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Compulsory public health courses for physicians – assessment of courses by attendees in the School of Public Health in Centre of Postgraduate Medical Education

Obowiązkowe kursy specjalizacyjne w dziedzinie zdrowia publicznego dla lekarzy w ocenie słuchaczy Szkoły Zdrowia Publicznego CMKP

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INTRODUCTION

In Poland, doctors and dentists going to obtain any medical specialty, medical and dental (except for the

Summary

Introduction. Training of doctors in public health is essential for the healthcare system. Therefore, the individual components of the training, including courses, should be continuously monitored, for which useful are the opinions of doctors – participants of this training.

Aim. The aim of this study was to collect the opinions of attendees of the School of Public Health in the Centre of Postgraduate Medical Education (CMKP) in Warsaw on compulsory public health courses for all physicians as well as courses provided within specialization in public health.

Material and methods. Material for analysis constituted 3809 questionnaires filled up by physicians participating in 214 courses held in years 2010-2015.

Results. Courses in the field of public health and courses provided within specialization in public health were assessed as useful in the practice of doctors. Lecturers gained highest ratings for the commitment, preparation and punctuality.

Conclusions. The results indicate the accuracy of the adopted organizational form and a good selection of lecturers. The assessment of courses by participants is an important tool for improving the quality of the educational process.

Streszczenie

Wstęp. Szkolenie lekarzy w zakresie zdrowia publicznego ma zasadnicze znaczenie dla systemu zdrowia. W związku z tym poszczególne elementy tego szkolenia, w tym kursy, powinny być na bieżąco monitorowane, w czym przydatne są opinie lekarzy – uczestników tego szkolenia.

Cel pracy. Celem badania było poznanie opinii słuchaczy Szkoły Zdrowia Publicznego CMKP na temat obowiązkowych kursów specjalizacyjnych w dziedzinie zdrowia publicznego dla wszystkich lekarzy oraz obowiązkowych kursów w ramach specjalizacji zdrowie publiczne.

Materiał i metody. Materiał do analizy stanowiło 3809 ankiet wypełnionych przez lekarzy uczestniczących w 214 kursach odbywających się w latach 2010-2015.

Wyniki. Kursy w zakresie zdrowia publicznego oraz kursy w ramach specjalizacji w dziedzinie zdrowia publicznego były oceniane jako przydatne w praktyce zawodowej lekarza. Wykładowcy najwyższe oceny uzyskali za zaangażowanie, przygotowanie i punktualność.

Wnioski. Wyniki wskazują na trafność przyjętej formy organizacyjnej i dobry dobór wykładów. Badanie oceny kursów przez uczestników jest ważnym narzędziem poprawy jakości procesu dydaktycznego.

specialization of public health), are obliged to hold the so-called unified specialty course in the field of pub-

lic health, with a final colloquium. These courses are in the process of accreditation and are run by various centers, including the School of Public Health in Centre of Postgraduate Medical Education (SZP CMKP).

Previously (until 31.03.2014) the course included: a) health promotion, b) medical law, c) bioethics, d) organization and economics of health system, and e) medical certification (1) – a total of 21 subjects (2). The course lasted 60 hours of teaching, along with a seminar and a colloquium, which meant the possibility of allocating approx. 120 minutes to discussing one group of topics.

Currently (since 1.10.2014), doctors acquiring specialization are required to hold separate uniform courses in public health and medical law with final colloquiums (3). The current course in public health includes: a) medical certification, b) promotion and prevention, c) epidemiology, d) bioethics and e) the organization and economics of health system. The course consists of two parts, i.e. public health (40 hours) and medical certification (24 hours). The part on public health includes 28 issues (4), which means that each of them can take up to approx. 85 minutes.

What is more, the courses at the School of Public Health in the Centre of Postgraduate Medical Education are provided in the specialty program in the field of public health. Under the old system (up to 31.03.2014) doctors could train in 40 basic specialties (including public health) and 28 detailed ones, and dentists in 9 basic ones (including public health). In the new system, public health is one of the 77 medical specialties and 9 medical-dental ones. Gaining expertise in the field of public health lasts four years and requires, among others, graduation from courses – previously 10, and now 22.

Acquiring each specialization by doctors and dentists is a kind of postgraduate education. All courses included in the programs of each specialty are assessed by the participants using a standard survey used in the evaluation of courses at the Centre of Postgraduate Medical Education.

AIM

The aim of the study was to know the opinion of the attendees of the School of Public Health, the Centre of Postgraduate Medical Education on: (a) a uniform course in public health addressed to all doctors and

dentists, regardless of the acquired expertise (herein after referred to as KJ) and (b) the courses included in the specialty program in public health addressed to doctors and dentists enrolled for this specialty (herein after referred to as KS) and to compare the perception of these courses.

