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Opinion of medical students on the role of a physiotherapist in providing health services

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Abstract

Introduction. An extremely important aspect of the efficient work of the therapeutic team is the knowledge of the rights and the range of tasks of each specialist who is part of it. In order to increase the efficiency of the physiotherapist's activity in the treatment and rehabilitation of patients, on September 25, 2015, the Act on the Physiotherapist's profession was passed. Despite the fact that the Act is more than 3 years old, there are no reports on the awareness and opinions of medical circles about it.

Objective of the study. The aim of the study was to examine the opinions of future doctors students of the 4th, 5th and 6th year of the medical faculty on the role of a physiotherapist in providing health services.

Material and methods. 225 people from several medical schools in Poland (144 women and 81 men) took part in the survey. The questionnaire was based on the Physiotherapist Act and included questions about the students' opinions on the physiotherapists' rights, their role and competence in the rehabilitation process.

Results. A significant proportion of future doctors do not have full knowledge of some of the physiotherapist's rights and the range of tasks. As many as 48.8% of the respondents disagree or have no opinion on the physiotherapist's possibility to refuse to perform the services ordered by a physician. Almost every third person thinks that physiotherapists do not have enough knowledge to conduct the functional diagnosis of the patient. According to 29.3% of respondents, a physiotherapist can not expect a physician to justify an order for physiotherapy.

On the other hand, the vast majority of the study group believes that the physiotherapist should look after the patient from the first day after the surgery and consider the physiotherapist an inseparable part of the therapeutic team. As many as 84% of students want to cooperate with a physiotherapist in the future.

Conclusions.

- 1. A significant percentage of students of medicine estimate the competences and skills of physiotherapists to be lower than guaranteed by the Act on the Profession of Physiotherapy.
- 2. The awareness of students of medicine regarding the competences of physiotherapists set out by the Act is insufficient, which may decrease the efficiency of a healthcare team.
- 3. Students of medicine consider the role of physiotherapists in the process of treatment and recovery of patients significant.

Keywords: Physical Therapy Speciality, Intersectoral Collaboration, Public Opinion

Introduction

From 25 September 2015, the physiotherapist's profession is regulated by a dedicated law, detailing the rights, duties and scope of competence of people performing this profession. Undoubtedly, the most important provision in the Act is the one concerning a full independency of the physiotherapist. Thanks to this, a properly qualified physiotherapist has full powers to perform a functional diagnosis as well as to plan, conduct and evaluate the results of rehabilitation. The Act also gives physiotherapists the rights and abilities to increase patient safety, including the possibility of requesting the referral's medical grounds, receiving full medical information about the patient and refusing to perform a medical order [1].

The provisions of the Act go hand in hand with the trend of interdisciplinary medicine, which according to the current sources is the most effective way to restore the patient's health [2,3]. It implements specific means of communication to the therapeutic team, which may be used by physiotherapists, but also defining their competence, indicates what other team members can expect from physiotherapists [4]. Therefore, the knowledge of the provisions of the Act by all people involved in the process of restoring the patient to health is extremely important for efficient communication.

At the stage of designing the content of the Act, its provisions met with protests from the medical community. There were official complaints filed by medical chambers, which were mostly dismissed [5]. Some doctors don't want anyone besides them to plan rehabilitation. They believe that the lack of supervision of doctors can be a threat to the health of patients. Another problem for them is an unjustified from the perspective of the law fear that physiotherapist are not well prepared for differential diagnosis. That is why, the Act contains provisions with which some of the medical community did not agree [6]. This raises the risk of disturbing a well-functioning interdisciplinary therapeutic team.

Another factor that can negatively affect the physiotherapist's position in the therapeutic team is the small amount of hours devoted to the importance of rehabilitation in the medical study curriculum. Usually, it amounts to just over a dozen hours in the perspective of six years of study [7,8].

Objective of the study

The aim of the study was to determine the current position of students of the medical faculty towards the assumptions of the Physiotherapist Act.

Material and methods

The survey included 225 students (including 144 women and 81 men, which accounted for 64% and 36% of respondents respectively) of the IV, V and VI year of medical studies. It was carried out in 2019 at several medical universities in Poland. The average age of the respondents was 23.56 ± 1.55 years, with the oldest person being 33 years old, while the youngest was 21.

