

DIAGNOSIS OF INTERPERSONAL COMPETENCES IN THE STUDENTS OF THE FACULTY OF HEALTH SCIENCES OF THE JAGIELLONIAN UNIVERSITY MEDICAL COLLEGE AND THEIR NEED TO IMPROVE COMMUNICATION WITH THE PATIENT BASED ON THE BASICS OF PSYCHOTHERAPY

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ABSTRACT

Introduction: Assessment of interpersonal competences of medical students is important for building interpersonal contacts and improving the patient contact skills. Interpersonal competences constitute a particular aspect of social competences, i.e. skills enabling effective coping with various interpersonal situations. They are important in medical professions and constitute the basis for building professional relationships.

The aim of the study was to diagnose interpersonal competences in the students of the Faculty of Health Sciences of the Jagiellonian University Medical College and get to know their needs concerning improving communication with patients based on the basics of psychotherapy.

Material and methods: The study included 147 first-cycle students of Nursing, Emergency Medical Services, and Physiotherapy. The research used the ICQ-R Interpersonal Competence Questionnaire and the diagnostic survey method. The obtained data were subjected to statistical analysis.

Results: Statistically significant differences were observed between the fields of study; they were visible in the domain of initiating relationships (IR) and self-disclosure (SD), with borderline significant values ($p = 0.057$), and the highest results for nursing students and the lowest for emergency medical services. The students of Emergency Medical Services and Physiotherapy obtained lower results in the self-disclosure domain. The surveyed who saw the value of using elements of elementary psychotherapy in contact with patients more frequently declared a high interest in further training in this area.

Conclusions: The results obtained in the assessment of interpersonal competences in the studied group indicate the need to conduct educational activities in this area, especially in terms of self-disclosure. The majority of the surveyed are interested in further improvement of skills in elementary psychotherapy, enabling the use of interpersonal competences in the relationship with patients (44.2% defined their need at a high level, and 42.9%, at a medium level).

Key words: students, interpersonal competences, elementary psychotherapy.

INTRODUCTION

The assessment of interpersonal competences of medical students is important for building interpersonal contacts and improving the skills of contact with the patient. In the available source literature competences are defined in various ways and occupy a special place in pedagogical and psychological sciences. Competences are, for example, defined

as “the ability and readiness of an individual to perform tasks at a certain level” [1]. Some researchers point out that competences should not only concern the level, but also meet specific standards [2]. The division of competences proposed by specialists includes, for example, communication, specialist, organizational, cooperation and professional development competences [3]. From the point of view of psychology, competences may concern the following

areas: interpersonal, including leadership and teamwork, intellectual, organizational, motivation and coping with stress as well as communication [4].

Interpersonal competences constitute a special aspect of social competences, i.e. skills enabling effective coping with various interpersonal situations. They are particularly important in medical professions and constitute the basis for building professional relationships. The key skills necessary for effective functioning in interpersonal relationships include competences connected with initiating relationships (IR), assertive influence (AI), self-disclosure (SD), providing emotional support (ES) and resolving conflicts (RC) [5]. It is worth noting that effective coping in life, including professional life, depends on the integrated functioning of many emotional competences, while deficits in the perception and expression of emotions disturb the proper functioning of a person [6]. The competences of a university graduate are often understood as three components: knowledge, skills and attitudes. These three areas interpenetrate, complement and strengthen each other [7]. At the same time, it should be noted that the way of understanding the competences indicated above was expanded. In terms of knowledge elements, the scope of knowledge and the depth of understanding were distinguished. As for skills, communication, problem solving and application of knowledge in practice were indicated. In the area of attitudes, self-esteem, cooperation and responsibility were distinguished [8].

Improving social skills in health care professions is important, not only due to the nature of the work undertaken, requiring social interactions at various levels, e.g. employee – patient, employee – supervisor, employee – other members of the therapeutic team, but it also determines good mental condition. Low social skills are connected with higher rates of loneliness, anxiety, and depression [9-11].

