ATTITUDES OF MEDICAL STUDENTS TOWARDS THE COVID-19 PANDEMIC IN THE SOCIOLOGY OF MEDICINE

DOI: 10.26399/meip.3(70).2020.19/m.madziala

INTRODUCTION

The impact of socio-cultural factors on the health of societies is not questioned by anyone today, and the sociology of health, disease and medicine is one of the most dynamically developing fields of sociology in Poland. It is proved by facts indicating a growing group of sociologists of medicine, as well as a growing number of publications and academic textbooks devoted to health issues: Barański, and Piątkowski (2002); Ostrowska (2009); Piątkowski (2009); Tobiasz-Adamczyk (2010).

In terms of the historical aspect, Magdalena Sokołowska is considered the mother of the Polish sociology of medicine (Klingemann, and Sokołowska 2011). The impact of contemporary health problems on the sociology of medicine is no longer just a selective issue, but due to the COVID-19 pandemic, sociological issues are already being studied and observed almost everywhere in the world.

The emergence of a previously unknown form of severe pneumonia in November 2019 at first surprised health care units of the city of Wuhan with nearly 9 million-population in the Chinese province of Hubei, and soon the entire province, which has 58.4 million inhabitants. This event received the highest epidemiological priority, and started a race of scientists, busily searching for the causative agent of this mysterious disease and ways to

^{*} Marcin Madziała – PhD, MSc, EMT-P, Lazarski University, Faculty of Medicine, e-mail: marcin.madziala@lazarski.pl, ORCID 0000-0001-5808-4743

combat it. The disease was named COVID-19 and the causative pathogen was named SARS-CoV-2 virus (Duszyński et al. 2020). According to the data of the Ministry of Health (Raport zakażeń koronawirusem 2021), from the identification of the first case in Poland, i.e. from 4 March 2020 to 21 March 2021, a total of 2 058 550 people were infected, 352 423 became ill, 1 656 827 recovered and 49,300 died.

The above statistical data clearly indicate problems which the sociology of medicine examines in a multifaceted manner, bearing in mind, among other things, the role, tasks, and efficiency of health care in fighting the pandemic, the social situation resulting from contracting the disease, the course of disease and further care resulting from complications, as well as the fact relating to the health situation after the end of the pandemic. Therefore, research into the attitudes of future physicians towards the current situation seems fully justified because, as students, they experience the beginning of their medical destinies related to the further treatment of patients who have and will have long-term complications following infection with the SARS-CoV-2 virus, as well as its pathogenic form COVID-19, which currently has one of the most severe courses.

1. Materials and Methods of Study

The study involved 150 medical students in their first, third and sixth year, who successfully completed the medical sociology course. There were 50 respondents in each year of study. In terms of gender, the majority were men (86), who constituted 57.33% of the respondents. The study was voluntary. For the research purposes, a questionnaire was used consisting of 7 questions, 2 of which required self-assessment concerning the occurrence of the pandemic and the level of knowledge about it, and 5 other aspects surveyed related to the sociology of medicine and diseases caused by the SARS-CoV-2 virus. Questions 4 and 6 were multiple-choice ones. The survey results were compiled with the use of Microsoft Excel for Office 365.

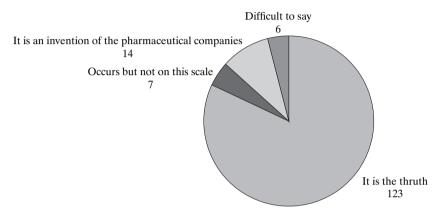
2. Results of the Survey

Question 1 asked for self-assessment of the students' awareness of the problem of the pandemic caused by the SARS-CoV-2 virus. The vast majority, 82% of the respondents, acknowledged the actual existence of the pandemic,

14% did not recognise its existence, while only 6 persons did not express their opinion.

Figure 1

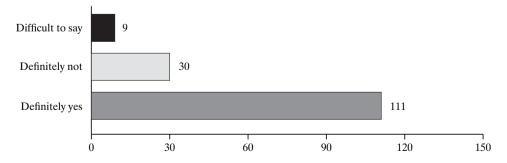
Question 1. In your opinion, how would you rate the phenomenon of the pandemic problem caused by the SARS-CoV-2 virus?