MATERIAL AND METHODS

The study included physicians and dentists who participated in courses conducted at the School of Public Health, the Centre of Postgraduate Medical Education in Warsaw. The material for the study included course evaluation surveys: 1325 surveys completed by doctors specializing in various medical fields, taking part in 62 KJ courses conducted in 2011-2015, and 2484 surveys completed by doctors specializing in public health participating in 152 KS courses carried out in 2010-2015. In the case of courses consisting of several parts, evaluation surveys were collected after each of them. The survey was anonymous and participation was voluntary.

We studied the perception of courses, i.e. evaluation of courses and evaluation of teachers. Rating courses (0-6 points on a scale, where 0 meant the evaluation of the minimum and maximum 6) took the domain organization of lectures in the course, the usefulness of lectures in raising the qualifications of a specialist, and medical practice (professional). Rating lecturers (scale 0-6 points) took over: the degree of preparation, presentation, use teaching aids, commitment, merit presentation and punctuality. The listeners evaluated each teacher individually, and the grade averaged. The analysis was quantitative in nature. The following hypothesis was set up: KSS courses are better seen from the courses KJ.

RESULTS

Uniform specialty course in the field of public health (KJ)

The highest score obtained the organization of courses (average of the years 2011-2015 amounted to 4.77), slightly lower usefulness of the course to professional practice (4.19). Draws attention to the lower average value of judgment in relation to the usefulness of the course in raising the qualifications of a specialist (3.90). There were no major changes in the perception of courses in different years (tab. 1).

Tab. 1. Average evaluation of KJ courses in 2011-2015

Year	Number of courses	Number of surveys	Organization of lectures	Raising specialist qualifications	Medical practice (professional)	Overall evaluation of the course (the average of all evaluations)
2011	4	90	4.61	3.90	4.38	4.30
2012	14	411	4.79	3.94	4.24	4.32
2013	14	311	4.82	3.90	4.12	4.28
2014	14	268	4.80	3.88	4.15	4.27
2015	16	245	4.82	3.90	4.08	4.27
Total/average	62	1325	4.77	3.90	4.19	4.29

In each category, the average assessment of lecturers from the years 2011-2015 exceeded 5 (tab. 2). Top marks lecturers obtained for punctuality (average 5.47), and for the preparation of (5.32), commitment (5.30), presentation (5.12) and merit classes (5.11).

Courses included in the program specialization in the field of public health (KS)

According to KS courses received the highest ratings in domain organization (average score 5.31) and improving the qualifications of a specialist (5.01). The lowest rated the usefulness of professional practice (4.49). There were no major changes in the perception of courses in subsequent years (tab. 3).

Top evaluations lecturers obtained for punctuality (5.60), and for the preparation of (5.49), commitment (5.46), the substantive activities (5.34) and presentation (5.32). As in the case of courses KJ average grade teachers increased slightly in the last year of observation (tab. 4).

DISCUSSION

The results indicate that the adopted organizational form was appropriate and the selection of lecturers of both types of courses was good. **The general averaged evaluation of KJ courses was much lower than the evaluation of KS courses (respectively, 4.29 and 4.94)**, as well as the evaluation of suitability for professional practice (4.19 vs 4.49) and the organization (4.77 vs 5.31). Particular attention is paid the difference in the evaluation of the suitability of courses in raising specialist qualifications (3.90 vs 5.01). **These results confirm the hypothesis assumed. At the same time evaluations of lecturers were very high, higher than evaluations of courses, which suggests that the criteria for differentiating course evaluation are its content and subject matter, not the lecturers nor the presented topics.**

Differences in the perception of courses may have several causes, including those related to the content of KJ courses and the perception of public health by clinicians. First of all, the thematic scope of KJ courses is defined by law and all units offering such courses need to respect it. The course foundation is to increase

Tab. 2. Average evaluation of KJ courses' lecturers in 2011-2015

Year	Degree of preparation	Presentation manner	Applied teaching aids	Involvement	Substantive presentation value	Punctuality	Average evaluation
2011	5.21	5.00	4.95	5.21	4.94	5.40	5.12
2012	5.34	5.18	5.15	5.31	5.17	5.50	5.28
2013	5.29	5.12	5.08	5.28	5.12	5.46	5.23
2014	5.34	5.06	4.95	5.28	5.09	5.48	5.20
2015	5.42	5.23	5.16	5.40	5.23	5.53	5.33
Average	5.32	5.12	5.06	5.30	5.11	5.47	5.23