The aim of the study was to diagnose interpersonal competences in the students of the Faculty of Health Sciences of the Jagiellonian University Medical College and to get to know their needs in terms of improving communication with the patient based on the basics of psychotherapy.

MATERIAL AND METHODS

The study used the ICQ-R Interpersonal Competence Questionnaire and the diagnostic survey method. The subscales of the Interpersonal Competence Questionnaire (ICQ) were analysed separately. The results obtained by the study participants were normalized in accordance with the tables of T-score norms developed for men and women [5] and were described using medians and quartiles. The graphical presentation of the distributions is shown in the

form of box and violin plots. Then, groups of people with results below the norm (< 40 T), within the norm (40-60 T) and above the norm (> 60 T) were distinguished for each of the subscales. Relative and absolute frequencies are provided for qualitative variables. Statistical analysis was performed taking into account both the categorised ICQ-R subscales and the T-score results to examine the differences between various fields of study (nursing, emergency medical services and physiotherapy), place of residence (village/city) and sex. Non-parametric tests were used: the Mann-Whitney *U* test, the Kruskal-Wallis rank ANOVA test, Spearman's rank correlation and Fisher's exact test. All analyses were performed in R (Development Core Team, Vienna, Austria, version 4.0.4). The significance

Table 1. Characteristics of the studied group

Variable	Categories	Overall (N = 147)
Age (years), n (%)	< 20	39 (26.5)
	20	66 (44.9)
	> 20	42 (28.6)
Sex, n (%)	Male	21 (14.3)
	Female	126 (85.7)
Place of residence, n (%)	City	97 (66.0)
	Village	50 (34.0)
Field of study, n (%)	Nursing	81 (55.1)
	Emergency Medical Services	26 (17.7)
	Physiotherapy	37 (25.2)
IR, n (%)	Below norm (< 40 T)	24 (16.3)
	Norm (40-60 T)	107 (72.8)
	Above norm (> 60 T)	16 (10.9)
AI, n (%)	Below norm (< 40 T)	25 (17.0)
	Norm (40-60 T)	102 (69.4)
	Above norm (> 60 T)	20 (13.6)
SD, n (%)	Below norm (< 40 T)	18 (12.2)
	Norm (40-60 T)	95 (64.6)
	Above norm (> 60 T)	34 (23.1)
ES, n (%)	Below norm (< 40 T)	36 (24.5)
	Norm (40-60 T)	96 (65.3)
	Above norm (> 60 T)	15 (10.2)
RC, n (%)	Below norm (< 40 T)	28 (19.0)
	Norm (40-60 T)	84 (57.1)
	Above norm (> 60 T)	35 (23.8)
IR [T], Q2 [Q1-Q3]	As continuous	51.0 [42.0-55.5]
AI [T], Q2 [Q1-Q3]	As continuous	48.0 [42.0-54.0]
SD [T], Q2 [Q1-Q3]	As continuous	52.0 [45.0-59.0]
ES [T], Q2 [Q1-Q3]	As continuous	48.0 [41.0-55.0]
RC [T], Q2 [Q1-Q3]	As continuous	49.0 [44.0-58.0]

IR – initiating relationships, AI – assertive influence, SD – self-disclosure, ES – providing emotional support, RC – resolving conflicts

level was set to $p < 0.05$ and two-sided hypotheses were verified.

The study was conducted between March and June 2023 among 147 students of the Faculty of Health Sciences of the Jagiellonian University Medical College, studying Nursing, Physiotherapy and Emergency Medical Services. The approval to conduct the study was obtained from the Bioethics Committee of the Jagiellonian University (no. 1072.6120.229.2020 of 24.09.2020). Participation in the study was voluntary. As suggested by the Bioethics Committee, the subjects declared their willingness to participate and were informed about the research in writing. Each interested person received materials to complete on their own and returned them to specially prepared boxes, so the anonymity of the subjects was preserved. The selection of the research group was deliberate and included students of the three above-mentioned fields studying at the bachelor's level 1-3 at the Faculty of Health Sciences. The exclusion criterion was lack of consent to participate in the study.