Source: author's own elaboration based on the survey.

In question 2, the respondents were asked whether the end of the epidemic would have any significance for their professional work. The majority (111) acknowledged the fact that the current pandemic will have an impact on the nature of their professional work. 30 students surveyed denied this and only 9 students could not decide.

Figure 2 Question 2. Will the end of the epidemic make any difference to your career?

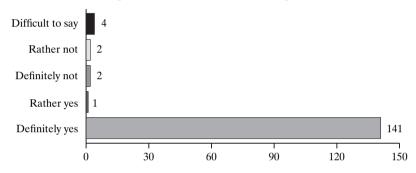


Source: author's own elaboration based on the survey.

Question 3 was intended for revealing whether sociological research into the occurrence of SARS-CoV-2 virus would be helpful in further treatment of patients. 94% of the students considered that sociological research would definitely be helpful in the further treatment of people who fell ill. Only 1 person considered it to be rather a fact, while the rest of the respondents denied it or could not decide.

Figure 3

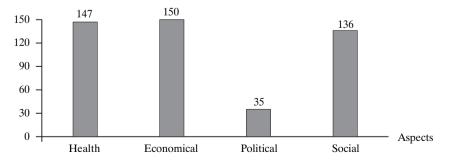
Question 3. Will sociological studies in the aspect of SARS-CoV-2 virus be helpful for further treatment of patients?



Source: author's own elaboration based on the survey.

In question 4, it was necessary to provide information about the impact of the pandemic on the Polish population. The vast majority (an average of 144) of the future physicians answered that it has a multifaceted dimension, which includes health, economic and social aspects. 35 of them also considered the political aspect.

Figure 4 Question 4. What is the impact of the pandemic on the population of Poland?*



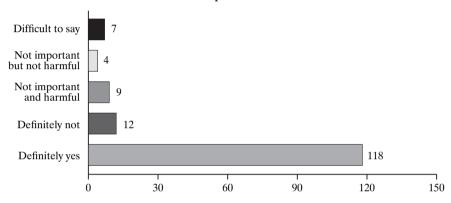
^{*} Multiple-choice.

Source: author's own elaboration based on the survey.

Question 5 asked about the validity of vaccination in terms of the health of the world population. 118 respondents considered that preventive vaccinations have an impact on the development of the pandemic, which was the vast majority. 9 students specified harmfulness and lack of importance, while the rest could not specify their opinion.

Figure 5

Question 5. Does the current SARS-CoV-2 vaccination affect the future of the pandemic?

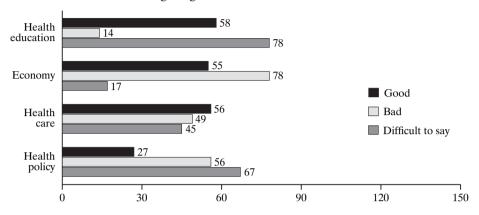


Source: author's own elaboration based on the survey.

Question 6 concerned all activities within the aspect of the fight against the coronavirus and the state's preparedness. Health education, within the framework of which Poles have the opportunity to raise awareness of the pandemic, received the most positive opinions (78 respondents). The same number of the respondents assessed the state of finance allocated for the fight against coronavirus negatively. It should be noted that the small number of the answer "good" was received by actions related to health care units and those related to the health policy implemented by the state.

Figure 6

Question 6. How do you assess the different areas in terms of the fight against coronavirus in Poland?*



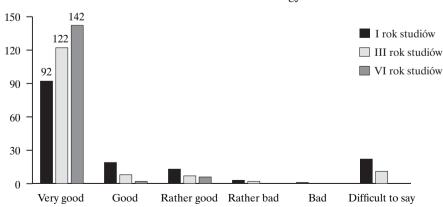
^{*} Multiple-choice.

Source: author's own elaboration based on the survey.

Question 7 concerned the determination of one's own level of knowledge in each year of education, which links the fact of the pandemic and the role of the sociology of medicine. The vast majority of the students in their respective years of study (I - 92, III - 122, VI - 142) described their level as very good. It was also noted that 33 of them did not have a precise opinion.

