



RESEARCH ON MEDICAL STUDENTS' VIEWS AND ATTITUDES ABOUT THEIR COMMUNICATION SKILLS TRAINING

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SUMMARY:

Aim: To explore medical students' views for communication skills implementation in medical practice before and after their communication skills training and clinical training.

Methods: Two hundred and sixty-three second year medical students in the Medical Faculty of the University of Pleven completed a questionnaire on the importance, training methods and elements of doctor-patient communication in medical practice and two hundred and fifteen fifth-year medical students at the Medical Faculty of the University of Pleven completed the same questionnaire.

Results: All participants in the study highly value the importance of communication with the patient for the diagnostic and therapeutic process, for the quality of the doctor-patient relationship, for increasing the self-confidence and satisfaction of the patient. There is no decrease in the assessment of students after clinical training on any of the indicators related to the basic communication skills of the doctor. Many students identify communication skills training as useful for acquiring the skills needed for clinical practice. All students surveyed reported a desire to improve their communication skills, preferring the methods and topics commonly used in this training.

Conclusion: Medical students have the right ideas about the importance of good communication with the patient. The gender, nationality and experience of medical students have some influence on the way they perceive and evaluate doctor-patient communication. The comprehensive training in medicine, as well as the short training in communication skills, has a certain positive effect on the assessment of students for their communication skills and dealing with difficult situations in medical practice.

Keywords: assessment, communication skills, medical education,

INTRODUCTION:

The seventies of the XX century are perhaps the time for a radical change of views of teaching communication skills to medical students. Until then, the doctor's clinical education included medical and technical knowledge and skills for physical examination and solving clinical problems. Communication with the patient was not the subject

of training at any medical university. The general opinion was that communication is an inherent ability and does not have to be studied specifically [1, 2, 3]. The first publications in support of the teaching of communication skills to medical students appeared in the late 1970s. Communication skills began to be taught in the form of short courses in some medical schools. In the nineties of the XX century, the importance of communication skills for the training of medical students was recognized by many authors. As a result, training in clinical communication skills has become a mandatory part of the curricula of a large number of medical schools and today; many European medical universities already have laboratories for communication skills. All publications about the topic in recent years find that communication skills can be improved through training and should be studied by medical students [2 - 11].

However, training in communication skills in Bulgaria, unlike in most European countries, is not mandatory. Medical students have the opportunity to perform such training at will in the form of courses or optional subjects. The lecturers from the General Medicine Department of the Medical University of Pleven have developed a program for training in communication skills for students in a master's program in medicine. It contains 30 hours with a predominance of practical exercises. This training became part of the curriculum as an optional subject for second-year medical students 14 years ago. Since then, this training has continued every year, and more and more students from master's programs in medicine wish to participate in it.

The research aims to study the opinion and attitudes of two groups of medical students about teaching communication skills. The first group is second-year students who are at the end of their pre-clinical training. The second group is fifth-year students who had completed most of their clinical training in medicine and training in communication skills.

MATERIALS AND METHODS:

The medical course at the Faculty of Medicine of the University of Pleven runs a six-year undergraduate program divided into pre-clinical years (years 1–2), clinical education (years 3–5) and one year of clinical internship. During the first two years, students have a small clinical experience and only a few opportunities to interact with

patients. Inversely, during clinical education, they interact with patients within a clinical environment, mostly hospital-based, under clinician supervision.

An empirical cross-sectional study was conducted through an anonymous group questionnaire among all students registered in the second and fifth year of the Medical faculty of the University of Pleven in the last year. Two hundred and sixty-three second-year students completed and returned the questionnaire. They represent 84.5% of the total number of second-year students. Most of them are citizens of other countries and study medicine in English. The majority of students with English language education - 110 (75%) are from E.U. countries and United Kingdom, the smaller proportion - 37 (25%) are from countries outside Europe - India, Nepal, Egypt, Japan, Canada, Syria,

Iraq. The other large group of second year students consists of Bulgarian citizens. Two hundred and fifteen fifth-year medical students completed and returned the questionnaire. They represent 95.5% of the total number of fifth-year students. Approximately half of them are citizens of other countries and study in English. The majority of students with English language education - 84 (67%) are from E.U. countries, and United Kingdom and the smaller group of students - 42 (33%) are from other countries - India, Pakistan, Turkey, Iran, Iraq. The second half of this group is Bulgarian citizens (table 1). The data from the survey were processed with the software statistical packages Excel v.10.0 and SPSS by the parametric and non-parametric tests (t-test, chi-square). The information from the survey was collected during the period: 1.02.2020 - 31.12.2020.