RESULTS

Nearly half (44.9%) of the students were twenty years old, 85.7% were women. The dominant field of study in the studied group was nursing (55.1%), every fourth surveyed person studied physiotherapy, and 17.7% studied emergency medical services (Table 1).

Results below the norm on the T-score scale were least frequently recorded in the SD subscale (12.2%), then in IR, AI and RC (16.3%, 17.0% 19.0%), and most frequently in ES (24.5%). In turn, exceeding the normal limit, above 60 T, occurred least frequently in the ES, IR and AI domains (10.2%, 10.9% and 13.6%) and most frequently in SD and RC (23.1% and 23.8%) (Table 1). The full distribution of each subscale is presented in violin plots (Fig. 1). The Spearman's rank method was used to determine correlation coefficients between the T-scores of individual domains. The association between all pairs of variables was positive and statistically significant, with the strongest coefficients for the association between ES and CR ($r = 0.517$, $p < 0.001$), AI and IR ($r = 0.451$,

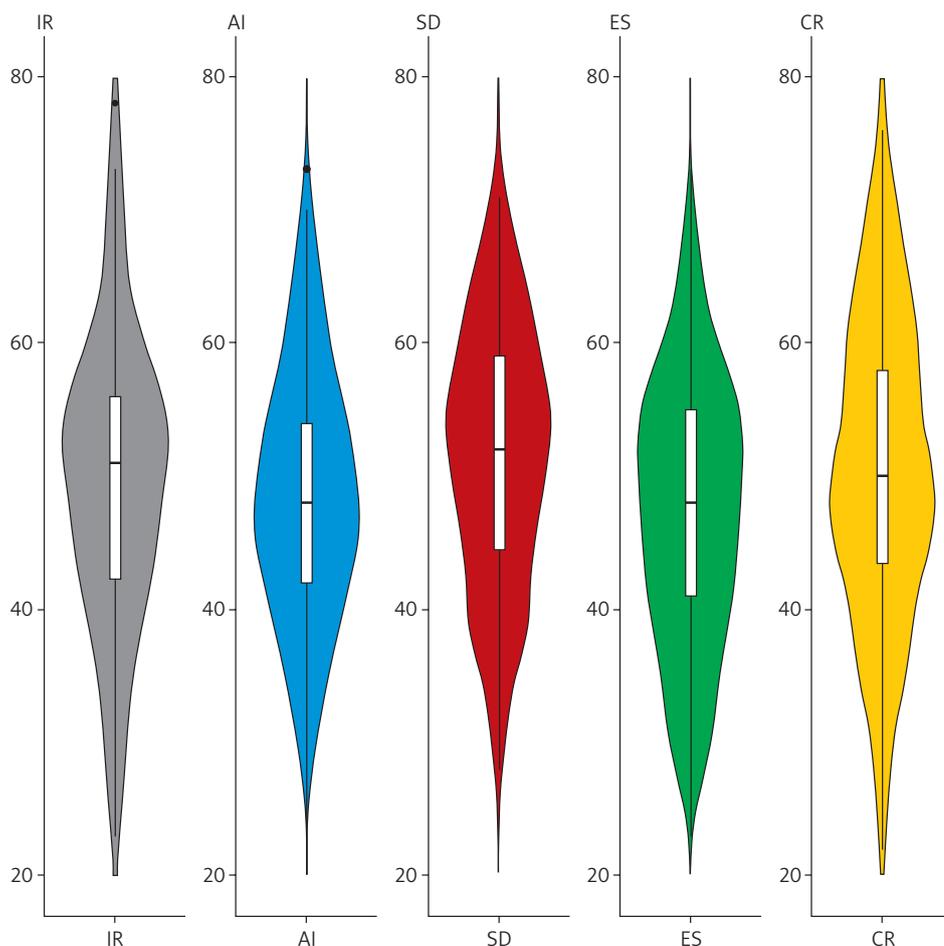


Figure 1. The distribution of scores of ICQ-R scale (expressed in T-scores) by individual domains