Figure 7

Question 7. How would you rate your level of knowledge about the pandemic and the role of medical sociology in it?



Source: author's own elaboration based on the survey.

3. SOCIOLOGY OF MEDICINE

The sociology of medicine is one of the few sub-disciplines that, having evolved out of general sociology but being based on its theoretical foundations and methodological assumptions applicable in increasingly developing empirical research, have achieved so much in a relatively short period of time. It has established itself not only in contemporary sociological thought, but also equally importantly in medical science, or health sciences in general (Tobiasz-Adamczyk 2015). Sociological research nowadays directly translates into these fields of medical science, and thus its beginning has important implications for the attitudes of future medical personnel. The sociology of medicine is taught at many key medical faculties as early as the first year of study. Although it seems incomprehensible to young medical students, experience shows that every experienced medical professional often becomes a sociologist, without even being aware of it.

The study of medical students examining the aspect of the sociology of medicine, after its interpretation, allows the lecturers of this subject to adopt appropriate attitudes, thus contributes to the constant correction of the content and methods in order to convey the idea of this field of science in the most understandable way. While analysing the sociological aspect of modern times, when we face a great epidemiological problem, it should also be remembered that the present day allows future medics unlimited access to all sources of information, especially so since the modern form of studying is closely related to access to computer solutions. The study by Łódzki (2017: 121-136) clearly indicates that traditional and social media not only reflect reality, but also create it. Interest in COVID-19 (measured by the intensity of the topic coverage on the Internet) is unrelated to the officially reported pressure of the virus (measured by frequency) and probably the physical risk of infection in Poland. As traditional media overtake social media, we recommend choosing traditional news media for rapid dissemination of information, but using social media for greater impact. Otherwise, public information campaigns may have less impact on the public than expected (Jarynowski et al. 2020).

The current epidemiological situation almost forces us to take sociological patronage over its aspects, due to the fact that further complications of the disease are unknown, and thus preparing future medics for analysis and observation is fully justified. The seemingly narrow field of sociology allows for adapting all methods in such a way that every medical professional that deals with patients will understand the socio-cultural dimension of the

sociology of medicine. Nowadays, sociologists collaborate with physicians in a multidisciplinary way, studying and analysing human health problems, improving the well-being and the quality of life of the population (Balarezo-López 2018). Linking the sociology of medicine to the actions and awareness of physicians, among others, allows for the creation of appropriate rules, attitudes, and responses, especially when the current pandemic has consequences for social relations at the level of mental and somatic health, which is not resolved in any way by any restrictions imposed by the governments of various countries (Gloster et al. 2020). A study by Wang et al. shows that the COVID-19 pandemic has a significant impact on the attitudes adopted by older people, manifested by a double increase in anxiety among this age group. Based on such analyses, it is concluded that more attention should be paid to the mental state of the elderly in rural areas and people kept in quarantine or persons close to the quarantined for the purpose of medical observation (Wang et al. 2020). The study of the attitudes and needs of students in terms of the sociology of medicine in the era of the SARS-CoV-2 pandemic is not only a need for analysis related to the future physician-patient relationship; in this case also a future physician aims to make sociologists of medicine aware of the needs in understanding the contemporary thoughts and attitudes adopted by students, as well as shaping their own scientific trends, since the further consequences of the pandemic are not yet known.

CONCLUSION

The survey aimed to analyse the knowledge of and attitudes towards the occurrence of the prevailing pandemic. The group was divided in a way that allows for an objective assessment of the state of knowledge at levels pertinent to the stage of education at the medical faculty. As a result, it was noticed that the level of knowledge directly translates into the stages of education, which is related to the amount of education resulting from seminars, practical classes, as well as experience resulting from clinical classes and internship. The significance of the students' gender has not been demonstrated with respect to issues of social sensitivity.

