

Evaluation of medical students' attitudes towards interprofessional education

Ewaluacja postawy studentów kierunków medycznych wobec interdyscyplinarnego nauczania

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Wprowadzenie. Udział Zakładu Higieny i Dietetyki Uniwersytetu Jagiellońskiego w międzynarodowym programie EIPEN stworzył nowe wyzwania dla interprofesjonalnego i interdyscyplinarnego nauczania studentów kierunków medycznych w Polsce.

Cel pracy. Ocena postawy studentów medycyny i pielęgniarstwa wobec interprofesjonalnego nauczania.

Metody. Stu dwudziestu trzech studentów 4 roku medycyny i stu dwóch studentów 4 roku pielęgniarstwa udzieliło odpowiedzi na pytania anonimowej ankiety dotyczące ich opinii na temat wspólnych teoretycznych i praktycznych zajęć w czasie ich studiów.

Wyniki. Wszyscy studenci pielęgniarstwa byli zainteresowani wspólnymi zajęciami ze studentami medycyny, lecz tylko 64% przyszłych lekarzy wyrażało chęć odbycia takich zajęć z przyszłymi magistrami pielęgniarstwa.

Wnioski. Interprofesjonalne nauczanie mogłoby być nowym wymiarem na polskich uczelniach medycznych, ale potrzebne są pewne podstawowe zmiany w planie zajęć studentów oraz w ich nastawieniu.

Słowa kluczowe: *interprofesjonalne nauczanie, EIPEN, studenci medycyny i pielęgniarstwa, wspólne zajęcia*

Background. The participation of the Department of Hygiene and Dietetics, Jagiellonian University in EIPEN created new challenges for interprofessional and interdisciplinary activity among medical students.

Aim. To evaluate the attitudes towards interprofessional education among medicine and nursing students.

Methods. One hundred twenty three students from the 4th year of the Medical Faculty and one hundred and two students from the 4th year of the Nursing Faculty gave responses to the questions of an anonymous questionnaire about their opinions regarding joint theoretical and practical classes during their studies.

Results. All future nurses wanted classes together with future doctors but only 64% of future doctors wanted them with future nurses.

Conclusions. Interprofessional education could be a new approach to teaching at Polish Medical Universities but some basic changes in students' curricula and in students' attitudes are needed.

Key words: *Interprofessional education, EIPEN, medicine and nursing students, common classes*

© Hygeia Public Health 2012, 47(4): 448-452

www.h-ph.pl

Nadesłano: 15.10.2012

Zakwalifikowano do druku: 15.11.2012

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Presently in Polish medical universities multi-professional activity is not common and it is realized usually in scientific research aspect by a multi-professional team. What is presently planned in the teaching field is introducing not only multiprofessional but also interprofessional learning. According to H. Barr [1] the multiprofessional learning is a situation when the students of different professions, such as nurses, physiotherapists and medical students, study side by side as during a lecture but do not communicate with each other. By interprofessional learning we understand the above mentioned situation with interactions with each other. It seems to be real in Polish conditions

thanks to the fact that the Department of Hygiene and Dietetics, Jagiellonian University Medical College in Krakow, Poland joined the European Interprofessional Education Network (EIPEN) in September 2005.

The European Interprofessional Education Network grew out of the UK Triple project and the network structure of the Higher Education Academy Subject Centres [2, 3]. The EIPEN partnership started in 2004 with partners in Greece, Finland, Hungary, Poland, Sweden and the UK and then expanded to Ireland, Belgium, and Slovenia (www.eipen.org) [4]. The partnership developed through interests in IPE and in international partnerships. The driving force

to follow the idea of IPE at Jagiellonian University were three events in the range of EIPEN activity: Polish/British Conference "Interdisciplinary teaching-contemporary challenges for teachers and students", Krakow, 2006, the Conference "Learning together to work together", Krakow, 2007, and interprofessional workshop at Queens University in Belfast, Northern Ireland, 2008. Apart from the previous motivation towards IPE gained from the references [5-7] thanks to the Conferences we reached the recommended standards in the theoretical sphere [8, 9] and the Irish workshop gave us practical foundation.

In Belfast two participants from the Department of Hygiene and Dietetics JUMC learned that interprofessional learning for medical students and nursing students apparently could be very effective and enabled proper communication between students in their future work. The visit showed many practical aspects of IPE and encouraged the participants to consider new ideas in teaching medical students at Jagiellonian University. It was planned to present the IPE learning outcomes achieved in British universities to Polish students of medicine and nursing, who are expected to study together. The aim was to show these students that interprofessional learning would enable them to: demonstrate that they can work effectively as team members; demonstrate understanding and knowledge of their own role and the role of other healthcare professionals; demonstrate effective communication between a doctor, nurse and other members of medical team and the efficient management of emergencies and other situations; acknowledge own limitations and promptly identify the most appropriate person within the multi-professional team to carry out a comprehensive assessment of risk and work with the patient to ensure that any immediate necessary action is taken. The students will also be able to see some organizational limits and potential limits in their education that may not happen in real situation; develop critical thinking skills to make a careful and exact evaluation or judgment of a patient's condition; make correct diagnosis of symptoms to identify the exact cause of illness; remain calm and demonstrate patience under stressful situations when delivering care; take action promptly during emergencies and to call for professional assistance on time and give self-assessment of clinical learning and future achievement of competence in the practice setting.

