Public Health students' networking knowledge assessment attempt – a preliminary report

(Próba oceny znajomości procesu networkingu wśród studentów kierunku zdrowie publiczne – doniesienie wstępne)

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Abstract – Introduction. Networking is a conscious exchange of information, resources, mutual support, and opportunities via social contacts. Effects of using networking skills in public health may be double: either with respect to professional development of a Public Health student, or with regard to the effectiveness of public health-related activities.

Aim of Study. The aim of the study was to assess the level of networking skills among Public Health students.

Materials and methods. The study involved a total of 61 Public Health students, including 47 women and 14 men. Second-year students of a Master's degree programme constituted the largest proportion of all study participants (70.5%). Over half of the respondents (60.7%) studied Public Health at Warsaw Medical University. The quantitative study among students was conducted using an original questionnaire comprising 29 closed-ended and semi-open questions. The material was collected with the use of docs.google.com. The respondents were selected using snowball sampling. The significance level was established at p < 0.05.

Results. 59.0% of the students have already encountered the term "networking." More than 67% of the students said that they had participated in professional and educational events and 33% of the respondents had not taken part in such events. Only 27.9% of the study participants could name their competencies without hesitation when asked. According to 70.5% of the respondents, knowledge of their own competencies may contribute decisively to their professional success.

Conclusions. Public Health students recognised the positive influence of cooperation with other people or groups of people on career building. A practical aspect of using networking skills should be incorporated into the curriculum of Public Health. It is necessary to conduct further studies in order to get the full picture of Public Health students' networking skills.

Key words - public health, networking, students, self-assessment.

Streszczenie – Wstęp. Networking jest to świadomy proces wymiany informacji, zasobów, wzajemnego poparcia i możliwości, prowadzony przy wykorzystaniu korzystnych kontaktów. Efekty praktycznego wykorzystywania umiejętności networkingowych w zdrowiu publicznym można rozpatrywać dwutorowo: zarówno w odniesieniu do rozwoju zawodowego studenta kierunku zdrowie publiczne, jak i osiąganej efektywności realizowanych działań na rzecz zdrowia publicznego.

Cel pracy. Celem pracy jest próba oceny poziomu umiejętności networkingowych wśród studentów kierunku zdrowie publiczne.

Materiał i metody. W badaniu udział wzięło 61 studentów kierunku zdrowie publiczne, w tym 47 kobiet i 14 mężczyzn. Większość badanych (70,5%) studiowała na II roku studiów II stopnia. Ponad połowa ankietowanych (60,7%) zdobywało wykształcenie wyższe z zakresu zdrowia publicznego na Warszawskim Uniwersytecie Medycznym. Badanie ilościowe wśród studentów zostało przeprowadzone za pomocą autorskiego kwestionariusza zawierającego 29 pytań zamkniętych oraz półotwartych. Materiał został zebrany za pomocą formularza dosc.google.com. Respondentów dobrano metodą kuli śnieżnej. Przyjęty poziom istotności p<0,05.

Wyniki. Studenci, którzy spotkali się z pojęciem „networking" stanowili 59,0%. Ponad 67% studentów wskazało, iż uczęszcza na wydarzenia branżowe i edukacyjne, a 33% badanych nie bierze udziału w tego typu wydarzeniach. W przypadku poproszenia studenta o wymienienie swoich kompetencji, jedynie 27,9% wymieni je bez wahania. Ponad 70% respondentów (70,5%) oceniło, iż znajomość własnych kompetencji może mieć zdecydowany wpływ na sukces w sferze zawodowej.

Wnioski. Studenci zdrowia publicznego dostrzegają pozytywne znaczenie współpracy z drugą osobą lub grupą osób dla budowania kariery. Praktyczny aspekt stosowania umiejętności networkingowych powinien zostać wbudowany w program studiów kierunku zdrowie publiczne. W celu uzyskania pełnego obrazu umiejętności networkingu wśród studentów kierunku zdrowie publiczne konieczne jest przeprowadzenie dodatkowych badań.

Słowa kluczowe - zdrowie publiczne, networking, studenci, samoocena.

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I. INTRODUCTION

According to Roman Wendt and Grzegorz Turniak, networking is a conscious exchange of information, resources, mutual support, and opportunities via social contacts. It also refers to: "establishing contacts for the purpose of business and career advancement." In addition, Wendt and Turniak define networking as a practical use of the best social engineering techniques at individual level [1,2,3]. According to Beata Kapcewicz, networking is more than just contacts with competent people. Kapcewicz defines networking as maintaining relations, continuous presence in other people's lives, and high degree of reliability [4].