When analysing the questions, it should be noted that 123 respondents considered the pandemic to be real, which suggests that their answers to further questions will indeed be conscious. Considering the sociological aspect of this study, it is pleasing that 111 students considered that the current pandemic

would have an impact on their professional career. The answers "no" or "don't know" may be dictated by the lack of any experience or awareness of a specialisation, which will not translate directly into taking care of patients with postponed complications after their exposure to SARS-CoV-2. Another important value for sociological research was the question that sought to answer whether sociological research into the aspect of the occurrence of SARS-CoV-2 would be helpful in the further treatment of patients. The vast majority of students who were familiar with the concept of this field answered: "ves": it was confirmed by 94% out of 150 respondents. Answering the question concerning the consequences of the pandemic for the Polish population, the respondents stated that most people bear health, economic and social consequences. According to the respondents, political issues concerned only a small part of the population. The observed increase in the number of infections and their consequences allows for such interpretation, which also directly affects the respondents themselves. Such a low ranking of the political aspect may be due to the fact that young people are not interested in it, and the amount of current political information forces them to consciously avoid this kind of topic. In the study, this aspect was raised most frequently among the sixth-year students, which may be considered the necessity for political observation from the perspective of graduation and pursuing a medical profession. What is very important for the sociology of medicine is the necessity for analysing currently performed vaccinations. In this question, the students were asked to indicate whether preventive vaccination has an impact on the development of the pandemic. 118 respondents answered that it is essential to its dimension. Others considered it irrelevant for various reasons or had no opinion. This was especially true for the firstyear students, who do not yet have epidemiological knowledge and thus may be sensitive to any reporting on social websites, in magazines, and mass media. Analysing the answers concerning the aspect of the state's actions in combating the pandemic, one can notice the positively evaluated influence of education on the awareness of the inhabitants of Poland. The evaluation of health care actions, health policy and economic actions were rated low. The impact of the reports on the increase in the number of cases, the number of ventilator beds or even the frustration of medical staff and their shortages were reflected in the respondents' answers. Also the economic dimension of the introduction of restrictions, the recognition of a country as a red zone, implies restrictions on civil liberties, which does not necessarily translate into the awareness of citizens in terms of the fight against the pandemic. The last question concerned the students' self-assessment in relation to the link

between the sociology of medicine and the fact of the pandemic. It should be noted that all the students had successfully completed this subject while studying medicine, and 6 of them had previous experience studying other medical subjects. The analysis of the data evidently indicates an upward trend in the legitimacy of the link between these disciplines, which is characterised by successive stages of their studies. This is justified by the achievement of emotional maturity, resulting also from the subject matter, the type of classes conducted, as well as their own sociological observations while dealing with real patients, their needs and suffering.

LIST OF REFERENCES

- Balarezo-López, G. (2018) 'Medical sociology: origin and field of action'. *Revista de Salud Pública* (Bogota). 20(2), 265–270.
- Barański, J. and Piątkowski, W. (2002) Zdrowie i choroba wybrane problemy socjologii medycyny [Health and disease selected problems of medical sociology]. Wrocław: Atut.
- Duszyński, J., Afelt, A., Ochab-Marcinek, A. et al. (2020) Zrozumieć COVID-19. Opracowanie zespołu ds. COVID-19 przy Prezesie Polskiej Akademii Nauk [Understanding COVID-19. Paper by the COVID-19 Advisory Team to the President the Polish Academy of Sciences]. Warszawa: PAN. [online] available from https://informacje.pan.pl/images/2020/opracowanie-covid19-14-09-2020/ZrozumiecCovid19_opracowanie_PAN.pdf [21 Mrach 2021].
- Gloster, A.T., Lamnisos, D., Lubenko, J. et al. (2020) 'Impact of COVID-19 pandemic on mental health: An international study'. *PLos One* 15(12).
- Jarynowski, A., Wójta-Kempa and M., Belik, V. (2020) 'Trends in interest of COVID-19 on Polish Internet'. *Przegląd Epidemiologiczny* 74(2), 258–275.
- Klingemann, J.I., and Sokołowska, M. (2011) 'Inspiracje i kontynuacje' ['Inspiration and continuation']. *Studia Socjologiczne* 3 (202).
- Łódzki, B. (2017) 'Medialny obraz rzeczywistości' ['Media image of reality']. *Studia Socialia Cracoviensia* 9, 1(16).
- Ostrowska, A. (2009) Socjologia medycyny: podejmowane problemy, kategorie analizy [Medical sociology: undertaken problems, categories of analysis]. Warszawa: IFiS PAN.
- Piątkowski, W. (2009) Lecznictwo niemedyczne perspektywa socjologiczna. [Non-medical treatment sociological perspective]. w: B. Płonka-Syroka (red.), Socjologia medycyny. Podejmowane problemy, kategorie, analizy. Warszawa: IFiS PAN.

