

Attempt towards assessment of professional internship programs among students of Public Health at the Faculty of Health Science, Warsaw Medical University – a preliminary report

(Próba oceny przebiegu praktyk zawodowych w grupie studentów Zdrowia publicznego Wydziału Nauki o Zdrowiu Warszawskiego Uniwersytetu Medycznego – doniesienie wstępne)

P Ostałowski^{1,A,B,D}, I Cieślak^{2,B,D}, M Panczyk^{2,C}, A Zarzeka^{2,C}, P Leszczyński^{3,4,E},

Ł Samoliński^{2,E}, J Gotlib^{2,F}

Abstract – Introduction: A summer professional internship is compulsory part of the education programme in the field of Public Health. Organisation of internships for Public Health students differs from one university to another. The study was an attempt to assess the organisation and course of professional internships among students of Public Health at the Faculty of Health Science, Warsaw Medical University.

Material and methods: The study included students of Public Health at the Faculty of Health Science, Warsaw Medical University (n=146). Women and first-cycle students constituted the majority of respondents (90% and 57%, respectively). Second-year students constituted a vast majority of the study participants (71%). The study was performed in May 2015 with the use of PAPI and an original questionnaire comprising 18 close-ended, semi-open-ended and open-ended questions, as well as three demographic questions.

Results: Most respondents did not do their professional internships during studies (71%). A significant number of students (88%) said they had not done any additional internships beyond those required by the curriculum. Governmental bodies were most often chosen as the place of internship by the study participants (43%). Most students (84.5%) had not been invited to further cooperation after completing the internship. In more than 9 cases out of 10, students had not received any financial compensation. Almost all study participants (94%) said that there was a need to develop an internship database.

Conclusions: Students of Public Health at the Faculty of Health Science, Warsaw Medical University were satisfied with their compulsory professional internship programs. A small percentage of the study participants undertake voluntary internships on their own initiative. Financial compensation and a chance of employment, offered to a limited number of the respondents, comprised a

significant incentive to do an internship in a particular institution. Students pointed out the need to develop an internship database held by the University.

Key words - professional internship programmes, public health, students of Public Health, assessment.

Streszczenie – Wstęp. Obowiązkowym elementem kształcenia na kierunku zdrowie publiczne są wakacyjne praktyki zawodowe. W zależności od uczelni, organizacja praktyk zawodowych studentów zdrowia publicznego różni się od siebie. Celem pracy była próba oceny organizacji i przebiegu praktyk zawodowych w grupie studentów studiujących na kierunku Zdrowie Publiczne Wydziału Nauki o Zdrowiu Warszawskiego Uniwersytetu Medycznego.

Materiał i metody. Badaniu poddani zostali studenci Oddziału Zdrowia Publicznego Wydziału Nauki o Zdrowiu Warszawskiego Uniwersytetu medycznego (n=146). Większość respondentów stanowiły kobiety (90%) oraz studenci studiów I stopnia (57%). Przeważająca część badanych studiowała na II roku studiów (71%). Badanie przeprowadzono w maju 2015 roku, metodą PAPI z użyciem autorskiego kwestionariusza składającego się z 18 pytań zamkniętych, półotwartych i otwartych oraz 3 pytań metryczki.

Wyniki. Większość respondentów nie odbywała praktyk zawodowych w czasie trwania studiów (71%). Znaczna liczba studentów (88%) deklarowała, iż nie realizowała dodatkowych praktyk poza tymi, które są wymagane w przebiegu studiów. Respondenci najczęściej wybierali instytucje rządowe jako miejsce swoich praktyk (43%). Większość studentów (84,5%) po skończeniu praktyki nie otrzymała propozycji dalszej współpracy. W ponad 9 przypadkach na 10, praktyki studenckie wykonywane były przez respondentów bez wynagrodzenia finansowego. Prawie wszyscy

respondenci (94%) wykazali istnienie potrzeby stworzenia bazy praktyk zawodowych.