The highest percentage of respondents were students living in large cities with a population of over 250,000 of inhabitants (57.3%), slightly fewer people from cities with less than 250,000. residents (31.1%). The smallest part of the group were those living in villages (11.6%).

Subjects of the study were students of medicine in Poland. The largest group of subjects comprised doctors-to-be from the West Pomerania Voivodeship, to be more exact, from Pomeranian Medical University (30.6%). The voivodeship with the second largest group of subjects in this study was the Kuyavian-Pomeranian Voivodeship with students of the Collegium Medicum of Nicolaus Copernicus University (16.7%). A large percentage of all subjects were also students from the following voivodeships: Silesian – the Medical University of Silesia (14.4%), Mazovian – the Medical University of Warsaw (12.6%), and Lublin – the Medical University of Lublin (12.2%).

The subjects of this study were 4-, 5- and 6-year students of medicine. Those specific groups spend a large amount of time in hospitals and are already able to form an opinion on working alongside professionals of other medical occupations, specifically, practicing doctors and physiotherapists. At that stage of studies, doctors-to-be have already possessed the knowledge of the competence, rights and duties of their future co-workers. Due to that, the study was conducted among people who have already completed several years of medicine studies.

The diagnostic tool in this project was a diagnostic survey containing 17 questions regarding the knowledge of doctors-to-be about the rights, duties and skills that practicing physiotherapists should have. In order for the questions in the survey to be reliable, it was prepared on the basis of the Act of the Profession of Physiotherapy. Then, copies of the survey were sent to students via the Internet or distributed on paper.

Statistical analysis of results was conducted in the program R Studio 1.1.463. Correlations were calculated with the use of the Spearman's rank correlation coefficient.

Results

Results show that most (176, 78.2%) doctors-to-be believe that physiotherapists are qualified to select suitable medical devices (e.g. crutches, canes, anti-bedsore mattress, walking frame) within the scope of their profession. Advanced students of the faculty of medicine also mostly agree that physiotherapists are qualified to commission (172, 76.5% affirmative responses) and teach the use of (201, 89.3%) such devices.

Most subjects (159, 70.7%) agree with the statement that a physiotherapist is able to solve some health issues of patients without consulting a doctor. A great majority of subjects express the will to work alongside a physiotherapist in the future (189, 84%) and consider a physiotherapist an integral part of the healthcare team (195, 86.7%).

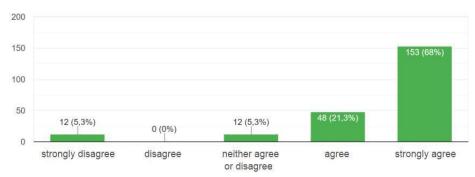
84,8% of 4-, 5- and 6-year students of medicine agree with the statement that a physiotherapist should be involved in the recovery of a patient from the first day after surgery. 55.5% of subjects agree with the statement that a physiotherapist should participate in the preparation of a patient for surgery.

29.3% of students surveyed do not agree with the statement that physiotherapists have the knowledge and qualifications required for functional diagnostics of a patient. 29.3% is also not certain if a physiotherapist can request a justification from a doctor regarding a

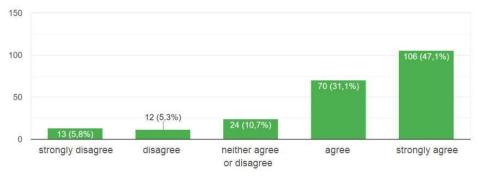
commission of physiotherapy. 48.8% of subjects do not agree with or does not have an opinion on the possibility of a physiotherapist refusing to provide the service commissioned by a doctor.

A high positive correlation (R=0.63, p<0.001) was demonstrated between the attitude of subjects towards the statement: "Physiotherapists have sufficient knowledge and qualifications for functional diagnostics of patients." and the attitude towards the statement: "Physiotherapists have sufficient knowledge and qualifications to select medical devices suitable for individual patients within the scope of physiotherapy." (such as orthoses, orthopaedic insoles, etc.). A moderate positive correlation (R=0.468, p<0.001) was also shown between the responses to the statement that the knowledge and qualifications of a physiotherapist are sufficient for functional diagnostics of a patient and the responses to the statement: "A physiotherapist can request justification from a doctor regarding the necessity of performing a service within the scope of physiotherapy."