Serwis Rzeczypospolitej Polskiej, Raport zakażeń koronawirusem (SARS-CoV-2) [online] available from [21 March 2021].

- Tobiasz-Adamczyk, B. (2010) Badania nad jakością życia uwarunkowaną stanem zdrowia [Research on the quality of life conditioned by the state health]. w: Piątkowski W. (red.), Socjologia z medycyną. W kręgu myśli naukowej Magdaleny Sokołowskiej. Warszawa: IFiS PAN.
- Tobiasz-Adamczyk, B. (2015) Wybrane aspekty relacji pomiędzy socjologią medycyny a socjologią choroby [Selected aspects of the relation between the sociology of medicine and the sociology of sickness]. Annales Universitatis Paedagogicae Cracoviensis. Studia Sociologica 1(7), 78–96.
- Wang, Z.H., Qi, S.G., Zhang, H., Mao, P.X., He, Y.L., Li, J., Xiao, S.Y., Peng, H.M., Sun, W.W., Guo, H.Y., Liu, M. (2020) 'Impact of the COVID-19 epidemic on anxiety among the elderly in community'. Zhonghua Yi Xue Za Zhi. 100(40).

ATTITUDES OF MEDICAL STUDENTS TOWARDS THE COVID-19 PANDEMIC IN THE SOCIOLOGY OF MEDICINE

Abstract

The sociology of medicine is essential for shaping social attitudes in the future physician-patient relationship. The contemporary pandemic SARS-CoV-2 coronavirus and the COVID-19 disease it causes compel research into the aspect of analysing the attitudes of future physicians who will have to treat the subsequent complications of this disease. 150 medical students from years I, III and VI participated in the survey. The results show that the awareness and attitudes adopted by the students are closely related to the increase in knowledge and are adequate for the subsequent years of study.

Key words: sociology of medicine, SARS-CoV-2, COVID-19, medical student, medical faculty

POSTAWY STUDENTÓW MEDYCYNY WOBEC PANDEMII COVID-19 W SOCJOLOGII MEDYCYNY

Streszczenie

Socjologia medycyny ma kluczowe znaczenie dla kształtowania postaw społecznych w przyszłej relacji lekarza z pacjentem. Współczesna pandemia koronawirusa SARS-CoV-2 i wywołana przez niego choroba COVID-19 zmusza do prowadzenia badań w aspekcie analizy postaw przyszłych lekarzy, którzy będą zmuszeni leczyć późniejsze powikłania tej choroby. W badaniu ankietowym wzięło udział 150 studentów kierunku lekarskiego z I, III i VI roku. Wyniki wykazały, że świadomość i postawy przyjmowane przez studentów mają ścisły związek ze wzrostem wiedzy i są adekwatne dla kolejnych lat studiowania.

Słowa kluczowe: socjologia medycyny, SARS-CoV-2, COVID-19, student medycyny, kierunek lekarski

Cite as:

Madziała, M. (2020) 'Attitudes of medical students towards the COVID-19 pandemic in the sociology of medicine'. *Myśl Ekonomiczna i Polityczna* 3(70), 176–187. DOI: 10.26399/meip.3(70).2020.19/m.madziala

Cytuj jako:

Madziała M., Attitudes of medical students towards the COVID-19 pandemic in the sociology of medicine [Postawy studentów podczas pandemii COVID-19 w socjologii medycyny], "Myśl Ekonomiczna i Polityczna" 2020 nr 3(70), s. 176–187. DOI: 10.26399/meip.3(70).2020.19/m.madziala