Wnioski. Studenci Oddziału Zdrowia Publicznego Wydziału Nauki o Zdrowiu Warszawskiego Uniwersytetu Medycznego są zadowoleni z odbywanych obowiązkowych praktyk zawodowych. Niewielki odsetek badanych odbywa nieobowiązkowe praktyki zawodowe z własnej inicjatywy. Dużą zachętą do realizacji praktyk w danej instytucji jest ich odpłatność lub perspektywa zatrudnienia w danym miejscu, czego doświadczyła niewielka grupa respondentów. Studenci wskazują na potrzebę stworzenia bazy praktyk studenckich, która znajdowałaby się w posiadaniu uczelni.

Słowa kluczowe – praktyki zawodowe, zdrowie publiczne, studenci zdrowia publicznego, ocena.

Author Affiliations:

1. Medical University of Warsaw, Faculty of Health Science, Public Health Major
2. Division of Teaching and Outcomes of Education, Faculty of Health Science, Medical University of Warsaw
3. Institute of Health, Faculty of Natural Science, Emergency Medicine Department, Siedlce University of Natural Sciences and Humanities
4. Collegium Masoviense – College of Health Science

Authors' contributions to the article:

- A. The idea and the planning of the study
- B. Gathering and listing data
- C. The data analysis and interpretation
- D. Writing the article
- E. Critical review of the article
- F. Final approval of the article

Correspondence to:

Prof. Joanna Gotlib PhD, Division of Teaching and Outcomes of Education, Faculty of Health Science, Medical University of Warsaw, Żwirki i Wigury 61 Str., PL- 02-091 Warszawa e-mail: joanna.gotlib@wum.edu.pl

Accepted for publication: January 31, 2017.

I. INTRODUCTION

The Public Health major combines medical science, health science, and sports science in order to prepare students to initiate and take up actions aiming at disease prevention, extension of life, and health promotion [1]. Despite combining so many fields of science, public health has become a scientific discipline and is taught at university-level schools. Since 1993, it has been a major at

Polish universities. At the beginning, only one university offered a degree programme in Public Health, in 2007 there were 12 universities teaching this major, and now there are 55 such schools. The number of students of Public Health increased by 448% between 1999 and 2004. Nevertheless, teaching standards for Public Health in Poland were introduced only in 2007. They concern the first and second-cycle programmes and cover the following aspects: graduate qualifications, standards of education, minimum number of hours and ECTS points¹, as well as guidelines for internship programs and course of education. However, these standards are not fully correct and they differ from other standards. Differences can be seen with respect to the methodology of teaching and graduate qualifications, which depart from those adopted in other countries [2-5]. The major in Public Health can be offered by both medical and non-medical university-level schools, as a full-time or part-time programme, as the first-cycle or second-cycle programmes, postgraduate or specialisation courses.

Summer internships form a compulsory part of the education programme in Public Health, during which students may use their knowledge in practice as well as gain experience and acquire new skills. The professional literature presents student internships as a method of learning that allows students to:

- gain professional experience,
- use knowledge in solving problems in everyday life of an organisation,
- develop a network of business contacts in the field of interest,
- recognise the sector and collect information (e.g. for a diploma project or to set the direction of a career),
- develop professional skills [7, 8].

Organisation of internships for Public Health students differs from one university to another.

An internship coordinator from the Institute of Public Health, Faculty of Health Science, Collegium Medicum of the Jagiellonian University deals with the organisation of professional internships for students of Public Health at the Faculty of Health Science. Number of hours of professional internship programme:

- a) First-cycle programme
 - after the first year: 2 weeks (80 hours)
 - after the second year: 4 weeks (160 hours)
- b) Second-cycle programme: after the first year: 5 weeks (200 hours)

¹ ECTS (European Credit Transfer System) – a credit point system for assessment of student's achievements introduced by Bologna Declaration [6]

A certificate confirming achievement of goals and a report with the description of activities performed by a student constitute a basic prerequisite for getting a credit for an internship.

Students may be exempt from an internship if they provide information on their professional experience which is equivalent to internship. Each intern chooses the place of internship on their own and the Jagiellonian University signs an agreement for an internship with a particular institution [9].