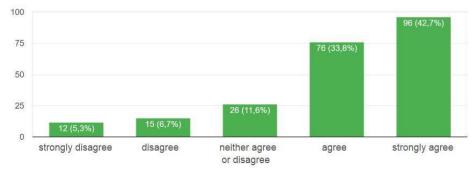
There was no statistical significance links in terms of gender, age and place of residence compared with answers.



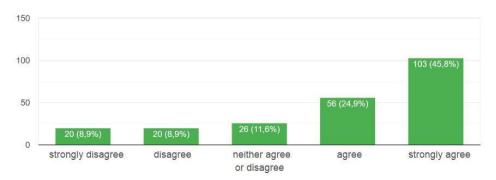
Question 1. Physiotherapists have sufficient knowledge and qualifications for functional diagnostics of patients.



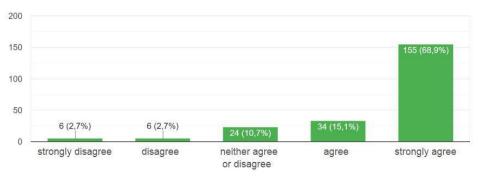
Question 2. Physiotherapists have sufficient knowledge and qualifications to commission medical devices within the scope of physiotherapy.



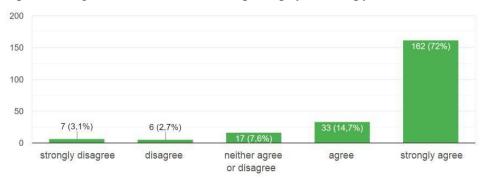
Question 3. Physiotherapists have sufficient knowledge and qualifications to select medical devices suitable for individual patients within the scope of physiotherapy.



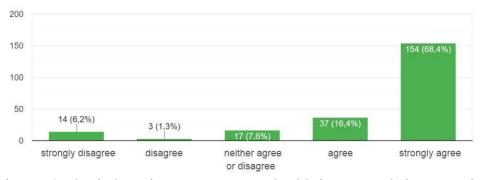
Question 4. Physiotherapists have sufficient knowledge and qualifications to teach patients the use of medical devices within the scope of physiotherapy.



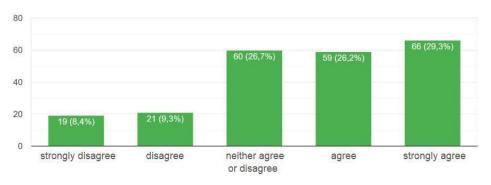
Question 5. A physiotherapist can request justification from a doctor regarding the necessity of performing a service within the scope of physiotherapy.



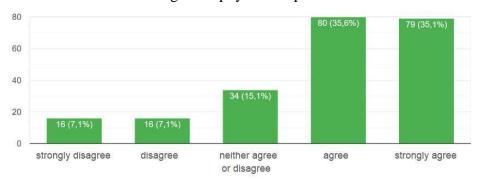
Question 6. A physiotherapist can refuse to perform a service within the scope of physiotherapy commissioned by a doctor.



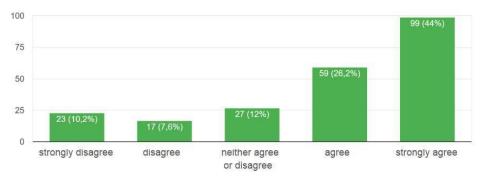
Question 7. A physiotherapist can treat some health issues on their own, without consulting a doctor.



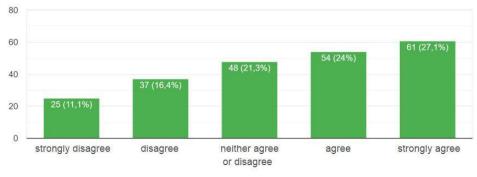
Question 8. I want to work alongside a physiotherapist in the future.



Question 9. A physiotherapist is an integral part of a healthcare team.



Question 10. A physiotherapist should participate in the preparation of a patient for surgery.



Question 11. A physiotherapist should be involved in the recovery of a patient from the first day after surgery.

