

## Trust of society towards selected medical professions – doctors, nurses, paramedic



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**INTRODUCTION:** In Poland is equal access to the health care system, based on the insurance model. It consists of many institutions in which patients can benefit from health services. Help in pre-hospital and outpatient settings is usually performed by doctors, nurses and paramedics. The study is aimed at assessing confidence towards these selected three medical professions and indicating their the most important disadvantages and advantages.

**MATERIAL AND METHODS:** The study was conducted among 109 randomly selected people, using the authorial questionnaire. To the statistical analysis was used Kruskal–Wallis test. All results were considered significant at  $p < 0.05$ .

**RESULTS:** The study was attended by 75 women and 34 men, the average age was 29.63 years ( $SD \pm 15.62$ ). The most people had contact with a doctor ( $n=109$ ), and slightly less with a nurse ( $n=105$ ) and with a paramedic ( $n=66$ ). In terms of the level of social trust, paramedics was rated the highest (7.81 points,  $SD \pm 1.84$ ), and slightly below doctors (7.2 points,  $SD \pm 1.89$ ) and nurses (6.9 points;  $SD \pm 2.23$ ). The accuracy of diagnosis / therapy (43.1%,  $n=47$ ) was considered the best advantage among the doctors, among nurses - good contact with the patient (57.8%,  $n=63$ ), and among paramedics - manual skills (36.7%,  $n=40$ ). The main disadvantages of physicians were wrong diagnosis and / or therapy (44%;  $n=48$ ), among nurses - bad contact with the patient (37.6%,  $n=41$ ), and among paramedics - a low level of knowledge (45%,  $n=49$ ). There were no statistically significant differences between the three professional groups in terms of advantages ( $p = 0.957$ ) and disadvantages ( $p = 0.995$ ).

**CONCLUSIONS:** The study showed that the greatest confidence have paramedics, then doctors and the smallest nurses. Also indicated the most important advantages and disadvantages of people performing selected medical professions.

**KEY WORDS:** Doctor, nursing, paramedic, opinion, trust

## INTRODUCTION

In Poland, there is a health care system, that is a set of institutions that aim to provide medical care to the public. It is based on the insurance model. Every citizen, regardless of his or her financial status, has equal access to health services that are financed from public funds [1]. However, the operation of this system is regulated by many acts regarding medical activities, health care services financed from public funds and patients' rights. The structure of the system consists of the beneficiaries, health insurance institutions (National Health Fund), healthcare providers (doctors, nurses, paramedics and others), control and supervision authorities and the Ministry of Health. The main source of financing is health insurance in the National Health Fund, however some benefits are covered from the budget of the Ministry of Health. The patient have guaranteed a free package of medical services, but he can use commercial services.

The State Emergency Medical Services (EMS) system, including emergency medical teams (EMT) and hospital emergency departments (ED) from January 1, 2007, are entirely financed from the state budget [2]. No additional fees are charged for medical services provided to save lives. The EMT call is also free in Poland. The patient who is in a sudden health emergency, has medical rescue activities (MRA) which are made by the selected doctors, nurses and paramedics. These people perform MRA 24 hours a day, seven days a week. Every person working in the EMS system should have extensive knowledge and skills at a high level, since random events do not allow planned patient selection to the medical person. Professions that provide services in the primary care system as well as in the emergency aid system should enjoy high social confidence to ensure a sense of security and professionalism.

Decisions and responsibility for the patient in ED structures are made first and foremost by the doctor. In order to be able to perform this function in Poland, is belong complete six years of study at the medical university. Then belong hold a thirteen-month postgraduate internship and pass a Medical Final Exam to get a diploma and the right to practice [3]. At present, there are 77 medical specialties and 9 medical-dentistry specialties [4]. Only a few specializations (including emergency medicine) give permission to work in the EMS system.

In addition to the medical profession, medical personnel are required who work in interdisciplinary teams and perform independent functions. The nurse profession includes a range of health services,

including: care, preparation and administration of medicines, injection and intravenous infusions, assistance to the doctor during treatments, etc. To obtain the right to practice, you must complete the first-cycle studies, which can be optionally supplemented by master's studies. Despite the lack of self-improvement requirements in this profession, a person working as a nurse should realize continual learning, which positively affects the quality of make this profession [5]. In emergency medical teams, nurses can perform independent functions and include the position of EMT leader. Specialization is required for this purpose.

