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Knowledge Level of Doctors in USU Medical School Regarding Doctor-Patient Communication

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ABSTRACT

Background: While carrying out its duties, doctors certainly cannot be separated from the act of communicating with patients. Doctor-patient communication is defined as ongoing communication between doctors, as a medic, with the patient as the treated person. This communication skills are important and therefore must be mastered by doctors. But before that, doctors must have adequate knowledge of how to communicate properly and effectively with patients. Lack of this communication skill will be a serious problem so it should not be ignored. **Objective:** To determine the doctors level of knowledge about doctor-patient communication. **Methods:** It was a descriptive study with cross sectional approach. The data were collected by distributing the questionnaire of 15 questions to 71 doctors who were still actively teaching at Faculty of Medicine, Universitas Sumatera Utara. The collected data then analyzed using SPSS computer program. **Results:** The results showed that most of the doctor that work on Faculty of Medicine, Universitas Sumatera Utara, 83.1% of the samples were in good category of knowledge, 14.1% of the samples were in sufficient category, the rest 2.8% of the samples were in low category. **Conclusion:** Majority of the doctor have a good level of knowledge about doctor-patient communication.

Keyword: ***Communication, Doctor-Patient, Knowledge***

ABSTRAK

Latar Belakang: *Dalam kehidupan sehari-hari, dokter tentunya tidak akan terlepas dari tindakan berkomunikasi dengan pasien. Komunikasi dokter-pasien diartikan sebagai komunikasi yang berlangsung antara dokter, sebagai ahli pengobatan, dengan pasien sebagai orang yang diobati. Kompentensi berkomunikasi dengan pasien wajib dikuasai oleh dokter. Untuk dapat melakukan komunikasi ini dengan baik setiap dokter wajib memiliki pengetahuan cara berkomunikasi yang baik. Kelemahan dalam komunikasi ini merupakan masalah yang serius bagi dokter sehingga tidak boleh dibiarkan.* ***Tujuan:*** *Mengetahui tingkat pengetahuan dokter di FK USU terhadap pentingnya komunikasi dokter-pasien.* ***Metode:*** *Penelitian ini menggunakan metode deskriptif dengan desain penelitian potong lintang (cross sectional), dan dilakukan di FK USU. Penelitian ini dilakukan dengan mengumpulkan data primer. Data kemudian dianalisis dengan menggunakan program SPSS.* ***Hasil:*** *Dari hasil penelitian diperoleh bahwa tingkat pengetahuan dokter terhadap komunikasi dokter-pasien di FK USU dari total 71 responden, 83.1% pada kategori baik, 14.1% pada kategori cukup dan 2.8% pada kategori kurang.* ***Kesimpulan:*** *Dokter di FK USU secara kesuluruhan telah memiliki pengetahuan yang baik mengenai komunikasi dokter-pasien.*

Kata Kunci : Pengetahuan, Komunikasi, Dokter-Pasien, Pengetahuan
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INTRODUCTION

Health is an important and valuable aspect for everyone. They are willing to go abroad and pay a high price to earn better medical services. Indonesians, in fact, often do travelled outside Indonesia for medical treatment. In a period of 9 years, the number of Indonesian patients seeking treatment abroad has increased by almost 100 percent. Patients argued that they had more confidence in the results of medical treatment abroad because of their more sophisticated technology, accuracy of diagnosis, quality of service and good health supervision and it was rare to find patient communication problems with doctors and medical personnel.[1] A global survey has been conducted and the results obtained that effective communication between doctors and patients is the key in treatment so that diagnosis becomes faster and more accurate. According to the American Society of Internal Medicine, good communication has been successful in reducing the number of complaints and lawsuits against doctors. This shows that most patients complain not because of the doctor's ability, but they feel that their doctor gave less attention.[2] From these data, we can conclude that the factor most often found to be problematic is communication. Communicating with other people seems like a simple thing, but when you think about it sometimes it is not easy to be able to communicate smoothly both ways. Sometimes the things we want to convey are received differently by other people. The difference in perception between the message giver and the recipient of the message often makes the relationship between the two become "less harmonious". Things like this also often occur in communication between doctors and patients.[3] In medical profession, communication is a skill that must be mastered where communication must take place in an equal position (not superior-inferior) so that the patient is willing / able to tell the pain / symptoms he is experiencing honestly and clearly. Effective communication is able to influence the patient's emotions in making decisions, while ineffective communication will create problems.[4] Therefore, as doctors, both general practitioners, specialist doctors and medical students who will interact directly with patients, must learn how to communicate properly and correctly. Based on the importance of doctor-patient communication, researchers are interested in conducting this research and it is hoped that this research will be used as an effort to improve the quality of doctor-patient communication.

METHODS

In this study, the knowledge of Doctor-Patient communication among doctors who were still actively teaching at Faculty of Medicine, University of North Sumatra, Medan was assessed using an online questionnaire via google form. The questionnaire used in this study had been tested for validity and reliability with the results of the validity test > 0.444 and the reliability test >0.7. This research was conducted from October to November 2020. Based on the calculation of the sample size using the Slovin formula, the number of samples required are 71. In this study, 71 research subjects were obtained, 29 of the samples were male and the rest 42 samples were female in which exclusion and inclusion criteria were fulfilled. The data in this study were presented in the form of a frequency distribution table and percentage. The data in this study then processed using statistical software and will be analyzed

univariately to see a descriptive description regarding doctor-patient communication based on gender, age, practical experience and educational background.

RESULTS

The characteristics of the respondents were divided by gender, age, practical experience and educational background. The complete data regarding sample characteristics are described as follows :

Table 1. Characteristics of Respondents Based on Gender

Gender	N	(%)
Male	29	40,8
Female	42	59,2
Total	71	100

Based on the results of table 1 above, it can be seen that there are 29 male respondents (40.8%) while 42 female respondents (59.2%).