Students of the Medical University of Lublin do their internships after each year of study in the course of the first- and second-cycle programmes at places indicated in the internship curriculum:

a) first-cycle programme

- after the first year: 2 weeks (80 hours) – social welfare centres
- after the second year: 2 weeks (80 hours) – public health institutions
- after the third year: 2 weeks (80 hours) - Health and Safety at Work

b) second-cycle programme

- first year: 1.5 weeks (60 hours) - court
- second year: 1.5 weeks (60 hours) - administration of healthcare institutions

Internships required by the curriculum may be done at any time in a teaching hospital, another healthcare centre or another unit set by the University. When requested by a student, an internship may be done in a place chosen by the student across the country, provided that the unit obtains the approval of the Dean and agrees to a student's free of charge admittance. In some cases, the Dean may agree to an internship abroad [10].

Students of Public Health at the Faculty of Health Science, Warsaw Medical University are obliged to do summer internships after the first and the second year of the first-cycle programme and after the first year of the second-cycle programme. The internship consists of 160 teaching hours on a single basis.

It is recommended that internships:

- take place in a hospital department after the first year of the first-cycle programme;
- take place in a healthcare institution, teaching hospital, sanitary and epidemiological station or insurance company after the second year of the first-cycle programme;
- take place in a central or local governmental body that organises and administers health care or in a department of a local unit of the Polish National Health Fund that deals with health of the local

community after the first year of the second-cycle programme.

The main aim of all internship programs is to make students familiarised with the organisational structure of a particular unit, its tasks, forms of employment and working methods, as well as to help the employees with their office and administration functions [13]. There is no internship database for students at Warsaw Medical University.

The aim of the study was an attempt to assess the organisation and course of professional internship among students of Public Health at the Faculty of Health Science, Warsaw Medical University.

II. MATERIAL AND METHODS

Material

The study included students of Public Health at the Faculty of Health Science, Warsaw Medical University (n=146). Women and first-cycle students comprised the majority of respondents. Second-year students formed a vast majority of the study participants. Tables 1, 2, and 3 present groups of students by gender, cycle and year of study.

Table 1. Characteristics of the students group under study by gender

Gender	Number	Percentage
Women	131	90%
Men	15	10%
Total	146	100%

Table 2. Characteristics of the students group under study by cycle of study

Cycle of study	Number	Percentage
First-cycle programme (Bachelor's degree)	83	57%
Second-cycle programme (Master's degree)	60	41%
No answer	3	2%
Total	146	100%

Table 3. Characteristics of the students group under study by year of study

Year of study	Number	Percentage
first	41	28%
second	103	71%
third	0	0%
No answer	2	1%
Total	146	100%

Methods

The study was conducted in May 2015 with the use of PAPI (*Paper & Pen Personal Interview* – a direct and personal questionnaire-based interview) and an original questionnaire comprising 18 close-ended, semi-open-ended and open-ended questions, as well as three demographic questions. The questions concerned student internships, both compulsory and additional, as well as places, forms, satisfaction with internships and their duration. The respondents expressed their opinions on developing internship databases held by the University and indicated the source of information they used when looking for internship offers that seemed interesting to them.

The study results were subjected to statistical analysis using the Microsoft Excel 2013 program (licensed to Warsaw Medical University). The analysis used techniques of descriptive statistics.

III. RESULTS

Most respondents did not take their professional internships during the course of study (71%). There was a statistical relationship between the cycle of study and the question of "How many times have you participated in internship programs during the course of study?" ($\chi^2(3, N = 146) = 76.237; p < 0.001$). The first-cycle students more often did not participate in any internship programs at all compared to the second-cycle students, whereas the second-cycle students more often than Bachelor's degree students participated in internships once or twice. Table 4 shows the distribution of frequency of answers to the question of "How many times have you participated in internship programs during the course of study?" by the cycle of study.