Paramedics are people who are the basic personnel on duty at EMT. These are people who specialize in providing health services in emergency situations of life or health danger. They have the authority to perform many medical activities themselves, including the administration of 47 medicines [6]. The professional title of a paramedic is obtained by completing undergraduate studies lasting 3 years on the medical rescue profile. No specialization is required to work in EMS. However, paramedics have a statutory obligation to improve their skills[7,8], and if they fail to do it, then they lose their eligibility [9].

The aim of the study is an attempt to assess the level of public trust in selected medical professions (doctor, nurse and paramedic), taking into account their main disadvantages and advantages.

## MATERIAL AND METHODS

The study was conducted in August 2018 with using the online form, which was directed to randomly selected people. The questionnaire consisted of 17 points. Five of them were socio-demographic questions, while the other 12 concerned the assessment of the degree of trust in the medical activities performed by doctors, nurses and paramedics.

An alternative to a one-way analysis of variance ANOVA - Kruskal - Wallis test was used to analyze statistical results. All results were considered significant at  $p < 0.05$ .

## RESULTS

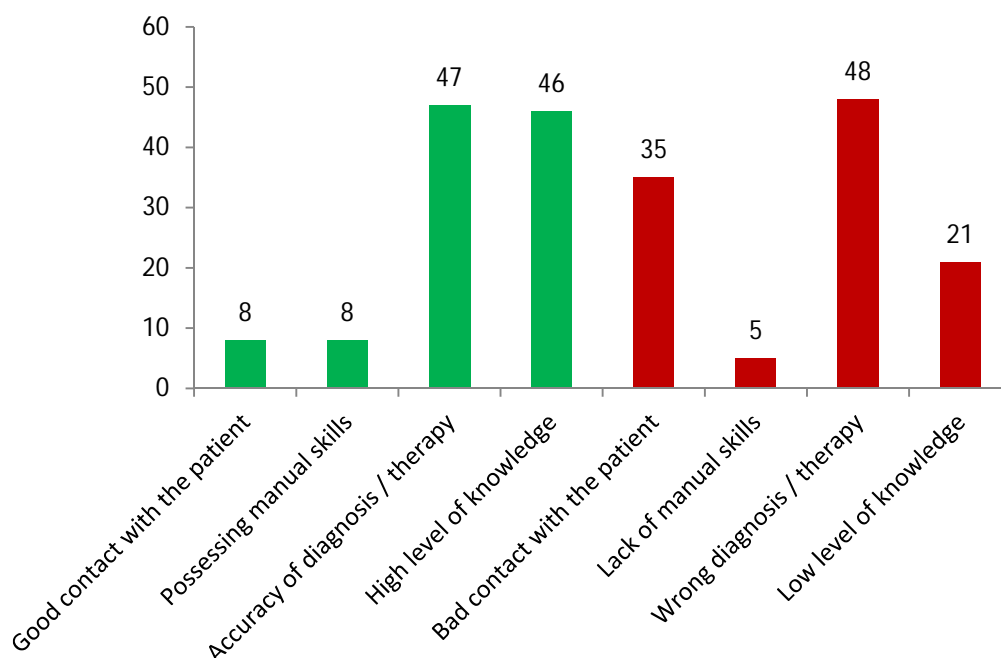
The study was attended by 109 people, including 75 women and 34 men. The average age of the respondents was 29.63 (SD±15.62). The majority of respondents (61.5%, n=67) live in the city, while the rest (38.5%, n=42) live in rural areas. Most people (48.6%, n=53) declare having secondary education, then (27.5%, n=30) higher, primary (17.4%, n=19) and vocational (6.4%; n=7).

The majority of respondents (82.6%, n=90) came from the Masovia Voivodeship, and considerably fewer people (5.5%, n=6) from Lublin, (4.6%; n=5) Greater Poland, (3, 7%; n=4) Silesian, (1.8%; n=2) Świętokrzyskie and (0.9%; n=1) Łódź and Opole.