Table1. Characteristics of the students participating in the study

Characteristics	Total number of students	Second year students	Fifth year students
	N (%)	N (%)	N (%)
Gender:			
men	221 (46%)	116 (44%)	105 (49%)
women	257 (54%)	147 (56%)	110 (51%)
By nationality:			
Bulgarian language students	205 (43%)	116 (44%)	89 (41%)
English language students	273 (57%)	147 (56%)	126 (59%)
Age		21,14±0,25	24,48±0,44

RESULTS:

The information was systematized from the answers of the students' views about the impact of doctor-patient communication on medical practice. All students consider communication to be very important for gathering information about the patient's problems and for building the trust between doctor and patient, which is the basis of a

correct diagnosis. In addition to these basic meanings, good communication, according to the students, is especially necessary for the timely diagnosis and for achieving cooperation with the patient in health education and therapy. It is very important for achieving higher confidence and satisfaction in the patient. There is an increase in some values for the fifth-year students (table 2).

Table 2. Importance of doctor-patient communication for medical practice, according to medical students

The meanings of doctor-patient communication	Total number of students	Second year students	Fifth year students
	N (%)	N (%)	N (%)
The quantity and accuracy of the collected information	369 (77%)	202 (77%)	167 (78%)
The timeliness of the diagnostic process	169 (35%)	77 (29%)	92 (43%)
The patient's satisfaction with the consultation	330 (69%)	163 (62%)	167 (78%)
The patient's confidence in dealing with the health problem	317 (66%)	155 (59%)	162 (76%)
The patient's trust in the physician	422 (88%)	230 (87%)	192 (90%)
The patient's cooperation in the therapeutic process	309 (65%)	140 (53%)	169 (79%)
The patient's cooperation in the health education	229 (48%)	82 (31%)	147 (69%)
It does not affect the work of the physician	6 (1%)	0 (0%)	6 (3%)

Note: the respondents gave more than one answer.

Students were invited to evaluate the importance and application of some forms and elements of the communication process between doctor and patient on a five-point scale, where 1 means - not important for medical practice, and 5 - very important for medical practice (table 3). The assessment of the fifth-year students is increased for all the indicators. The increases are statistically significant for indicators such as: understanding the patient's emotions and worries, greeting the patient, giving the explanations for examinations, feedback for patient's understanding, discussing the treatment plan and involv-

ing the patient in the decision making. It was found that women of both years - in the second ($p = 0.05$) and in the fifth ($p = 0.01$) impute more importance than men on careful listening to the patient and avoiding distraction with other activities. The fifth-year women, in addition, to impute more importance on the discussion with the patient of the therapeutic possibilities ($p = 0.05$) and using the appropriate language for explanations ($p = 0.03$). Similar differences in the way of communication by gender have been observed by other authors [12, 13, 14, 15].

Table 3. Significance of some practical communication skills according to the students

Skills / behavior of the physician	Mean Second year students	Mean Fifth year students	p /Student's t-test/
Understands the emotions and worries of the patient	4.31±0.10	4.53±0.10	p=0.001
Avoids all other activities during the communication - documents, telephone...	4.08±0.13	4.1±0.15	p=0.42
Greets patient appropriately	4.25±0.11	4.44±0.12	p=0.01
Uses various methods to facilitate the patient's story-paraphrases, summarizations....	4.03±0.11	4.1±0.94	p=0.22
Notices what the patient looks and behaves	4.24±0.12	4.27±0.15	p=0.41
Checks the patient's understands for the given explanations	4.57±0.09	4.70±0.09	p=0.02
Asks the patient about the desired information	4.25±0.10	4.42±0.11	p=0.00
Explains to the patient what examinations or procedure they are going to do and why	4.32±0.11	4.57±0.11	p=0.00
Discusses with the patient the possible side effects of the medication	4.41±0.11	4.54±0.11	p=0.10
Discusses with the patient treatment options	4.55±0.10	4.68±0.09	p=0.02
Uses words and expressions according to the cultural and educational levels of the patient	4.48±0.11	4.54±0.11	p=0.22
Show willingness to answer the patient's questions	4.40±0.10	4.52±0.12	p=0.05
Involves the patient in decision making	3.79±0.13	4.20±0.12	p=0.00

There are also some differences in students' perceptions of the importance of communication skills depending on their nationality. Second-year students, who are mostly citizens of European countries, compared to Bulgarian students, are more likely to pay attention to the patient's look and behavior ($p = 0.0001$), to the information needed by the patient ($p = 0.0001$) and to involving the patient in decision making ($p = 0.004$). Bulgarian second-year students impute more importance in communicating with the patient to avoiding other activities during the communication ($p = 0.05$), to using different methods to facilitate the patient's story ($p = 0.01$), giving detailed explanations to the patient about the laboratory examinations ($p = 0.003$) and checking the patient understood ($p = 0.05$). Some of these differences

might be observed among the fifth-year students.