In the literature, the possibility of exchanging knowledge and gaining individual experience based on competencies of other participants of the network is considered to be the greatest benefit of networking [3-7]. Learning from others and obtaining an adviser may significantly influence the scientific quality and scope of the action taken. Seen from this angle, networking gives an opportunity to self-development with the use of available substantive resources provided by networking partners.

Networks can be analysed from two angles: individual – as relations between people, and organisational – as co-operation between organisations [8]. An appropriate type of relations is chosen depending on the purpose to be achieved.

The effects of practical use of networking skills in public health may be approached in two ways: with reference to the professional development of Public Health students as well as regarding the effectiveness of the public health-related actions. In this case, public health should be understood as a discipline aiming at the improvement of the health status of the population.

It should be noted that networking used for improving job prospects will indirectly influence the effectiveness of the activities undertaken. This happens through creating networks with persons having knowledge or skills that may prove necessary for the improvement of the value of activities taken in public health and their better implementation.

Different studies demonstrated that between 65% and 85% of employment is obtained thanks to networking and recommendation of a third party [9-11].

Networking cannot be ignored in career management and planning. In this case it is important to maintain networks since such an approach contributes to [9,10]:

- an increase in efficiency and possibility of professional success – working with different professional groups is also important for boosting creativity and finding new solutions;
- promotion prospects – recognition and establishment of one's brand one to be entrusted with more and more valuable/prestigious tasks, have more opportunities and scope of decision-making;
- climbing the career ladder (apart from promotion within one company) – support from persons belonging to the network of a particular person, recognition in the company due to positive consequences of action and conscious brand building, as well as participation in activities outside the place of employment, all these have an impact on career development.

Relations alone, without appropriate skills, knowledge and substantive knowledge will not pave Public Health students the way to an ideal professional status or achieving the objectives pursued. Only relationships developed in a suitable ground consisting in competencies and professional training, supported by work and commitment of a student can bring the expected benefits.

Outcomes of education set out in the curriculum should be reflected in courses carried out in the Public Health programme. Only such an attitude will allow students to develop networking skills.

Aim of Study

The aim of the study was to assess Public Health students' level of networking skills.

II. MATERIAL AND METHODS

Material

The study involved a total of 61 Public Health students, including 47 women and 14 men who studied Public Health in the academic year 2015-16. Students aged 20-25 years were the most numerous subgroup of the respondents (75.4%). Second-year students of a Master's degree programme constituted the largest proportion of all study participants (70.5%). Over a half of the respondents (60.7%) studied Public Health at the Medical University of Warsaw. The remaining respondents studied at universities set out in Table 1.

Table 1. List of university-level schools attended by respondents studying Public Health and number of respondents studying at a particular university

University	Fre-quency	Percent-age
Warsaw Medical University	37	60.7%
Collegium Medicum of the Jagiellonian University	6	9.8%
Medical University of Gdansk	2	3.3%
Medical University of Bialystok	3	4.9%
Collegium Medicum in Bydgoszcz of the Nicolaus Copernicus University	1	1.6%
Poznan University of Medical Science	2	3.3%
Pomeranian Medical University	1	1.6%
Wroclaw Medical University	2	3.3%
Medical University of Lodz	1	1.6%
Medical University of Lublin	3	4.9%
Silesian Medical University	1	1.6%
no data	2	3.3%
Total	**61**	**100.0%**

Methods

The quantitative study was conducted using an original questionnaire comprising 29 closed-ended and semi-open questions. It was divided into three main thematic blocks and an additional part with demographic questions:

1. Networking

2. Professional and educational events

3. Networking skills.

The material was collected with the use of docs.google.com. The respondents were selected with the use of snowball sampling, consisting in reaching specific social groups using a particular group of leaders who forward the information to people that match the criteria to participate in the study, which is otherwise difficult to achieve. This method also takes advantage of social networking platforms where the questionnaire was distributed [12]. The statistical analysis of the results was conducted using STATISTICA 12.0 software. The following statistical tests were applied:

- Spearman's rank correlation coefficient (ρ);
- Mann-Whitney U test;
- Pearson's χ^2 test for independence
- Pearson's r correlation coefficient

For the analysis, the significance level was established at $\alpha=0.05$.

III. RESULTS

59.0% of the students have already encountered the term "networking." In that group, 41.7% of the students considered the definition "The process of sharing information, resources, mutual support and opportunities, carried out owing to existing relationships and maintaining relationships" as the most suitable for the term "networking." The second most popular (30.6%) definition was "Constant maintenance of relationship with a person or group of people who are important to us for professional reasons or because of the action we have undertaken. The relationship with these persons may help to achieve the aim pursued or get valuable information."

83.3% of those who have already encountered the term "networking" agreed with the statement that it should play a significant role in the activities related to public health.