Notes: Wider sections of the violin plots mean a higher likelihood that students will take on the given value; the skinnier sections represent a lower likelihood. In the middle of the violin plots we put box plots with black intervals showing median and interquartile range, respectively

$p < 0.001$) ES and AI ($r = 0.441, p < 0.001$) (Fig. 2). Statistically significant differences between fields of study were noted for the IR and SD domains (borderline significant, $p = 0.057$), with the highest results for nursing students and the lowest for emergency medical services (Table 2). The analysis taking into account the categorised results confirmed the studied relationship for IR (only 6.1% of nursing students had results below the norm compared to 30.8% and 28.9% in the fields of emergency medical services and physiotherapy, respectively, while exceeding the norm was observed in as many as 14.6% of nursing students, then in 7.9% of physiotherapy students and 0% of emergency medical services) (Table 2). The distribution of both the continuous and categorised ES variable differed significantly between people with different places of residence, indicating higher results in people from villages compared to people from cities (Q2 [Q1-Q3]: 50.0

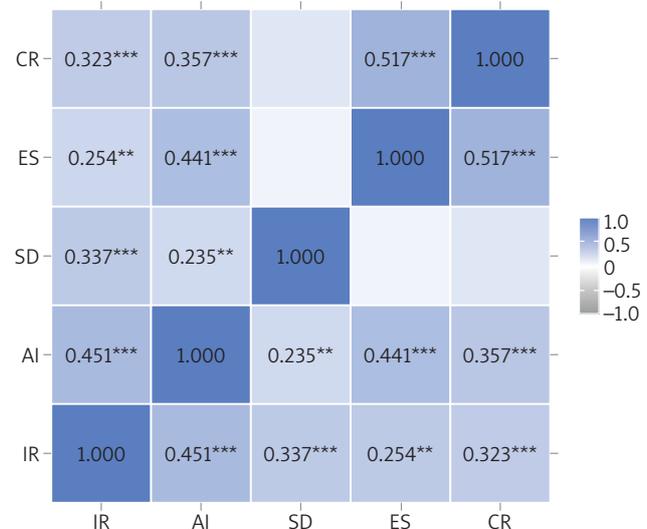


Figure 2. The correlations between individual domains of ICQ-R scale (expressed in T-scores) – Spearman's rank correlation coefficients were presents, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 2. Comparisons of scores of ICQ-R scale (expressed in T-scores) between different fields of study and within each individual domain

Variable or category	Nursing (n = 82)	Emergency Medical Services (n = 26)	Physiotherapy (n = 38)	P#
Continuous variables, Q2 [Q1-Q3]				
IR [T]	53.0 [46.0-58.0]	44.0 [38.0-47.8]	49.0 [37.3-54.5]	< 0.001
AI [T]	50.0 [42.5-56.0]	47.5 [41.3-54.0]	46.0 [40.3-52.0]	0.233
SD [T]	54.5 [47.0-61.0]	48.0 [39.3-55.0]	51.0 [44.5-56.0]	0.057
ES [T]	48.0 [41.0-55.0]	45.5 [37.3-55.0]	50.0 [39.5-55.0]	0.790
RC [T]	51.0 [45.5-61.0]	46.0 [39.5-53.0]	49.0 [41.3-58.0]	0.141
IR – categorised, n (%)				
Below norm (< 40 T)	5 (6.1)	8 (30.8)	11 (28.9)	< 0.001
Norm (40-60 T)	65 (79.3)	18 (69.2)	24 (63.2)	
Above norm (> 60 T)	12 (14.6)	0 (0)	3 (7.9)	
AI – categorised, n (%)				
Below norm (< 40 T)	13 (15.9)	4 (15.4)	8 (21.1)	0.408
Norm (40-60 T)	54 (65.9)	21 (80.8)	25 (65.8)	
Above norm (> 60 T)	15 (18.3)	1 (3.8)	5 (13.2)	
SD – categorised, n (%)				
Below norm (< 40 T)	7 (8.5)	7 (26.9)	4 (10.5)	0.106
Norm (40-60 T)	52 (63.4)	14 (53.8)	28 (73.7)	
Above norm (> 60 T)	23 (28.0)	5 (19.2)	6 (15.8)	
ES – categorised, n (%)				
Below norm (< 40 T)	17 (20.7)	9 (34.6)	10 (26.3)	0.615
Norm (40-60 T)	56 (68.3)	14 (53.8)	25 (65.8)	
Above norm (> 60 T)	9 (11.0)	3 (11.5)	3 (7.9)	
RC – categorised, n (%)				
Below norm (< 40 T)	11 (13.4)	7 (26.9)	9 (23.7)	0.391
Norm (40-60 T)	49 (59.8)	15 (57.7)	20 (52.6)	
Above norm (> 60 T)	22 (26.8)	4 (15.4)	9 (23.7)	