Tab. 3. Average evaluation of KS courses in 2011-2015

Year	Number of courses	Number of surveys	Organization of lectures	Raising specialist qualifications	Medical practice (professional)	Overall evaluation of the course (the average of all evaluations)
2010	11	143	5.41	5.02	4.58	5.00
2011	18	261	5.20	4.93	4.04	4.73
2012	30	681	5.23	5.01	4.57	4.94
2013	29	451	5.38	5.11	4.80	5.10
2014	26	386	5.33	4.96	4.48	4.92
2015	38	562	5.20	4.85	4.59	4.88
Total/average	152	2484	5.31	5.01	4.49	4.94

Tab. 4. Average evaluation of KS courses' lecturers in 2011-2015

Year	Degree of preparation	Presentation manner	Applied teaching aids	Involvement	Substantive presentation value	Punctuality	Average evaluation
2010	5.59	5.46	5.42	5.59	5.52	5.71	5.55
2011	5.46	5.27	5.24	5.43	5.28	5.58	5.37
2012	5.41	5.27	5.23	5.39	5.28	5.55	5.36
2013	5.42	5.27	5.22	5.41	5.28	5.55	5.36
2014	5.49	5.28	5.20	5.45	5.30	5.60	5.39
2015	5.54	5.37	5.32	5.51	5.40	5.63	5.46
Average	5.49	5.32	5.27	5.46	5.34	5.60	5.41

general knowledge about the tasks of public health, not increasing specialist qualifications. The program is overloaded, so the possibility of further issues is limited. It is not possible to take into account the specificities any specialization and diversity of content for their needs. In a similar study in 2009 every tenth doctor said that the course did not meet his expectations (5). As a result of the formal limitations the course in a small way is preparing to perform active roles in the health care system. Perhaps the theme of the course is too theoretical and does not meet the expectations of the doctors who would prefer the program more ambitious and practical (6).

Secondly, the subject of the course KJ (and the need for the meeting) can be seen as inadequate to the task of professional clinicians and unnecessary in education. The conviction of a low rank public health is rooted both in the national health policy (7) as a customs.

Public health is a theoretical and practical activities undertaken to prevent disease and prolonging the lives and promote the population health. For centuries prevention they dealt with the doctors, at least on an individual scale. However, doctors were also initiators of the action at the population level. Examples of activities are John Snow during a cholera outbreak in London in 1854, or doctor US Army Colonel, William Gorgas, who, in 1905, began control of mosquitoes in the area of the construction of the Panama Canal, which contributed to a decline in the incidence of yellow fever and malaria among workers (8). A spectacular beginning of the development of the profession “specialist in the field of public health” was the year 1915, when the US released report by the Rockefeller Foundation and The Welch-Rose report devoted to the need to extract new profession and for a method of training such professionals (9). As a result of the report in 1916, grant from the Rockefeller Foundation funded the creation of the first US school of public health – Johns Hopkins School of Hygiene and Public Health in Baltimore (Maryland), which began operations during a flu epidemic in 1918 (10). Soon a similar way to school was established at Harvard University in Boston (Massachusetts). Gradually they opened new schools, initially funded with private funds and, since the adoption of the Social Security Act in 1935, subsidized by the federal government. In the years following other training centers (within the existing departments at various universities).

Public Health in the United States largely developed outside the world of medicine and without supervision (even though it was strongly influenced by the biomedical paradigm), and the limited role of health care entities (11). Independent schools of public health were open to doctors, nurses, engineers, administrators, etc., and despite this fact doctors constituted a significant portion or majority of graduates. In Great Britain and at the European continent, specialization in the field of public health

over the years developed in close connection with the training of doctors (12). Both in the 20s and 30s the Rockefeller Foundation helped in the creation of schools of public health/hygiene in many countries around the world, including in Europe (i.e. Prague, London, Copenhagen, Budapest, Oslo, Belgrade, Zagreb, Madrid, Cluj (Romania), Sofia, Rome, Athens, Bucharest, Stockholm) and outside (Toronto, Sao Paulo, Ankara, Calcutta, Manila). One of these schools was founded in 1922 as The State School of Hygiene at the National Institute of Hygiene in Warsaw. Within two decades, the Foundation spent more than USD 25 million for this purpose, and its total contribution is estimated at PLN 375 million at the current exchange rate (13, 14).

In Poland, before 1990, as well as in the so-called socialist camp countries, the priority of public health, and education in this field, were sanitation and hygiene activities related to the fight against infectious diseases (15). The development of education in public health came after a period of political transformation, especially in the period before accession to the EU, when higher studies began to appear in this field.