### Assessment of trust towards doctors

Every respondent had contact with a doctor, more than half (55%, n=60) in a clinic or outpatient clinic, 25 people in a hospital ward, 22 people in a hospital emergency department / ambulance service, and 2 people in all of these places. The average assessment of the level of public confidence in medical activities performed by physicians was 7.2 points ( $SD \pm 1.89$ ) on a scale from 1 to 10.

The respondents indicated the biggest advantages as (43.1%, n=47) the accuracy of diagnosis / therapy and (42.2%; n=46) high level of knowledge, while the biggest disadvantages were found (44%; n=48) wrong diagnosis / therapy and (32.1%; n=35) bad contact with the patient. A detailed comparison is shown in Figure 1.

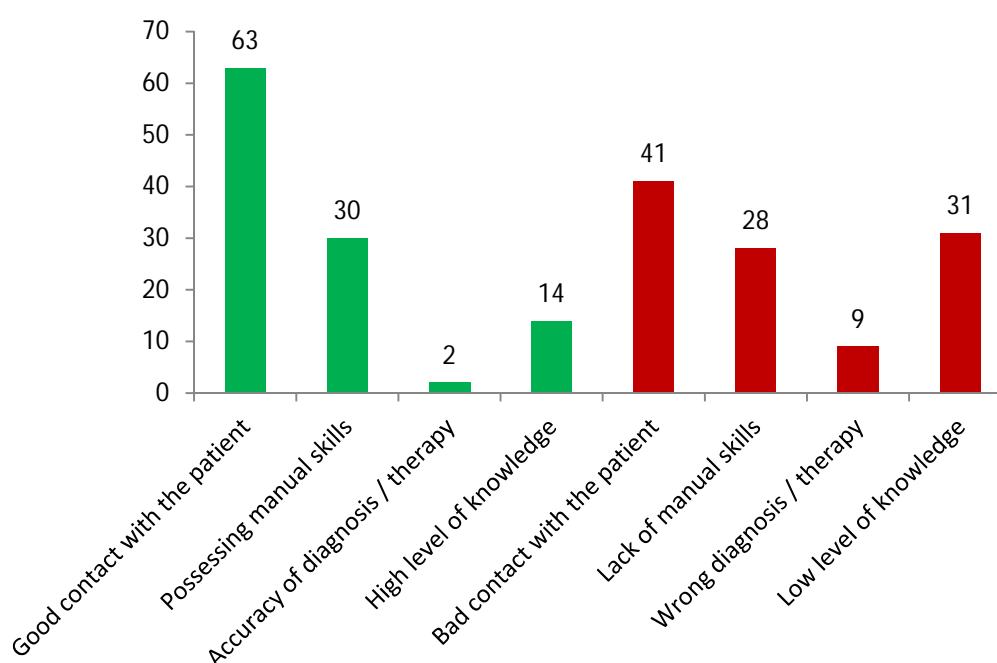


**Figure 1.** Comparison of advantages and disadvantages among doctors.

### Assessment of trust towards nurses

More than half of the respondents (51.4%, n=56) had contact with a nurse in a hospital ward, (31.2%, n=34) in a clinic or outpatient clinic, (12.8%, n=14) in the hospital emergency department / ambulance service, and one has met with this profession in all of these places. Only four people did not have contact with people doing this job. The average assessment of the level of public confidence in medical activities performed by nurses was 6.9 points ( $SD \pm 2.23$ ) on a scale from 1 to 10.

For the biggest advantages of nurses (57.8%, n=63), the respondents considered good contact with the patient and (27.5%, n=30) possessing manual skills, while the biggest disadvantages were found (37.6%; n=41 ) bad contact with the patient and (28.4%, n=31) low level of knowledge. A detailed comparison is shown in Figure 2.



