic years.

Academic years	Electroradiology	Social communication	Emergency medicine	Health education	Health promotion	Management in healthcare	Other	Total
2008/2009	172	0	418	0	168	126	303	1,187
2007/2008	154	0	634	0	44	146	222	1,200
2006/2007	125	0	962	0	96	184	303	1,670
2005/2006	27	12	1,219	9	60	189	196	1,712
2004/2005	35	17	895	13	57	187	152	1,356
2003/2004	0	11	830	0	45	131	132	1,149
2002/2003	0	0	603	0	47	215	116	981
2001/2002	0	0	0	0	0	108	44	152
2000/2001	0	0	0	0	0	57	17	74
Razem	513	40	5,561	22	517	1,343	1,485	9,481

Source: own study

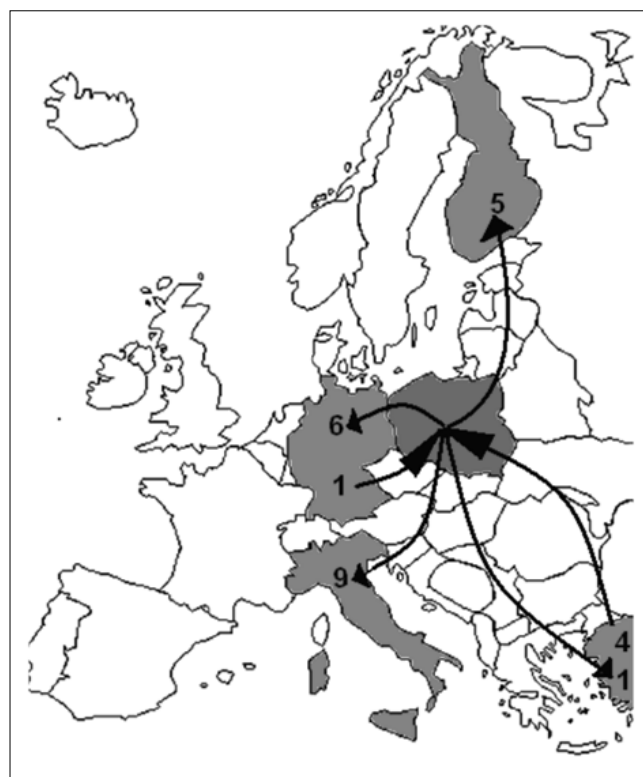


FIGURE 3. Students majoring in public health of the studied universities who participated in the international student mobility programs in the years 2005-2009.

Source: own study

TABLE 5. Students according to the place of practical training and the academic years.

Academic years	Pharmaceutical company	NHS	Health promotion centre	Sanitary and Epidemiology Unit	Town Hall public health department	Social Insurance Board	Other	Total
2008/2009	28	75	4	136	37	45	954	1,279
2007/2008	25	151	7	193	30	45	824	1,275
2006/2007	24	35	2	164	28	124	817	1,194
2005/2006	14	27	0	189	24	40	495	789
2004/2005	0	21	0	107	13	12	257	410
2003/2004	0	19	0	65	2	15	262	363
2002/2003	0	10	0	62	3	30	131	236
2001/2002	0	6	0	20	6	40	0	72
2000/2001	0	2	0	15	8	20	0	45
Razem	91	346	13	951	151	371	3,740	5,663

Source: own study

and non-government organizations. The above data does not concern the Medical University of Gdansk where, throughout the course of studies, students have a chance to become familiar with work at other institutions (Table 5).

An extremely worrying is the fact that only the Medical University of Lodz offers to its students a chance to carry out a work training program. As can be seen from Table 6, it is a small ratio of students among their total number at this department (about 1.5% in 2008/2009). This results from introducing a training program only at studies of the second degree of certain specializations.

TABLE 6. Students of Medical University of Lodz, broken into their training and academic years.