For continuous variables P value based on the Kruskal-Wallis rank ANOVA test and for categorical variables based on Fisher's exact test
 IR – initiating relationships, AI – assertive influence, SD – self-disclosure, ES – providing emotional support, RC – resolving conflicts

[45.0-55.0] vs. 50.0 [45.0-55.0]). Results within the norm and above the norm were also recorded more often in people living in villages than in cities (76.0% and 12.0% vs. 59.8% and 9.3%, respectively) (Table 3). Sex did not differentiate any of the ICQ subscales (Table 4).

The assessment of the need of students of the studied fields for improving communication skills based on the basics of elementary psychotherapy and their understanding of this process and experience included answers to questions from several groups. The surveyed referred to the issue of the use of elementary psychotherapy methods by the therapeutic team and their impact on the patient's treatment process as well as the expected type of support. They also assessed their own skills in using such a form of contact and referred to their own experience in this area.

The majority of the surveyed (56.3%) believed that elementary psychotherapy had a positive impact on the treatment process, and 87.8% that it should be an important element improving the quality of the pa-

tient's coping with the disease. Only 1.4% of the study participants had a different opinion. The surveyed stated that what patients most expect in therapeutic communication is evaluative support.

The surveyed assessed their skills in conducting basic psychotherapy at various levels. Only 4.9% stated that they had them at a very good level, 43.1% at a good level, as many as 45.1% at an average level, and 6.9% at a low level. In the assessment of deficits connected with knowledge and skills in therapeutic communication, the most frequently occurring answer was "sometimes I experience problems" (56.2%), the second answer appearing in more than 1/5 of the surveyed was "rarely" (26%), 13% of the study participants declared that they experienced this type of problems very often, and only 4.8% said "never".

The surveyed also determined their own need to acquire skills in the use of elementary psychotherapy in contact with the patient. As many as 44.2% defined their need at a high level, the surveyed chose equally high values considering that their need in this area was at an average level (42.9%), the answers "I am

Table 3. Comparisons of scores of ICQ-R scale (expressed in T-scores) between different inhabitants of cities and villages and within each individual domain