Despite historical, cultural and economic differences, there are some similarities between America and Europe with respect to education and doctors' career as well as public health professionals. **The development of separate paths in public health contributed to the division of tasks between the curative medicine and public health.** Doctors focused on treating diseases and public health professionals, not necessarily doctors, on maintenance of health (16).

In the 70s of the 20th century, due to a number of conditions, it was considered that the tasks of both professions are becoming increasingly convergent, and their representatives should cooperate and communicate. They noticed the total domination of curative medicine over public health and began to attempt reintegration of fields and professions. On the international stage, the Declaration of Alma-Ata on Primary Health Care (PHC) adopted by the World Health Organization in 1978 can be considered the turning point in this process. Today, integration of public health care and public health is supported by e.g. the American Academy of Family Physicians (17).

This tendency is accompanied by the desire to increase the competences of practitioners in the field of public health and to integrate this aspect in the training of doctors. This issue is raised in the scientific literature (18-21) in the studies of the World Health Organization (22), and in formal policy documents, e.g. in the United States (23-25) and the United Kingdom (26, 27). However, such undergraduate and postgraduate training has many shortcomings (28).

Today, it is stressed that physicians are a component of the public health system, they should consciously

cooperate in these activities and obtain expertise in public health in parallel with their medical knowledge and skills (29). **It is expected of doctors to be health advocates, speaking for social, economic, educational and political changes, to support health (30), to actively work towards reducing inequalities in health (31, 32), to be change agents, or have leadership qualities that will enable them support and making changes in the social and health system (33).** Competences within the area of social and behavioral sciences are necessary for doctors to better treat patients and give advice. Understanding the structure of the health system, the principles of the financing of services and administration of care is essential for the planning and delivery of health care (34).

Despite the existence of a number of recommendations for the training of doctors in the public health, scientific literature does not provide much information

about their implementation, and assessment of such projects. The research shows, however, that the training of doctors in the field of public health is a major challenge (35-37), so assessment studies of the learning by the participants is an important tool for improving the educational process.

CONCLUSIONS

Uniform compulsory specialized course in the field of public health is highly rated and is accepted by doctors. The results indicate that the adopted organizational form and a good selection of lecturers is proper. In the light of the current knowledge, physicians should possess competence in the field of public health, which should be implemented through a unified specialized course. Assessment of courses by participants is an important tool for improving the quality of the teaching process.