In order to achieve these goals it became necessary to learn the attitudes of medical and nursing students towards learning with, from and about each other during their medical education at Jagiellonian University, Medical College. This is why the examination was undertaken.

Material & methods

The Department of Hygiene and Dietetics studied the program supervised by Funny Mitchel, the Project Manager North West London Strategic Health Authority/Imperial College London (our guest in the Department during the Conference) who described a successful large scale program to integrate interprofessional learning into the clinical teaching of all medical, nursing and other health-related specialty students attending universities in North West London. Clinicians teach in teams of different professions using interactive teaching methods. Interprofessional learning is now included in all student assessments [10].

The Jagiellonian University medical students have never before participated in classes together with future nurses. We believed that we would be able to organize interprofessional lectures and practical classes in the clinics. We wanted the students' opinions about joint classes. When the students finish the interprofessional course we will repeat the questionnaire and we will ask whether the interprofessional classes had been useful.

In the presented study one hundred twenty three students from the 4th year of the Medical Faculty and one hundred and two students from the 4th year of the Nursing Faculty were asked about their opinion concerning interprofessional, theoretical and practical classes during their studies.

A special short questionnaire was used. It was a preliminary questionnaire prior to the introduction of IPE classes. It consisted of one closed question: do you accept joint classes? (yes, no) and one open question: what kind of joint classes do you accept: theoretical, practical or maybe both? The students could explain why they accepted/ did not accept the idea of IPE.

Results

The number of students and the percentage distribution of answers obtained from questions of questionnaire are presented on Tab. I and Fig. 1.

Table I. The characteristics of opinions of medicine and nursery students about common classes

	Practical and theoretical		Practical		Theoretical	
	Yes	No	Yes	No	Yes	No
	N					
Doctors N=123	79	44	74	49	30	93
%	64,2	35,8	60,2	39,8	24,4	75,6
Nurses N=102	102	0	77	25	65	37
%	100,0		75,5	24,5	63,7	36,3
All N=225	181	44	151	74	95	130
%	80,5	19,5	67,1	32,9	42,2	57,8

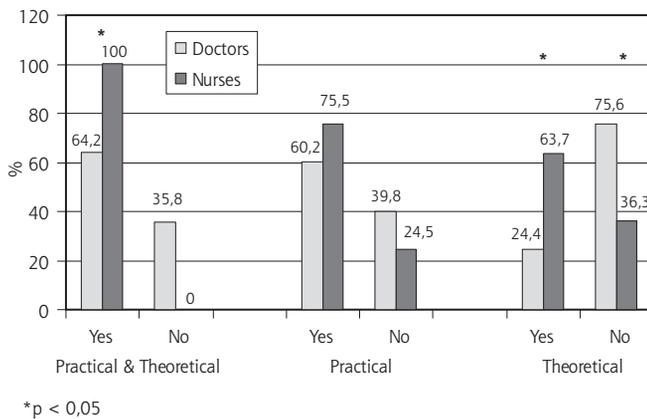


Fig. 1. The outcome of the questionnaire

One hundred percent of future nurses wanted classes together with future doctors and app. sixty four percent of future doctors wanted classes together with future nurses. App. seventy five percent of future nurses wanted practical classes together and app. 60% of future doctors wanted such classes. As far as theoretical classes are concerned, app. 63% of nurses and app. 24% of doctors wanted them together. App. eighty percent of future nurses and only app. 20% of future doctors wanted both theoretical and practical classes together.

The presented data show that future nurses are more open to an interprofessional approach to learning than future doctors. The nurses were more interested in having practical and theoretical classes together. Medical and nursery students will be able to demonstrate effective communication between a doctor, nurse and other members of the medical team. Medical students were rather resistant to this idea of joint lectures and practical classes, with explanations such as: “We have different curricula, too much material to learn so we do not have time for such experiments...”, “...Nurses have different duties in their work than doctors so maybe only practical classes are worth trying ...”, “Nurses have lower responsibility in their work than doctors so there is no sense in studying together...”.

The argument that was mentioned most often by medical students against interprofessional classes was the fact that the differences in students' curricula were too big, there was too much theory to learn and they had different roles and responsibilities in their future work.

Medical students claimed that they had always studied separately and were not accustomed to having classes together with students of other faculties. Their attitude towards interprofessional learning was rather sceptical and reluctant. They were not convinced that interprofessional classes are important for better communication and collaboration in future work.