Variable or category	City (n = 97)	Village (n = 50)	P [#]
IR [T], Q2 [Q1-Q3]	50.0 [42.0-55.0]	51.0 [42.3-56.0]	0.717
AI [T], Q2 [Q1-Q3]	46.0 [42.0-54.0]	51.0 [40.5-56.0]	0.361
SD [T], Q2 [Q1-Q3]	52.0 [46.0-57.0]	53.0 [42.5-61.0]	0.835
ES [T], Q2 [Q1-Q3]	45.0 [37.0-55.0]	50.0 [45.0-55.0]	0.029
RC [T], Q2 [Q1-Q3]	49.0 [42.0-58.0]	52.0 [45.0-60.3]	0.201
IR – categorised, n (%)			
Below norm (< 40 T)	16 (16.5)	8 (16.0)	0.960
Norm (40-60 T)	71 (73.2)	36 (72.0)	
Above norm (> 60 T)	10 (10.3)	6 (12.0)	
AI – categorised, n (%)			
Below norm (< 40 T)	13 (13.4)	12 (24.0)	0.250
Norm (40-60 T)	71 (73.2)	31 (62.0)	
Above norm (> 60 T)	13 (13.4)	7 (14.0)	
SD – categorised, n (%)			
Below norm (< 40 T)	10 (10.3)	8 (16.0)	0.293
Norm (40-60 T)	67 (69.1)	28 (56.0)	
Above norm (> 60 T)	20 (20.6)	14 (28.0)	
ES – categorised, n (%)			
Below norm (< 40 T)	30 (30.9)	6 (12.0)	0.035
Norm (40-60 T)	58 (59.8)	38 (76.0)	
Above norm (> 60 T)	9 (9.3)	6 (12.0)	
RC – categorised, n (%)			
Below norm (< 40 T)	21 (21.6)	7 (14.0)	0.570
Norm (40-60 T)	54 (55.7)	30 (60.0)	
Above norm (> 60 T)	22 (22.7)	13 (26.0)	

[#] For continuous variables P value based on the Mann-Whitney U test and for categorical variables based on Fisher's exact test

Table 4. Comparisons of scores of ICQ-R scale (expressed in T-points) between sexes and within each individual domain

Variable or category	Male (n = 21)	Female (n = 126)	P#
IR [T], Q2 [Q1-Q3]	47.0 [44.0-53.0]	51.0 [42.0-56.0]	0.404
AI [T], Q2 [Q1-Q3]	47.0 [41.0-54.0]	48.0 [42.0-54.0]	0.667
SD [T], Q2 [Q1-Q3]	54.0 [47.0-55.0]	51.0 [44.0-59.0]	0.392
ES [T], Q2 [Q1-Q3]	50.0 [46.0-55.0]	48.0 [41.0-55.0]	0.378
RC [T], Q2 [Q1-Q3]	45.0 [41.0-51.0]	51.0 [45.0-58.0]	0.154
IR – categorised, n (%)			
Below norm (< 40 T)	2 (9.5)	22 (17.5)	0.589
Norm (40-60 T)	16 (76.2)	91 (72.2)	
Above norm (> 60 T)	3 (14.3)	13 (10.3)	
AI – categorised, n (%)			
Below norm (< 40 T)	4 (19.0)	21 (16.7)	0.876
Norm (40-60 T)	15 (71.4)	87 (69.0)	
Above norm (> 60 T)	2 (9.5)	18 (14.3)	
SD – categorised, n (%)			
Below norm (< 40 T)	2 (9.5)	16 (12.7)	1.000
Norm (40-60 T)	14 (66.7)	81 (64.3)	
Above norm (> 60 T)	5 (23.8)	29 (23.0)	
ES – categorised, n (%)			
Below norm (< 40 T)	5 (23.8)	31 (24.6)	0.256
Norm (40-60 T)	16 (76.2)	80 (63.5)	
Above norm (> 60 T)	0 (0)	15 (11.9)	
RC – categorised, n (%)			
Below norm (< 40 T)	5 (23.8)	23 (18.3)	0.768
Norm (40-60 T)	11 (52.4)	73 (57.9)	
Above norm (> 60 T)	5 (23.8)	30 (23.8)	

For continuous variables P value based on the Mann-Whitney U test and for categorical variables based on Fisher's exact test
 IR – initiating relationships, AI – assertive influence, SD – self-disclosure, ES – providing emotional support, RC – resolving conflicts

not interested” and “my interest is low” concerned 12.9% of the surveyed.

The undertaken research looked for the relationship between the assessment of the positive impact of elementary psychotherapy on the patient’s treatment process and the willingness to acquire skills in this area. The results are presented in Table 5.