BIBLIOGRAPHY

- Rozporządzenie Ministra Zdrowia z dnia 20 października 2005 r. w sprawie specjalizacji lekarzy i lekarzy dentystów. Dz. U. 2005 nr 213 poz. 1779.
- Centrum Medyczne Kształcenia Podyplomowego. Program specjalizacji w chorobach wewnętrznych. Program podstawowy dla lekarzy po stażu podyplomowym (bez żadnej specjalizacji). Aktualizacja 2005. Warszawa 2005.
- Rozporządzenie Ministra Zdrowia z dnia 2 stycznia 2013 r. w sprawie specjalizacji lekarzy i lekarzy dentystów. Dz. U. 2013 poz. 26.
- Centrum Medyczne Kształcenia Podyplomowego. Program specjalizacji w dziedzinie chorób wewnętrznych (moduł podstawowy i moduł specjalistyczny) dla lekarzy nieposiadających odpowiedniej specjalizacji I lub II stopnia lub tytułu specjalisty w odpowiedniej dziedzinie medycyny. Warszawa 2014.
- Opolski J, Zgliczyński WS, Ruiz M et al.: Jednolity, obowiązkowy dla wszystkich lekarzy kurs specjalizacyjny w dziedzinie zdrowia publicznego – w ocenie słuchaczy Szkoły Zdrowia Publicznego CMKP. Postępy Nauk Medycznych 2009; 4: 277-281.
- Tyler IV, Hau M, Buxton JA et al.: Canadian medical students' perceptions of public health education in the undergraduate medical curriculum. Academic Medicine 2009; 84(9): 1307-1312.
- WHO Polska: Raport dot. oceny podejmowanych w Polsce niezbędnych działań z zakresu zdrowia publicznego (EPHOs). 2015. Materiał roboczy.
- Faerstein E, Winkelstein W: William Gorgas: Yellow Fever Meets Its Nemesis. Epidemiology 2011; 22(6): 872.
- Welch WH, Rose W: Institute of Hygiene: a report to the General Education Board of Rockefeller Foundation. New York: The Rockefeller Foundation submitted in 1915.
- Rosenstock L, Helsing K, Rimer BK: Public Health Education in the United States: Then and Now. Public Health Reviews 2011; 33(1): 39-65.
- Starr P: Professionalization and Public Health: Historical Legacies, Continuing Dilemmas. J Public Health Management Practice 2009 Nov, suppl.: S26-S30.
- Fee E, Acheson RM (eds.): A history of education in public health: health that mocks the doctors' rules. Oxford University Press, Oxford 1991.
- Fee E, Bu L: Models of public health education: choices for the future? Bulletin of the World Health Organization 2007; 85(12): 977-979.
- The Rockefeller Foundation. Our History; <https://www.rockefellerfoundation.org/about-us/our-history/>.
- Ádany R, Villerusa A, Bislimovska J, Kulzhanov M: Public Health Education in Central and Eastern Europe, and Central Asia. Public Health Reviews 2011; 33(1): 105-133.
- Ruis AR, Golden RN: The schism between medical and public health education: a historical perspective. Acad Med 2008 Dec; 83(12): 1153-1157.
- American Academy of Family Physicians. Integration of Primary Care and Public Health (Position Paper). December 2014; <http://www.aafp.org/about/policies/all/integrationprimarycareandpublichealth.html>.
- Rosenberg SN, Schorow M, Haynes ML: Bridging the gap between clinical medicine and public health: an experimental course for medical students. Public Health Reports 1978 Nov-Dec; 93(6): 673-677.
- Stephen Gillam S, Maudsley G: Public health education for medical students: rising to the professional challenge. Journal of Public Health 2010; 32(1): 125-131.
- Fineberg HV: Public health and medicine: where the twain shall meet. American Journal of Preventive Medicine 2011; 41(4 S3): S149-S151.
- Sava S, Armitage K, Kaufman A: It's time to integrate public health into medical education and clinical care. Journal of Public Health Management & Practice 2013 May-Jun; 19(3): 197-198.
- WHO Regional Office for South-East Asia. Teaching of Public Health in Medical Schools Report of the Regional Meeting Bangkok, Thailand, 8-10 December 2009. WHO, New Delhi 2010.
- Gebbie K, Rosenstock L, Hernandez LM (eds.): Committee on Educating Public Health Professionals for the 21st Century. Board on Health Promotion and Disease Prevention. Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century. Institute of Medicine of the National Academies. The National Academic Press, Washington D.C. 2003.
- Hernandez LM, Munthali AW (eds.): Committee on Training Physicians for Public Health Careers. Board on Population Health and Public Health Practice. Training physicians for public health careers. Institute of Medicine of the National Academies. The National Academic Press. Washington, D.C. 2007.
- Fee E: Divorce between theory and practice: the system of public health training in the United States. Ciênc. saúde coletiva [online] 2008; 13(3): 841-851.
- Gillam S, Maudsley G: Public health education for medical students. A guide for medical schools. On behalf of Academic Departments of Public Health in the United Kingdom, London 2007.
- Faculty of Public Health. Education and Training Department. Undergraduate Public Health Curriculum for UK Medical Schools. Consensus Statement 2014.
- Riegelman RK, Albertine S, Wyckoff R: A history of undergraduate education for public health: from behind the scenes to center stage. Frontiers in Public Health 2015, published: 27 April 2015.
- Koo K, Lapp I: Educating the next generation of physicians in public health: the MPH for medical students. Public Health Reports 2014; 129(5): 460-464.
- To MJ, Sharma M: Training tomorrow's physician-advocates Medical Education 2015 Aug; 49(8): 752-754.
- Royal College of Physicians. How doctors can close the gap Tackling the social determinants of health through culture change, advocacy and education. London 2010.
- British Medical Association. Social Determinants of Health – What Doctors Can Do. October 2011.
- Frenk J, Chen L, Bhutta ZA et al.: Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. The Lancet 2010; 376(9756): 1923-1958.

34. Stellman JM, Cohen S, Rosenfield A: Evaluation of a one-year Masters of Public Health program for medical students between their third and fourth years. *Academic Medicine* 2008; 83(4): 365-370.
35. Edwards R, White M, Chappel D, Gray J: Teaching public health to medical students in the United Kingdom – are the General Medical Council's recommendations being implemented? *J Public Health Med.* 1999 Jun; 21(2): 150-157.
36. Harris R, Kinsinger LS, Tolleson-Rinehart S et al.: The MD-MPH program at the University of North Carolina at Chapel Hill. *Academic Medicine* 2008 Apr; 83(4): 371-377.
37. Navinan MR, Wijayaratne DR, Rajapakse S: Final-year medical students' perceptions regarding the curriculum in public health. *Indian J Community Med* 2011 Oct; 36(4): 268-274.

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