More than 67% of the students said they had participated in professional and educational events and 32.8% of the respondents had not taken part in such events. Answering the question about creating opportunities by universities to participate in professional and educational events, 59.0% of the respondents said that their schools provided them with such possibilities.

Over half of the study participants (50.9%) reported that they consciously built their own brand by reaching out to proper contacts. See Figure 1 for the distribution of the remaining answers.
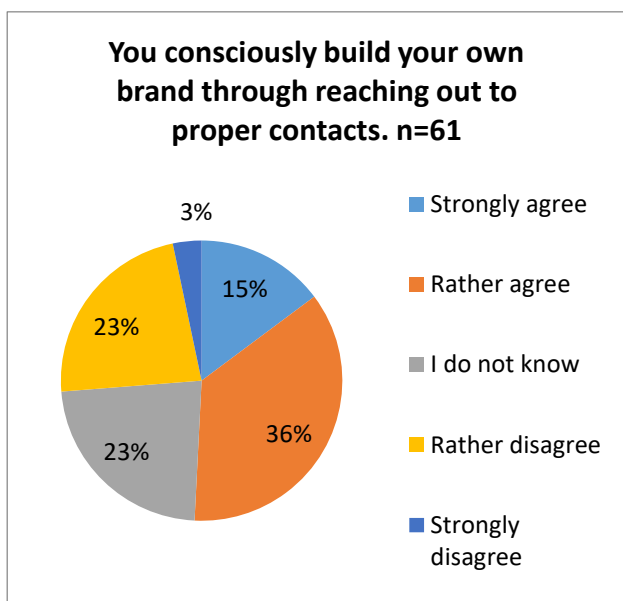
Figure 1. Distribution of the variable: "You consciously build your own brand through reaching out to proper contacts"

Almost 32% of the study participants answered in the affirmative to the question "Do you plan with whom to make acquaintance?"

Only 27.9% of the students listed their competencies without hesitation when asked to do so and as many as 57.4% of all said they could do it on reflection.

Choosing between persons a student would like to make contact with during meeting breaks, 41.0% of the respondents would choose both an employee of a private entity and a student of another university. The smallest number of persons (18.0%) would like to make contact with a manager of a private entity.

According to over 70% of the respondents, knowledge of their own competencies may contribute decisively to their professional success. Over 85% of all respondents believed that knowledge of their own competencies may influence the implementation of activities related to public health.

A positive correlation was found between a variable "If you were asked by a person you just met to list your competencies, would you do it?" and a variable "Knowledge of your own competencies has an impact on the chance for professional success". The more aware of their own competencies the students were, the more often they indicated the significance of being familiar with those competencies in achieving professional success. Correlation coefficient amounted to p=0.005399. See Table 2 for detailed values obtained in the analysis.

Table 2. Analysis of variables: "If you were asked by a person you just met to list your competencies, would you do it?" and "Knowledge of your own competencies has an impact on the chance for professional success "

If you were asked by a person you just met to list your competencies, would you do it?	Knowledge of your own competencies has an impact on the chance for professional success					
	strongly agree	rather agree	I do not know	rather disagree	strongly disagree	Total
Yes, without hesitation	**14**	**1**	**1**	**1**	**0**	**17**
% of the column	32.56%	7.69%	50.00%	50.00%	0.00%	
% of the line	82.35%	5.88%	5.88%	5.88%	0.00%	
% of the total	22.95%	1.64%	1.64%	1.64%	0.00%	27.87%
Yes, on reflection	**26**	**7**	**1**	**1**	**0**	**35**
% of the column	60.47%	53.85%	50.00%	50.00%	0.00%	
% of the line	74.29%	20.00%	2.86%	2.86%	0.00%	
% of the total	42.62%	11.48%	1.64%	1.64%	0.00%	57.38%
No, I won't	**1**	**4**	**0**	**0**	**0**	**5**
% of the column	2.33%	30.77%	0.00%	0.00%	0.00%	
% of the line	20.00%	80.00%	0.00%	0.00%	0.00%	
% of the total	1.64%	6.56%	0.00%	0.00%	0.00%	8.20%
I do not know	**2**	**1**	**0**	**0**	**1**	**4**
% of the column	4.65%	7.69%	0.00%	0.00%	100.00%	
% of the line	50.00%	25.00%	0.00%	0.00%	25.00%	
% of the total	3.28%	1.64%	0.00%	0.00%	1.64%	6.56%
Total	**43**	**13**	**2**	**2**	**1**	**61**
% of the total	70.49%	21.31%	3.28%	3.28%	1.64%	100.00%

Analysis of the correlation between the variable: "Cooperation with other people who are often experts in various fields improves the efficiency of implementing tasks related to public health" and the variable: "Competencies may have an impact on the implementation of activities for public health" was found to be statistically significant. Those students who agreed with the statement that cooperation with others improves the efficiency of implementing tasks related to public health noticed the influence of the knowledge of their own competencies on the implementation of tasks related to public health. Correlation coefficient amounted

to p=0.00084. See Table 3 for detailed values obtained in the analysis.