Discussion

Doctors play a crucial role not only in the treatment of patients, but also in shaping their patients' views on health issues [9,10]. Increase of physicians' awareness and openly stating that a physiotherapist can treat some health problems on their own can reduce the work

overload experienced by doctors, which would solve one of the main problems that plague the public healthcare system in Poland [11]. Considering the specific nature of some ailments, the help of a physiotherapist can also prove more beneficial and, due to the high cost for pharmacological treatment, more economical for a patient than visiting a doctor. Another matter of great importance is the reduction of the patient's exposure to the inevitable side effects of pharmacological treatment. It is also worth mentioning that in cases when a physiotherapist is able to fix the cause of an ailment, it proves much more efficient in the long-term (consequently, more economical as well in terms of public insurance costs) than pharmacological symptomatic treatment [12, 13, 14].

The fact that most subjects stated their will to work with physiotherapists in the future gives hope that striving for interdisciplinary healthcare teams bound by close cooperation with all of its members will become an actual state of affairs, which is essential in effective patient recovery [4]. The results of this study also show that doctors-to-be acknowledge the importance of physiotherapy in the process of treatment and recovery of patients.

When it comes to the involvement of physiotherapists in preparation for surgery, which, similarly to therapy after surgery [15, 16], significantly reduces recovery time, particularly from the orthopaedic point of view, it is important to notice that the knowledge of almost half of students of medicine on that subject is incomplete. Preparing patients properly for the difficulties they will face after surgery allows to reduce the consequences of surgery and the time needed for them to recover and regain independence [17, 18, 19, 20]. The opinion of a physiotherapist in the functional assessment of a patient can also prove significant to surgeons and allow them to choose the best surgical tools and methods.

The Act on the Profession of Physiotherapy guarantees sufficient competences and qualifications of licenced physiotherapists authorised to exercise profession. One of the aims of the Act is assuring not only patients, but also representatives of other medical specialisations that physiotherapists have the skills expected from them and are required to keep them up to date with current academic reports (Continuing Education Requirement). The assumption that the competences of a physiotherapist are lower than factual can result in erroneous estimation of relevant information by a patient, which can further lead to unsuccessful communication between them, doctors and physiotherapist and, consequently, decrease the quality of service offered to the patient. The awareness of physiotherapists' competence regarding functional diagnostics is also relevant to the diagnosis, as a physiotherapist is the one who should conduct functional diagnostics due to their skills and experience in that matter. The correlations demonstrated in this study show that better awareness of a physiotherapist's qualifications is connected with better dialogue, which is essential to efficient interdisciplinary cooperation. It can be concluded that a higher number of hours dedicated to educating future doctors in rehabilitation may improve the situation.

Doctors must be aware that many factors can prevent a physiotherapist from performing in the case of a given patient. A long period of time between the commission and its performance during which the state of the patient may change, contraindications found during examination by a physiotherapist and awareness that everyone can make a mistake are factors that must be considered as possible and absolutely recognised by doctors.

Considering the fact that physiotherapists are held responsible for potential consequences of the treatment they carry out, efficient cooperation within the healthcare team requires their freedom to request justification on any given commission. Apart from that, the incomplete awareness of doctors regarding the right of a physiotherapist to do so may result in communicative problems, such as incorrect doctor's referals, which may put the patient's health in danger. According to that information it is extremely important to create a well-organised team which would have two main rules: well-being of patients and cooperation between all co-workers.

Conclusions

- 1. A significant percentage of students of medicine estimate the competences and skills of physiotherapists to be lower than guaranteed by the Act on the Profession of Physiotherapy.
- 2. The awareness of students of medicine regarding the competences of physiotherapists set out by the Act is insufficient, which may decrease the efficiency of a healthcare team.
- 3. Students of medicine consider the role of physiotherapists in the process of treatment and recovery of patients significant.