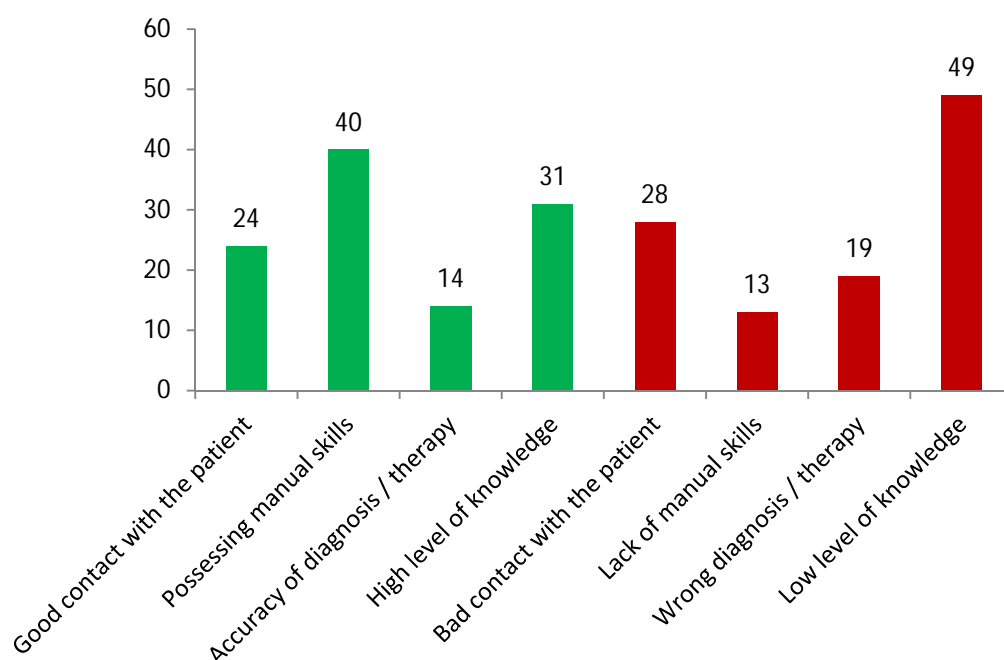
**Figure 2.** Comparison of advantages and disadvantages among nurses.

### Assessment of trust towards paramedics

The majority of respondents (54.1%, n=59) met with a paramedic in a hospital emergency department / ambulance service, six people declare a meeting with a rescuer in a hospital ward, and one

person in a clinic or outpatient clinic. Among the respondents, 39.4% (n=43) did not have contact with people performing this profession. The average assessment of the level of public confidence in medical activities performed by paramedics was 7.81 points (SD±1.84) on a scale from 1 to 10.

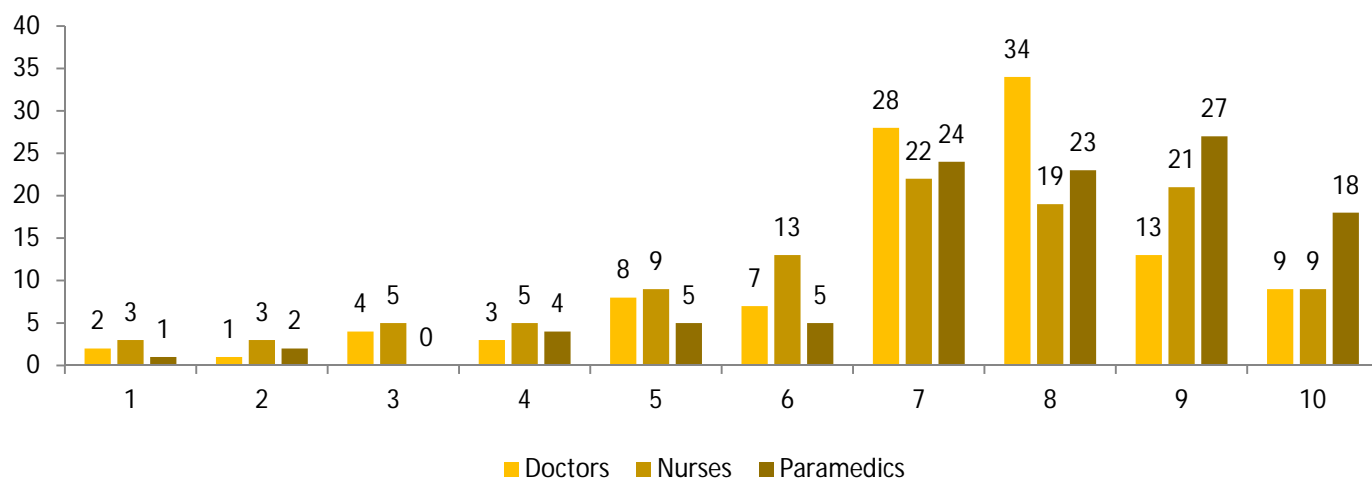
The greatest advantages among paramedics according to the respondents were possessing manual skills (36.7%, n=40) and high level of knowledge (28.4%, n=31), while the biggest disadvantages were found low level of knowledge (45%, n=49) and bad contact with the patient (25.7%; n=28). A detailed comparison is shown in Figure 3.