A statistically significant relationship was confirmed ($p = 0.013$). The surveyed who see the value of using elements of elementary psychotherapy more often declare a high interest in further training in this area.

A correlation was established between the current skills in conducting elementary psychotherapy as part of the therapeutic communication process and the sex of the surveyed (Table 6).

A statistically significant relationship was confirmed ($p = 0.022$). Women less frequently rated well the ability to conduct elementary psychotherapy as part of the therapeutic communication process.

The research established a correlation between experiencing problems connected with the deficit of knowledge and skills and the place of residence (Table 7).

Table 5. The relationship between the assessment of the positive impact of elementary psychotherapy on the treatment process and the need for improving skills in this area

The assessment of the process of elementary psychotherapy positively affecting the treatment process	Agree/disagree/mildly disagree/undecided n (%)	Strongly agree n (%)	P
The need to acquire skills in the field of elementary psychotherapy	I am not/low interested	6 (33.3)	0.013
	Medium	31 (50.8)	
	High	44 (68.8)	

Table 6. The relationship between the skills in conducting elementary psychotherapy in therapeutic communication and the sex of the surveyed

Skills in conducting elementary psychotherapy as part of therapeutic communication process		Very well <i>n</i> (%)	Well <i>n</i> (%)	Averagely <i>n</i> (%)	<i>P</i>
Sex of the surveyed	Female	6 (4.9)	48 (39.0)	62 (50.4)	0.022
	Male	1 (5.0)	13 (65.0)	3 (15.0)	

Table 7. The correlation between experiencing problems connected with the deficit of knowledge and skills and the place of residence

Experiencing problems connected with the deficit of knowledge and skills		Very frequently <i>n</i> (%)	Sometimes <i>n</i> (%)	Rarely <i>n</i> (%)	Never <i>n</i> (%)	<i>P</i>
Place of residence	City	12 (12.8)	45 (47.9)	33 (35.1)	4 (4.3)	0.011
	Village	7 (14.0)	36 (72.0)	5 (10.0)	2 (4.0)	

Frequently and very frequently experienced problems connected with the deficit of knowledge and skills were more often declared by people living in villages ($p = 0.011$).

DISCUSSION

Research on the competences of medical students can be carried out at various levels, the most important of which results from the relationship with people who were entrusted to their care, i.e. patients. The subject of interest in assessing competence levels are also employers, who often emphasize the importance of high interpersonal competences in their expectations.

The conducted research aimed to assess social competences in four dimensions as well as to become familiarized with students' expectations regarding the possibility of deepening the knowledge and skills necessary to use the basic tools of elementary psychotherapy well. It is worth emphasizing that in the studied group, results below the norm were least frequently recorded in the self-disclosure subscale (SD/12.2%), and most often in the emotional support dimension (ES/24.5%). Meanwhile, many studies emphasize the importance of emotional support in the treatment process and cooperation with the patient, also in the context of faster adaptation to changes connected with the disease and better coping with it. It is, therefore, an area to work on, and understanding the causes of difficulties in this field requires further research. Further analyses in the assessment of social competences confirmed the least frequently exceeded norm in the domains of emotional support (ES/10.2%), initiating relationships (IR/10.9%) and assertive influence (AI/13.6%), and most frequently in competences in the area of self-disclosure (SD/23.1%) and conflict resolution (CR/23.8%).

Statistically significant differences between fields of study could also be observed; borderline significant values were recorded for the domains of IR and SD ($p = 0.057$), with the highest results for nursing stu-

dents and the lowest for emergency medical services. Perhaps this difference is connected with the specificity of the work and the much more frequent and longer time of being in contact with the patient in the professional group of nurses than in paramedics.

What seems to be important in the conducted research is the fact that the analysis taking into account the categorised results confirmed the studied relationship for initiating relationships (IR). Only 6.1% of nursing students had results below the norm compared to 30.8 and 28.9% of students in emergency medical services and physiotherapy. The high percentage of people from two medical fields scoring below the norm in this domain suggests paying more attention to the importance of improving the level of skills in this area as part of medical communication classes or other optional classes.