Table 4. Distribution of frequency of answers to the question of "How many times have you participated in internship programs during the course of study?" by the cycle of study

How many times have you participated in internship programs during the course of study?	Cycle of study		
	First-cycle programme	Second-cycle programme	N
Not a single time	83 (98.80%)	20 (32.26%)	103 (70.55%)
1 to 2 times	0 (0%)	37 (59.68%)	37 (25.34%)
3 to 4 times	1 (1.19%)	5 (8.06%)	6 (4.11%)
5 times or more	0 (0%)	1 (1.61%)	1 (0.68%)
Total	84 (100.00%)	62 (100.00%)	146 (100.00%)
<i>p</i>	<0.001		

Most students (88%) said they had not done any additional internship programs beyond those required by the curriculum. The study demonstrated that the second-cycle students take extracurricular internships more often. Governmental bodies were most frequently chosen as a place of internship (43%), followed by non-governmental organisations (12%), pharmaceutical companies (7.46%) and non-profit institutions (6.22%). The majority of the study participants had their internships during summer holidays (85%) and they lasted between two and four weeks (61.5%), six and eight hours a day (68%). More than 67% of the respondents said that one of the employees was assigned to them as their supervisor during the internship. Most students (84.5%) were not invited to further cooperation after completing the internship. In more than 9 cases out of 10, students did not receive any financial compensation. More than half of the study group (58.2%) would recommend the place of their internship to other students. Almost all study participants (94%) said that there was a need to develop an internship database held by the University.

IV. DISCUSSION

The study is the first attempt to analyse the opinions of Public Health students of the Faculty of Health Science at Warsaw Medical University. Therefore, the study has an innovative character. It is also worth emphasising that the

issues discussed by the Authors are of great practical importance for the improvement of teaching quality of Public Health students.

The organisation of student internship programs varies from country to country with respect to curriculum, course and duration. Summer internships in Public Health at the Harvard T.H. Chan School of Public Health are based on five programs:

1. Fostering Advancement & Careers through Enrichment Training in Science (FACETS) – a six-week program provides students with an opportunity to gain experience. Interns work on a research project in a selected field: social and behavioural science, health policy and management, health in global terms, epidemiology, nutrition or environmental health. The aim of the program is to give students practical skills that would increase their employment opportunities.
2. Multidisciplinary International Research Training Program (MIRT) – an international program aiming at encouraging students to pursue their careers in biomedical and behavioural research. The program provides short-term trainings in public health. Interns have the opportunity to gain knowledge about scientific literature on biomedical projects, ethics in research, as well as cultural aspects that have an impact on the health of the population. The program is financed by the National Institute of Minority Health and Health Disparities. Internships take place in agreement with scientific institutions in the following developing countries: Zimbabwe, Ethiopia, Vietnam, Thailand, Malaysia, Georgia, Peru, Mexico, Ecuador, Chile, and Australia.
3. Summer Program in Biological Sciences in Public Health – this program aims at drawing attention to the fact that laboratory trials may contribute to finding a solution to numerous public health problems. Research projects focus on biological science that plays an important role in disease prevention.
4. Summer Program in Biostatistics and Computational Biology – an intensive six-week program during which issues of biostatistics, epidemiology, and research in public health are introduced to participants. The program aims to show students the purpose of using quantitative methods in biological, environmental, and medical research.
5. Summer Program in Epidemiology – a four-week program including mathematical and quantitative research methods and presenting the skills and processes necessary to pursue a career in public health [11].

Professional internships in the Public Health major at Maastricht University are based on a structured program included in the timetable. Internships are compulsory and their courses are related to diploma projects of particular students. Each year the University offers a list of places where students are allowed to do their internships. The following are most common: European public health institutions, governmental or insurance companies, consulting agencies, research institutes, and faculties of particular universities [12].

In Poland, internships in Public Health sector differ from those in other countries.