The students should remember that the success in medical career is defined as professional competence, satisfaction with medicine as a career, occupational stress and burnout and quality of life (QOF) [11]. One of the elements of professional competence is good communication with other professionals, including nurses.

Discussion

Presently we need to face two new tasks in Poland: to overcome mental resistance of medical and nursery students and encourage them to do IPE and to change official establishments. First task seems easier than the second one. Poland is now more open towards Europe and the world (e.g. Erasmus, IFMSA and other programs) but the core curriculum of all subjects connected with preventive and prophylactic medicine is still regulated by standards approved on the ministerial level. The teaching system in Poland is based on departments not on courses, therefore it limits the possibility of interprofessional education. Individualization of programmes for medicine is also limited. There are not enough “general” lecturers with a problem-solving approach and an interprofessional scientific approach to health and sickness [12]. The main problem for implementing interprofessional education is the formal organisation of studies in each Medical University. This means that it will be necessary to have interdivisional contracts for interprofessional groups coming together (medicine, nursing) to enable interprofessional interactions: student to student, not only student to teacher [13]. Timetables for students are always very tightly organized with little time for anything extra, three strategies may be used to help overcome the resistance to taking on this new form of education:

1. Most crucially, to make IPL obligatory so that students have to do it.
2. To persuade the teachers that this is not additional work, and that it is an integral part of the curriculum.
3. To provide a lot of initial support in arranging dates that could be suitable for all concerned.

The results from our questionnaire showed that our students have similar stereotypical views as students from St George's Hospital Medical School with the Joint Faculty of Health Care Sciences of Kingston University. Tunstall-Pedoe et al. [14] have written that their students arrive at the university with stereotyped views of each other's professions, and that these views appear to become more exaggerated during the CFP - Common Foundation Programme. Students felt that the CFP would enhance interprofessional working, but there were concerns that it forced them to learn irrelevant skills. Students whose parents worked as

health care professionals, held stronger stereotyped views.

Some similarities can be found between Jagiellonian and Auckland University students in their attitudes towards IPE. Horsburgh et al. [15] noted that the majority of students of The Faculty of Medical and Health Sciences, University of Auckland reported positive attitudes towards shared learning. Nursing and Pharmacy students indicated more strongly that learning together would lead to more effective teamwork. Medical students were the least sure of their professional role, and considered that they required the acquisition of more knowledge and skills than nursing or pharmacy students.

During our IPE courses we plan to present to our students the results of research by the University of Manchester which showed that pre- and post self-evaluation of confidence levels for taught skills revealed a statistically significant increase for all skills [16].

K Hallin et al. [17] noted that all student groups perceived improved knowledge of the other professions' work; their assessment was that the course had contributed to the understanding of the importance of communication and teamwork to patient care and that medical students had the greatest gain. These findings will be very helpful in persuading our sceptical medical students to be more open to the idea of IPE.

Almås, Synnøve, Hofseth [18] have stated that students with longer interprofessional education appreciated interprofessional practice more than those with shorter interprofessional education. We believe that our students will agree with this conclusion after a few IPE courses.

Medical students from Jagiellonian University will be expected to play their roles as doctors in the multi-professional team as in a real hospital situation along with nurses. Interprofessional practical activities and seminars are essential for these professions to understand each other better. It is important for students to be taught by practicing clinicians with the use of interactive learning, rather than academics. Students should be working and resolving problems together, not merely listening passively. The type of activity in which they learn about each others' roles

and responsibilities should be maximized. We suspect that students may be often surprised at how much they themselves learn about their colleagues from other professions, and may enjoy working in a new way with them. We agree with Swedish scientists [17] that interprofessional collaboration (IPC) in teams is assumed to be beneficial because it allows a more holistic approach to patient care than is possible in uniprofessional care. Patients in Poland would perceive a higher grade of quality of care as compared to controls with no signs of disadvantages when treated and informed by supervised interprofessional student teams. There are many educational challenges among teachers and students.

Similarly to Trowler and Sanders' metaphor: "think about the wood as well as the trees, the dance as well as the dancers" [5] we also plan to start in a small way, plan meticulously, ensure support from more experienced, build a strong team of IPE enthusiasts staff.

Conclusions

1. Medical students are reluctant to have common classes with nurses. Particularly it concerns theoretical classes. One of the possibilities of diminishing this reluctance in Polish medical students is inviting British lectures to Polish Universities or an international student exchange.
2. Interprofessional learning, both theoretical and practical for medical and nursing students has many advantages. Some basic changes in students' curricula and awareness are needed before IPE can be implemented as a new approach in teaching and learning.
3. There is a need for good health and social care in Poland and some reforms are required in order to deal with the challenges of the long term needs of our population. Bigger efficiency in the use of resources must be achieved. There is also the need for wider collaboration between organisations and between the professions. The intention of these changes is to instil collaboration as normative to professional practice across the entire new patterns of interprofessional relationships and it should be done at the university level.

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