Bibliography

- 1. Ustawa z dnia 25 września 2015 r. o zawodzie fizjoterapeuty, Dz.U. 2015 poz. 1994 http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20150001994 (access: 08.06.2019)
- 2. Axelsson R, Axelsson SB. Integration and collaboration in public health-a conceptual framework. Int. J. Health Plann 2006;21(1):75-88. doi:10.1002/hpm.826
- 3. Michael J. Dowling. The need for interdisciplinary medical education. https://www.northwell.edu/news/the-need-for-interdisciplinary-medical-education (access: 08.06.2019)
- 4. Neumann V, Gutenbrunner C, Fialka-Moser V, Christodoulou N, Varela E, Giustini A, et al. Interdisciplinary Team Working in Physical and Rehabilitation Medicine. J Rehabil Med 2010;42(1):4–8(5). doi: 10.2340/16501977-0483
- 5. Wróblewska K. Lekarze przeciwni ustawie o zawodzie fizjoterapeuty. https://www.medexpress.pl/start/lekarze-przeciwni-ustawie-o-zawodzie-fizjoterapeuty/61620/ (access: 08.06.2019)
- 6. Lisowska K. Lekarze mają wątpliwości, czy fizjoterapeutom nie pozwolono na zbyt wiele... http://www.rynekzdrowia.pl/Polityka-zdrowotna/Lekarze-maja-watpliwosci-czy-fizjoterapeutom-nie-pozwolono-na-zbyt-wiele,191527,14.html?fbclid=IwAR2-6BIQsucb3mNusZnCjda6HXOUF6AOru9tOOqXlZKM2zIT4T3S_tNqUzY" (access: 08.06.2019)
- 7. https://www.pum.edu.pl/studenci/dziekanaty/dziekanat-wydzial-lekarski/plan-studiow (access: 08.06.2019)
- 8. https://www.lekarski.umed.wroc.pl/lekarski-plan-zajec (access: 08.06.2019)
- 9. Stewart MA. Effective physician-patient communication and health outcomes: a review. CMAJ 1995;152(9):1423–1433.
- 10. Dharamsi S, Ho A, Spadafora SM, Woollard R. The Physician as Health Advocate: Translating the Quest for Social Responsibility Into Medical Education and Practice. Acad Med 2011;86(9):1108–13. doi: 10.1097/ACM.0b013e318226b43b
- 11. Cichocka E. Dlaczego kolejki do specjalistów są długie. http://wyborcza.pl/TylkoZdrowie/1,137474,19404038,dlaczego-kolejki-do-specjalistow-sa-dlugie.html (access: 08.06.2019)
- 12. Oldmeadow LB, Bedi HS, Burch HT, Smith JS, Leahy ES, Goldwasser M. Experienced physiotherapists as gatekeepers to hospital orthopaedic outpatient care. Med J Aust 2007;186(12): 625-628.
- 13. Fritz JM, Cleland JA, Speckman M, Brennan GP, Hunter SJ. Physical Therapy for Acute Low Back Pain: Associations With Subsequent Healthcare Costs. Spine 2008;33(16):1800–1805. doi: 10.1097/BRS.0b013e31817bd853
- 14. Whitehurst DG, Lewis M, Yao GL, Bryan S, Raftery JP, Mullis R, Hay EM. A brief pain management program compared with physical therapy for low back pain: Results from an

- economic analysis alongside a randomized clinical trial. Arthritis Care Res 2007;57(3): 466-473. doi:10.1002/art.22606
- 15. Roos EM. Effectiveness and practice variation of rehabilitation after joint replacement. Curr Opin Rheumatol 2003;15(2):160–1622.
- 16. Stineman MG, Kwong PL, Kurichi JE, Prvu-Bettger JA, Vogel WB, Maislin G, et al. The Effectiveness of Inpatient Rehabilitation in the Acute Postoperative Phase of Care After Transtibial or Transfemoral Amputation: Study of an Integrated Health Care Delivery System. Arch Phys Med Rehabil 2008;89(10):1863–1872. doi:10.1016/j.apmr.2008.03.013.
- 17. McGregor AH, Rylands H, Owen A, Doré CJ, Hughes SPF. Does preoperative hip rehabilitation advice improve recovery and patient satisfaction? J Arthroplasty 2004;19(4):464–468. doi:10.1016/j.arth.2003.12.074
- 18. Nagarajan K, Bennett A, Agostini P, Naidu B. Is preoperative physiotherapy/pulmonary rehabilitation beneficial in lung resection patients? Interact Cardiovasc Thorac Surg 2011;13(3):300–302. doi: 10.1510/icvts.2010.264507
- 19. Coudeyre E, Jardin C, Givron P, Ribinik P, Revel M, Rannou F. Could preoperative rehabilitation modify postoperative outcomes after total hip and knee arthroplasty? Elaboration of French clinical practice guidelines. Ann Readapt Med Phys 2007;50(3):189–197. doi: 10.1016/j.annrmp.2007.02.002
- 20. Huang S-W, Chen P-H, Chou Y-H. Effects of a preoperative simplified home rehabilitation education program on length of stay of total knee arthroplasty patients. Orthop Traumatol Surg Res 2012;98(3):259–264. doi: 10.1016/j.otsr.2011.12.004