Academic years	Students of Medical University of Lodz who undertook their training
2008/2009	36
2007/2008	36
2006/2007	28
2005/2006	28
2004/2005	28
2003/2004	32
2002/2003	30
2001/2002	38
2000/2001	39
Total	295

Source: own study

The earliest to have noticed the necessity of opening a body whose aim is to supervise and introduce the orders of the Bologna Process, was Collegium Medicum of the Jagiellonian University in 2001/2002.

Among all of the universities where this major was introduced, only the Pomeranian Medical University in Szczecin and Collegium Medicum in Bydgoszcz did not have an organisation body responsible for introducing and implementing the guidelines of the Bologna Process. However, restructuring processes at universities remain only a question of time and every institution will have to submit to the declarations and requirements included in the Bologna Process.

Universities had a chance to express their views on advantages and disadvantages of the Bologna Process and pointed to the aspects that ought to be altered or improved in future. Responses were obtained only from four universities: Medical University of Lublin (1), Poznan Medical University (2), Medical University of Bialystok (3) and Medical University of Lodz (4).

At the beginning it should be stressed that majority of universities accepted the guidelines of the Bologna Process. Among the most frequently listed advantages there is a possibility to internationally compare and recognize qualifications and diplomas of the students. Attention was paid to the diploma supplement that would make it possible for foreign universities and future employers to evaluate the graduate's abilities. As for the education process itself, the universities expressed their satisfaction with the changes that led to modernization of curriculum and here '*adjustment of the education process to the needs of the labour market*' (3)

was listed, together with '*student-centered education*' (3) and '*creating education programmes based on results of education*' (4). Another advantage of the Process that was stressed equally often as those listed above, was '*improving students' and university workers' mobility*' (3) which causes '*improvement in the quality of education and mutual respect and understanding (multi-cultural awareness)*' (4). Among other good sides of the Process listed there, was the three-cycle system of studies and '*creating clear and simple rules of evaluation*' (2), including the ECTS system. Furthermore, the universities expressed their pleasure resulting from the fact that they developed and strengthened their co-operation with other institutions abroad which is directly connected with '*building-up the dimension of European higher education system*' (3). To that list of advantages, the Medical University of Lublin also added '*introducing a number of hours devoted to basic and specialist fields of studies*' (1) and '*a possibility to introduce certain practices or specializations at BA level*' (1). On the other hand, Medical University of Bialystok emphasized '*the possibility of lifelong learning*' (3) and the influence of the State Accreditation Committee on the quality of education at the university level.

Among the shortcomings of the Bologna Process, some of the most frequently listed were '*commercialization of higher education*' (2, 3) and '*decrease in the number of Masters*' (2, 3) that is the result of the ending of the education process, by a significant number of students, on the first cycle of their studies, that is on Bachelor level. Such a situation may be the reason for which departments which '*do not reach an appropriate number of Master students*' (2) are eradicated.

The universities emphasized that '*three years of Bachelor studies are not enough to gain the minimum amount of knowledge necessary to work in the chosen work field*' (3) and that it is '*impossible to combine some of the guidelines of the Bologna Process with decent and reliable education and care over the student*' (2), and that curriculum in its basic and specialist form is deprived of the subjects that should be included there for the student to be able to gain the minimum knowledge in a given subject. Furthermore, it was pointed out that students nowadays may obtain a BA title '*at small divisions of vocational university institutions that are not always at high level of standard*' (3) and follow that with the Master title at some of the biggest academic centres. Medical University of Poznan drew attention to yet another negative side of the introduced changes, that is '*the drop and diminishing importance of certain departments and specializations*' (2) which stems from the fact that '*studies connected with business, administration and social sciences increase in importance at the expense of medical, agricultural and humanistic fields, and closing down some of the niche specializations*' (2).

On the other hand, the University of Bialystok claims that some institutions introduce ECTS system in an inappropriate way. Out of the four institutions that decided to point to the problems connected with introducing the guidelines of the Bologna Process into universities in Poland, only one of them – at the Medical University of Lodz, no drawback was listed and it was stressed that '*the problem is the "old" academic mentality*' (4).