The study demonstrated that second-cycle students more often participated in internships. This resulted from the necessity of taking compulsory internships included in the curriculum, but also gave grounds for concluding that their greater activity was associated with the upcoming graduation and entering the labour market. Experience is the second aspect, following knowledge, considered by a potential employer in the recruitment process. Over two-thirds of employers (68%) draw attention to the length of internship [14]. Andrzejczyk and Tyrańska-Fobke conducted a study at the Medical University of Gdansk on the attitudes of Public Health students towards future employment. It demonstrated that only 2.1% of the respondents participated in voluntary professional internships [15]. These results are consistent with the present ones. Similarly to the students in Gdańsk, students of the Warsaw Medical University rarely participated in voluntary internships or apprenticeships during their studies. Quite apart from the Public Health major, the authors of the study performed within the programme of *"Start in the Labour Market"* conducted among 3,000 students of higher-level schools in Poland pointed to the fact that 22% of the respondents participated in activities such as internships or apprenticeships out of university [16]. It is worth considering why the students of Public Health were unwilling to participate in internships that go beyond the compulsory curriculum. This may be a result of low quality and diversity of internships offered by employers or a lack of prospects after graduation and a low motivation of students to find employment in the public health sector. A number of compulsory internships done by students may be small due to the fact that when students start internships on their own initiative, it is them who feel responsible to meet the expectations of employers, whereas the university is no longer a coordinator. A lack of any remuneration may also reduce the motivation to participate in extracurricular internships. The present study as well as the study by Andrzejczyk and Tyrańska-Fobke [15] showed that Public Health students were most willing to have in-

ternships in public/governmental institutions. However, a representative Study of Students performed by ConQuest Consulting in 2012 showed that most respondents (58%) would like to have an internship and start their first job in a corporation [17]. Despite the fact that Public Health seems to be an interdisciplinary major that offers a wide range of possible career paths, most students do their internships and take on employment in the public sector. It is believed that internships in corporations are taken by a small number of most active students who are not afraid of challenges.

The organisation of practical training is an interesting idea that could attract further interest of students in extra-curricular internships and would help create highly competent and qualified staff. A study by Stephen et al. [18] discusses an example of training initiated by the Centre for Disease Prevention and Control (CDC) in the key areas of public health, such as epidemiology and laboratory science. The CDC also offers trainings in the form of short-term internships in public health. CDC staff found that learning by means of participating in projects and trainings fostered development of well-trained workers focused on their own professional development. This program entitled "*Career Path to Public Health Program*" is addressed not only to students, but also to academics and all those who are interested in public health.

Horney and Davis from the University of North Carolina Center for Public Health Preparedness, United States [19], discussed another example of how practical training and internships should be organised. In 2003, they established Team Epi-Aid whose aim was to organise voluntary-based internships in cooperation with the state and local institutions responsible for managing outbreaks of diseases or other urgent situations. Evaluation of 2010 internships demonstrated that students participating in initiatives within internship programs could more often find a job in their profession.

A program based on similar premises proves successful also in the United Kingdom. It covers public university-level schools teaching public health across the country [20] and is conducted jointly with the National Health Service (NHS). Abilities in analysing and assessing scientific evidence, creating policies and strategies for health, as well as leadership and cooperation between institutions are considered to be the key competences of graduating students.

The "*TRIUMPH*" program of the University of Wisconsin School of Medicine and Public Health discussed in a study by Cynthia et al. [21] is also worth mentioning. The program aimed at integrating professional practice of medical and public health students in epidemiological research, mentoring projects, and developing guidelines for public health.

At present there is no program in Poland that would initiate cooperation between public universities and payers in the healthcare system.

V. CONCLUSIONS

- Students of Public Health at the Faculty of Health Science, Warsaw Medical University were satisfied with their compulsory professional internship programs.
- Only a small percentage of the Public Health students did voluntary internship programs on their own initiative, which may hamper their employment opportunities.
- Financial compensation and employment opportunities, offered to a limited number of the respondents, made up a strong incentive to take an internship in a particular institution.
- Students pointed to the need of developing an internship database, held by the University.
- There is a need for further and more detailed research in the field of evaluation of professional internship programs for students, both quantitative and qualitative.

VI. REFERENCES

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