Table 3. Analysis of variables: "Cooperation with other people who are often experts in various fields improves the efficiency of implementing tasks related to public health" and "Competencies may have an impact on the implementation of activities for public health."

Cooperation with other people who are often experts in various fields improves the efficiency of implementing tasks related to public health	Competencies may have an impact on the implementation of activities for public health				
	strongly agree	rather agree	I do not know	strongly disagree	Line Total
Strongly agree	**26**	**14**	**3**	**0**	**43**
% of the column	81.25%	66.67%	50.00%	0.00%	
% of the line	60.47%	32.56%	6.98%	0.00%	
% of the total	42.62%	22.95%	4.92%	0.00%	70.49%
Rather agree	**4**	**6**	**3**	**0**	**13**
% of the column	12.50%	28.57%	50.00%	0.00%	
% of the line	30.77%	46.15%	23.08%	0.00%	
% of the total	6.56%	9.84%	4.92%	0.00%	21.31%
Strongly disagree	**2**	**1**	**0**	**2**	**5**
% of the column	6.25%	4.76%	0.00%	100.00%	
% of the line	40.00%	20.00%	0.00%	40.00%	
% of the total	3.28%	1.64%	0.00%	3.28%	8.20%
Total	**32**	**21**	**6**	**2**	**61**
% of the total	52.46%	34.43%	9.84%	3.28%	

IV. DISCUSSION

On the basis of the analysis of the Public Health students' level of networking skills, it is impossible to state clearly whether it is "high" or "low." A need for analysis of a practical aspect of using skills known as networking skills as well as subjectivity of self-assessment carried out by students constitute major problems in clear description of the level of networking.

Particular attention needs to be drawn to variables analysed in the present study that refer to conscious brand building, planning of how to build a network, and aware-

ness of own competencies. Those aspects, the use of which was confirmed by a majority of the study group, are crucial for the effective (in the context of durability) establishment of network [3-5,9,13-15]. In addition, students listed the following aspects as important regarding establishing contacts: ease of expression, honesty, and trust building. Mere awareness of the importance of those values for development of relationship with another person may increase the level of networking skills.

Importantly, students noticed the significance of cooperation with others in order to effectively implement activities for public health. Authors of a study on using networks for the implementation of tasks related to public health also emphasised the importance of human relations and work within available networks for the action taken [16-20].

Participation in professional and educational events facilitates the establishment of new contacts since it is very likely to meet a person there that might be of help in the achievement of personal, professional, or social objectives. Despite the fact that the students participating in the present study attended such events, the study demonstrates that opportunities created by universities probably did not increase the frequency of their participation in professional and educational events. Therefore, it seems advisable to build awareness of the importance of networks for career development among Public Health students. This also seems necessary considering the negative answer provided by the students to the question about opportunities created by universities to participate in professional and educational events.

The study showed that the choice of people the students declared they would probably talk to and make contact with during meeting breaks is worrying. A student of another university and an employee of a public institution were indicated equally frequently. The smallest number of the study participants would like to make contact with a manager of a private entity. This demonstrated either a low self-assessment of one's own competencies or the presence of concerns resulting from upbringing in general not allowing one to establish a direct contact with persons being higher on the career ladder.

Uncertainty relating to the awareness of one's own competencies should also be considered as worrying. In spite of giving an affirmative answer to the question: "If you were asked by a person you just met to list your competencies, would you do it?", the most popular answer was: "Yes, after a second of consideration." This attitude demonstrated that the students had a general knowledge of their own competencies, which may presumably allow them to call themselves "specialists in public health." Faced with

the need for indicating specific narrow competencies and professional skills (e.g. development of prevention programmes, analysis of regional/employee health needs), a student needed time to name these competencies and skills. The lack of awareness of advantages and skills when attempting to establish contact with a new person and build their own brand may put in doubt a student's substantive knowledge and his/her own brand as well.

V. CONCLUSIONS

- Public Health students recognised the positive influence of cooperation with other people or group of people on career building and implementation of activities related to public health.

- A practical aspect of using networking skills should be included in the curriculum for Public Health and in the outcomes of education set out for this major.

- University-level schools offering programmes in Public Health should make students aware of their own competencies as well as of the importance of using networking and networking skills for the development of their careers and implementation of activities related to public health.

- It is necessary to conduct further studies of both theoretical and practical aspects among a larger group of students in order to get the full picture of networking skills of Public Health students.

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