Part of the focus of this study is on identifying differences in the point of view of second and fifth-year students for their communication skills training. Asked to rate their communication skills on a five-point scale, where 1 means very low skills and 5 means very high skills for communication with the patient, with the patient's family members and with colleagues, students show above-average confidence. The highest is their confidence in communication skills with colleagues, followed by their confidence in communicating with the patient, and the weakest is their communication skills with the patient's family. The grades of fifth-year students are higher than those of second-year students (table 4).

Table 4. Self-assessment of the communication skills of second and fifth year medical students

Skills assessment	Mean Second year students	Mean Fifth year students	p /Student's t-test/
For communication with the patient	3.53±0.13	4.05±0.10	p=-4.23
For communication with the patient's family	3.30±0.13	3.66±0.12	p=0.001
For communication with colleagues	4.06±0.11	4.20±0.13	p=0.04

The students' answers show that their clinical education and communication skills training have had a positive effect on the self-assessment of their communication skills. The reported increase in students' confidence in communication skills is statistically significant.

Regarding their self-assessment of how would they deal with difficult situations in medical practice, such as breaking the bad news, there is no significant difference between the responses of younger students and the fifth year students ($p = 0.22$). The highest is the group of students from both years who think they would succeed, but it will be difficult for them. The students' answers are presented in table 5. Probably, the equal level of confidence in breaking bad news in fifth-year students compared to second-year students is due to the experience with real patients. Fifth-year students are aware of how difficult is this, and despite their training, they do not feel more confident of breaking bad news. There is a difference in nationality and gender, which is observed in second-year students in their answers to this question. Bulgarian students show lower confidence in their ability to break bad news - 15% of them would cope without a problem, unlike 37% of the English-speaking students ($p = 0.007$). Men are about 10% more confident in dealing with this situation than women in both Bulgarian and English language students ($p = 0.05$).

Regarding dealing with another difficult situation - meeting an aggressive patient, the students' answers show a slight increase in the confidence in the fifth year students. The group of those who think that they will cope, but it will be difficult for them is the largest and the group of students who think that they are not prepared is reduced - table 5. The difference in nationalities and sex, which is observed in fifth-year students in their answers, is similar

to that of the previous question - English-speaking students ($p = 0.05$) and men ($p = 0.01$) show a little more confidence to deal with this type of patients.

Asked if they think that physicians from different clinical fields and specialties have different ways of communication, both - second and fifth year students answered in the affirmative (table 5).

The fifth-year students were asked some additional questions regarding the effectiveness and importance of their current training in medicine and in communication skills. In terms of how their overall medical education has affected their way of communicating, a very high proportion of students - 95% answered that medical education had a positive effect on their communication skills, 1.5% of students report that the impact was negative, and 3.5% answered that medical training did not affect their communication - table 5. In this regard, their opinion was sought as to which disciplines have had the most serious effect on the acquisition of communication skills with the patient. On this issue, students indicate in the first place the training in general medicine, in the second place - the training in communication skills, and in the third place - the training in the various clinical disciplines, followed by the training in behavioral sciences and social medicine.

The study found that of all 215 fifth-year surveyed students, only 17 (8%) did not attend the optional subject of communication skills during second-year from their medical training. Trained students were asked to evaluate its usefulness in terms of their clinical training in the third, fourth and fifth years. A very large part of the students evaluate it as positive, a very small part believe that this training was not useful to them, and some students are hesitant - table 5.

Table 5. Students' opinion on clinical communication

Questions	Total number of students N (%)	Second year students N (%)	Fifth year students N (%)	p /chi-square test/
Are you prepared to break bad news?				
Yes	123 (26%)	72 (28%)	51 (24%)	0.22
Yes, but it will be very difficult for me	281 (59%)	145 (55%)	136 (63%)	
No	69 (14%)	44 (17%)	28 (13%)	
Are you prepared to deal with aggressive patients?				
Yes	177 (37%)	99 (38%)	78 (37%)	0.00
Yes, but it will be very difficult for me	228 (48%)	111 (42%)	117 (55%)	
No	71 (15%)	53 (20%)	18 (8%)	