In the described question, apart from expressing opinion about advantages and disadvantages of the Bologna Process,

the universities also had a chance to present those aspects of the Process that ought to be changed or updated. Two universities: Białystok and Łódź formed a thesis that there is a need in our country to increase the number of campaigns that would inform about the introduced changes, so that the academic society and students '*understand the actual guidelines of the Bologna Process*' (4). What is more, the Medical University of Białystok pointed out that there is a need to '*increase the control of quality of education at smaller vocational high schools*' (3). Poznań Medical University sounds a warning about '*protection of variety through support for smaller universities and niche specializations*' (2). Whereas Medical University of Lublin sees the need to introduce specialization content into the first and second degree of education to enable '*the future graduates to prepare for their perspective work in a certain field of public health*' (1).

DISCUSSION

Education towards public health undergoes constant modifications. Aiming at improvement of health worldwide, WHO pays attention to the role played by the public health specialists in this field. Due to the above, the WHO experts recommend improving the quality of learning in the Public Health major [9]. This idea has been promoted since 1966 by ASPHER – Association of Schools of public health in the European Region [10]. The members of this association are people and institutions interested in enhancing public health through improving the process of education among the professionals in this field. One of the ASPHER's demands in 1992 was making studying process an international one, which is also the main guideline of the Bologna Process. It was on the initiative of ASPHER and EUPHA European Public Health Association that in 2002 European Accreditation Agency of Public Health – EAAPH [11] was established. Medical universities from Poland also drew attention to the need of control of the process of education, emphasizing the influence of State Accreditation Committee on the quality of learning on the level of higher education.

In the light of the carried out observation in the accredited Schools of public health in the USA between the years of 1991 and 2005, it turned out that the public health major was willingly chosen by the students whose number increased every year [12]. The results show that public health major at Polish universities has been more and more popular since 2007, though the number of students in this major has a decreasing tendency. Other studies give evidence that only every other student of the first degree declares their willingness to continue this subject at the second degree, which became possible due to the changes introduced by the Bologna Process [13].

The analysis of the results showed that the public health major is highly feminized. Other studies confirm the popularity of this subject among women rather than men, which represents the general tendency in occupations connected with health care and health protection [12,13].

According to the guidelines of the Bologna Process, educating students towards public health ought to be directed at achieving active attitudes towards knowledge and skills. Furthermore, the graduates ought to be prepared for strategic

and creative thinking [14]. Graduates face such requirements because of the constantly changing environmental conditions and the changes that take place in broadly understood health care.

Medical universities in Poland should still aim at achieving and introducing world standards of education in the field of public health. We should make every effort to make public health an interesting versatile and promising field of studies again both for the students and people who will have to make a decision concerning their future career.

CONCLUSIONS

1. Education towards public health in Poland developed dynamically up to 2007, but since the academic year of 2007/2008 there has been a decreasing interest among the young people in this major.
2. Not all institutions implement the guidelines of education in public health major in the same way. Evidence of that can be a varied offer of specializations and a possibility of doing a students' practical training.
3. Majority of universities in which the studies have been carried out made the effort and tried to face up to the requirements of learning process through creating an organization body that would be responsible for introducing and implementing the guidelines of the Bologna Process.
4. Thanks to one of many guidelines of the Bologna Process, it was possible for a student mobility program to take place.
5. As a result of many actions that were aimed at wide spreading the knowledge about the guidelines of the Bologna Process, the lecturers and students themselves are more and more positive about the changes taking place in higher education, bearing in mind future benefits.
6. Majority of medical universities in Poland see the changes introduced by the Bologna Process as a positive and inevitable necessity.
7. Care needs to be taken that information about the guidelines of the Bologna Process be popularized among the people of Poland.
8. At the same time it needs to be noticed that Poland is on a good track to achieving global standards as far as improving the quality of education at universities is concerned.

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