**Figure 3.** Comparison of advantages and disadvantages among paramedics.

### Statistical analysis of grades

In order to determine the differences between professional groups in terms of four disadvantages and advantages, the Kruskal-Wallis test was used. In terms of advantages, no statistically significant differences were found between the group of doctors, nurses and paramedics ( $p=0.957$ ). Taking into account the disadvantages indicated by the respondents, there were no significant differences between medical professions ( $p=0.995$ ). Detailed assessment of selected medical professions is shown in Figure 4.



**Figure 4.** Comparison of the assessment of the level of trust between

## DISCUSSION

Doctors are people with whom most people have contact at some point in their lives. They perform a very important job, because at the first contact with the patient they must arouse confidence in him and extract as much information as possible about his health. From their knowledge depends on whether they will make the correct diagnosis and start adequate therapy. The conducted study indicates that the highest physician's attribute is the accuracy of the diagnosis and further therapy. In addition, the doctor should thoroughly discuss with the patient what health problems he has and teach his family how to proceed correctly in this area. They should inspire trust and show disinterestedness. Many people give their doctors a lot of trust [10]. However, the authors of this study showed that equally many respondents indicated that the biggest disadvantage of doctors is wrong diagnosis and therapy. The even division of opinions seems to be reliable taking into account the fact that all respondents declared earlier contact with a doctor, so they experienced direct relations with this medical profession.

A lot of people meet with a nurse profession while staying at one of the hospital wards and in the clinic. Only a few respondents did not have contact with people doing this job. From nurses, patients usually require courtesy and good contact with them, as well as possessing manual skills [11]. Other available research also indicates such advantages, and also informs that patients expect nursing care and

support from nurses [12]. In turn, the biggest disadvantages are: bad contact with the patient and a comparably low level of knowledge and lack of manual skills. Another study shows that nurses assess their profession higher than doctors or patients, which indicates that they have a more positive image of this profession [13].

Paramedics are often the first people on the battlefield for human life. It is up to them to take appropriate action at the place of the incident and decisions that can save the patient. Although many people do not have contact with paramedics, public trust to their work is on high level. The most valued features of them are: possessing manual skills and showing a high level of knowledge. In turn, the main disadvantage is the low level of knowledge and a lesser extent - bad contact with the patient. Many rescuers are choosing this profession because they want to help others and from passion. One of the studies, which consists in self-assessment by paramedics, shows that according to them the most important in this profession is logical thinking, not giving in to stress, patience, the ability to calm the patient, or the ability to show empathy [14].

The study allows us to determine what degree of trust the medical profession enjoys and their greatest advantages and disadvantages. Thanks to this we are able to indicate what in a given profession should be changed in terms of the possibility of gaining the trust of the patient, especially those who are in danger of health and / or life. The highest rated are paramedics (7.81 points,  $SD \pm 1.84$ ), and the lowest nurse (6.9 points;  $SD \pm 2.23$ ). Representatives of such a young profession as medical rescue were able, despite their short history in Poland, to gain social trust and demonstrate high quality of services. However, they should raise the level of knowledge and work to improve contact with the patient. Similar requirements are placed from nurses who, according to the respondents, should improve the quality of contact with patients and supplement their knowledge. Whereas doctors, in addition to improving patient relationships, should conduct better diagnostics and implement proper therapy. The scope of competence and responsibility of doctors is very wide, which is why high demands are placed on them [15].



## CONCLUSIONS

The highest rated professional group in the public opinion are paramedics with high manual skills but low level of knowledge. The lowest rated group are nurses, among whom contact with the patient is the biggest advantage among other medical professions, nevertheless, according to the respondents, it still requires improvement. A comparable group of respondents assessed doctors both high and low in terms of the accuracy of diagnosis and therapy, which proves the varied experiences of society.

## Disclosure statement

No potential conflict of interest was reported by the author's.

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