Do doctors communicate differently in different specialties?				
Yes	387 (81%)	205 (78%)	182 (85%)	0.13
No	34 (7%)	24 (9%)	10 (5%)	
I'm not sure	57 (12%)	34 (13%)	23 (10%)	
Do you need to improve your communication skills?				
Yes	440 (92%)	244 (93%)	196 (91%)	0.65
No	38 (8%)	19 (7%)	19 (9%)	
Was Communication skills training useful for your clinical training?				
Yes	162(75%)		162(75%)	
No	8 (4%)		8 (4%)	
I'm not sure	28 (13%)	-	28 (13%)	-
I have not this training	17 (8%)		17 (8%)	
Did overall medical training influence your communication skills?				
Yes, in positive	205 (95%)		205 (95%)	
Yes, in negative	3 (1.5%)	-	3 (1.5%)	-
No	7 (3.5%)		7 (3.5%)	

When asked about their need for communication skills training, the majority of second and fifth-year students answered that they needed such training. With regard to the areas in which students would like to improve their communication skills, it is found that for all respondents, the main priority is communication with difficult patients and a very important area is the breaking

of bad news (with special priority for fifth-year students). The third important area for all respondents is giving explanations to the patient. The areas such as active listening and body language, communications for teamwork and the application of empathy in medical practice are also important (table 6).

Table 6. In which area would you like to improve your communication skills?

Communication skills for:	Total number of students N (%)	Second year students N (%)	Fifth year students N (%)
Active listening	121 (25%)	65 (25%)	56 (27%)
Explaining, giving the information	236 (49%)	144 (56%)	92 (44%)
Applying empathy	99 (21%)	53 (21%)	46 (22%)
Body language	193 (40%)	105 (41%)	88 (43%)
Communications with difficult patients	283 (59%)	155 (60%)	128 (62%)
Communications for teamwork	131 (27%)	68 (26%)	63 (30%)
Breaking bad news	275 (57%)	143 (56%)	132 (64%)
else	14 (3%)	5 (2%)	9 (4%)

Note: the respondents gave more than one answer.

With regard to the preferred methods of teaching communication skills, second and fifth-year students choose first to communicate with real and simulated patients, followed by group discussions and role-plays. The

classical methods of teaching through lectures and educational films continue to have their significance, as well as the work under the guidance of a mentor (table 7).

Table 7. Preferred methods for learning communication skills

Methods of teaching:	Total number	Second year	Fifth year
	of students N (%)	students N (%)	students N (%)
Role play	210 (44%)	113 (43%)	97 (46%)
Educational films	80 (18%)	47 (18%)	33 (16%)
Working with simulated patients	234 (49%)	129 (50%)	105 (50%)
Working with real patients	416 (87%)	216 (83%)	200 (94%)
Lectures	53 (11%)	22 (8%)	31 (15%)
Group discussions	269 (56%)	140 (54%)	129 (61%)
Mentoring	159 (33%)	86 (33%)	73 (34%)
else	5 (1%)	1 (0.3%)	4 (2%)

Note: the respondents gave more than one answer.

DISCUSSION:

All participants in the study appreciated the importance of communication with the patient for the diagnosis, the therapy, the quality of the doctor-patient relationship and the satisfaction of the patient. It is a positive fact that there is no reduction in the students' assessment after the clinical training in any of the communication skills used by the physician during the medical consultation. This shows that for the students, the importance of communication has not changed after the training in clinical practice. Comparison between the responses of second and fifth year students even showed an increase in the importance of communication with the patient, especially in terms of the timely diagnosis and for achieving cooperation with the patient in the process of health education and therapy. The results show that students understand the differences in the activities and tasks of the physicians from the different clinical areas and are aware of some differences in their approaches and behavior to the patient determined by the specialty. This fact is also observed in the studies of other authors [8, 15]. Many students identify communication skills training as useful for acquiring the skills needed for clinical practice. Other researches also show that training in communication skills for medical students improve their attitudes [12, 14], their confidence [7, 13], the structure of the interview [7, 8, 11, 12] and empathy for the patient [13, 14]. Many other au-

thors also report that the gender of students influences their opinion about communication skills – the women have more positive attitudes towards this learning and are more empathetic, the men are more confident and have less positive attitudes to training [12, 13, 15]. All surveyed students report a desire to increase their communication skills by the methods commonly used in this training: communication with simulated and real patients, role plays, films, discussions, lectures [12, 13, 14].

CONCLUSION:

The desire of students to learn and acquire new communication skills their active choice of topics and teaching methods is a very good indicator that they understand the potential of this interpersonal interaction. Ultimately, it should not be forgotten that the doctor-patient relationship is a complex art that needs time, patience and desire on the participants.

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