In the assessment of the students' need to improve communication skills based on the basics of elementary psychotherapy and their understanding of this process as well as revealing their own experience, the following facts stand out: more than half of the surveyed (56.3%) recognize the positive influence of elementary psychotherapy on the treatment process; the highest percentage of the study participants (45.1%) rate their skills in this area as average and more than half (56.2%) sometimes experience problems with its use in practice. What is important, as many as 44.2% report a high need for improvement in this area.

The surveyed who see the value of elementary psychotherapy declare a high interest in training in this area $p = 0.013$. In turn, in terms of sociodemographic variables, two relationships were confirmed. Women rated their psychotherapeutic competences as good significantly less frequently than men $p = 0.0022$. Inhabitants of villages frequently and very frequently experienced problems connected with the deficit of knowledge and skills in this area $p = 0.011$.

From other authors' research on the assessment of social competences, it is worth mentioning

the research conducted by Dryl, which confirmed that there are discrepancies between the level of competences expected by employers and the level of competences actually possessed by graduates. The largest competence gaps were identified in the area of the ability to define and justify priorities (1.14 points), work organization skills and time management (1.09 points) as well as effective communication (0.95 points) [12]. However, in the research conducted by Tyszkiewicz *et al.* among students of medical faculties it was observed that students of medicine obtained lower results than students of other medical faculties in terms of emotional intelligence, both in the area of the ability to recognize, understand and respect other people's emotions and to become aware and express their own emotions. Similarly, students of medicine scored lower in the area of social competences concerning behaviours in intimate situations. Women had a higher level of emotional intelligence and social competence than men, except in situations requiring assertiveness. In this study, no research was undertaken in the field of medicine, but differences in the results obtained between the different fields of medical studies examined were noted [13].

Research on interpersonal competences among medical students has obviously been carried out in other countries, but in slightly different areas than those examined in this work. An interesting example is a study by Ogle, Bushnell and Caputi investigating the relationship between empathy and clinical competence among medical students. Its results show that the observed empathetic behaviour was strongly associated with clinical competence and this association was evident across a range of medical conditions and types of consultation. The authors conclude that, in medical education, strategies enhancing the behavioural expression of empathy could be helpful in making medical students appear more clinically competent to both examiners and patients [14].

Another study by Graf *et al.* aimed at examining the development of the communication skills of medical students during an OSCE (objective structured clinical examination). The results of this study indicate that students possess good overall communication skills in the four dimensions of empathy, content structure, verbal expression, and non-verbal expression. However, it has also been found that there are differences between self- and external perception of medical students' communication skills, which suggests the need for modification of priorities in the process of education [15].

One more study that is worth mentioning is the one by Saaranen *et al.*, in which students of nursing were learning interpersonal communication competence through the simulation method. Its conclusion

is that simulation is a valuable method in developing the competence in question [16].

The research results obtained in the presented work also indicate differences between the fields of medical studies in the diagnosis of social competences, especially in the domain of IR and SD. The results obtained below the norm for the domain of SD in the field of Emergency Medical Services and Physiotherapy suggest the need for educational activities in this area. The subject of social competence research requires further survey, while taking into account the reasons why the students obtain values below the norm.

CONCLUSIONS

In medical students, the level of social competences varied among the four dimensions, as well as among some factors, such as field of study and place of residence.

The results of current research may help to more effectively reach groups of medical students who need to deepen or improve their interpersonal competences in areas including: leadership and teamwork, intellectual and organizational work, motivation and coping with stress as well as communication. This is especially important because their future work is based on relationships with people entrusted to their care and its scope is multidimensional.

Increasing the interest of students of medical fields of study, including nursing, in further education in the area of elementary psychotherapy is of great importance and they may be encouraged to do so by making them aware of the value of using elementary psychotherapy in contact with the patient.

Disclosure

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