Table 2. Characteristics of Respondents Based on Age

Age	N	(%)
26-35 years	10	14,1
36-45 years	39	54,9
46-55 years	17	23,9
56-65 years	5	7
Total	71	100,0

Based on the results of table 2 above, it can be seen that of the 71 research respondents, the majority of respondents in this study were aged 36-45 years as many as 39 people (54.9%), followed by ages 46-55 years as many as 17 people (23.9%), aged 26-35 years as many as 10 people (14.1%), and at least 56-65 years old as many as 5 people (7%).

Table 3. Characteristics of Respondents Based on Place and Practical Experience

Place	**N**	**(%)**
Public Hospital	57	14,1
Private Hospital	54	54,9
Personal Clinic	12	23,9
Others	1	7
Not Active	0	0
Experience	**N**	**(%)**
<10 years	32	45,1
10-20 years	30	42,3
>20 years	9	12,7

Based on the results of table 3 above, it can be seen that of the 71 respondents who gave answers to questions about the place of practice, 124 answers to these questions were obtained. Respondents mostly practiced in public hospitals, with 57 answers (80.3%), followed by private (76.1%), personal (16.9%), and others (1.4%). It was also found that the majority of respondents practiced less than 10 years, namely 32 people (45.1%), 10-20 years as many as 30 people (42.3%), and more than 20 years as many as 9 people (12.7%). This shows that all respondents are still active in carrying out their profession as a doctor.

Table 4. Characteristics of Respondents Based on Academic Educational Background.

Academic	N	(%)
S1	7	9,9
S2	44	62
S3	20	28,2
Total	71	100,0

Based on the results of table 4 above, it can be seen from 71 study respondents, majority of doctors with the last academic education of S2 were 44 doctors (62%), 20 doctors (28.2%) had S3 academic education and 7 doctors (9.9%) had S1 academic education.

Table 5. Characteristics of Respondents Based on Specialist Educational Background

Specialist	N	(%)
SP-1 (Specialist)	31	43,7
SP-2 (Consultant)	40	56,3

Total	71	100

Based on the results of table 5 above, it can be seen that most of the respondents have a subspecialty/consultant education with 40 doctors (56.3%) while 31 doctors (43.7%) have only a specialist education.

Table 6. Knowledge Levels by Gender

Gender	Knowledge Levels						N
	Good		Sufficient		Low		
	N	%	N	%	N	%	
Male	21	72,4	6	20,7	2	6,9	29
Female	38	90,5	4	9,5	0	0	42
Total	59	83,1	10	14,1	2	2,8	71

Based on the results of table 6 above, for the male gender, there were 21 doctors (72.4%) with a good level of knowledge, 6 doctors (20.7%) with a sufficient level of knowledge and 2 doctors (6.9%) with a low level of knowledge. Meanwhile, for the female gender, there were 38 doctors (90.5%) with a good level of knowledge, 4 doctors (9.5%) with a sufficient level of knowledge and no doctor with a low level of knowledge.

Table 7. Knowledge Levels by Age

Age	Knowledge Levels						N
	Good		Sufficient		Low		
	N	%	N	%	N	%	
26-35	8	80	1	10	1	10	10
36-45	32	82,1	7	17,9	0	0	39
46-55	14	82,4	2	11,8	1	5,9	17
56-65	5	100	0	0	0	0	5
Total	59	83,1	10	14,1	2	2,8	71

Based on the results of table 7 above, it is known that respondents aged between 26-35 years who have a good level of knowledge are 8 (80%) doctors, 1 (10%) doctors have sufficient knowledge, and 1 (10%) doctors have low knowledge. From those aged between 36-45 years, there were 32 (82.1%) doctors who had a good knowledge level, 7 (17.9%) doctors had sufficient knowledge, and there was no doctor with low knowledge level. From the age between 46-55 years old, numbers of doctors who had a good knowledge level were 14 (82.4%) doctors, 2 (11.8%) doctors had sufficient knowledge, and 1 (5.9%) doctors had a low level of knowledge. For ages between 56-65 years, all respondents have a good level of knowledge, namely 5 (100%) doctors.

Table 8. Knowledge Levels by Academic Educational Background

Academic	Knowledge Levels						N
	Good		Sufficicent		Low		
	N	%	N	%	N	%	
Bachelor	7	100	0	0	0	0	7
Master	35	79,5	8	18,2	1	2,3	44
PhD	17	85	2	10	1	5	20
Total	59	83,1	10	14,1	2	2,8	71

Based on the results of table 8 above, it can be seen that the respondents with the last academic education level of S1 were 7 doctors and all of them had a good level of knowledge. Respondents with the last academic education level of S2 were 44 doctors, of which 35 doctors (79.5%) had good knowledge, 8 doctors (18.2%) had sufficient knowledge, 1 doctor (2.3%) had low knowledge. Meanwhile, the respondents with the last academic education level of S3 were 20 doctors, of which 17 doctors (85%) had good knowledge, 2 doctors (10%) had sufficient knowledge, 1 doctor (5%) had low knowledge.

Table 9. Knowledge Levels by Specialist Educational Background

Academic	Knowledge Levels						N
	Good		Sufficicent		Low		
	N	%	N	%	N	%	
SP-1	26	83,9	4	12,9	1	3,2	31
SP-2	33	82,5	6	15	1	2,5	40
Total	59	83,1	10	14,1	2	2,8	71

Based on the results of table 9 above, of the total respondents with the latest education level of SP-1, majority had a good level of knowledge, namely 26 doctors (83.9%), 4 doctors (12.9%) had sufficient knowledge level, and 1 doctor (3.2%) had low knowledge level. Meanwhile, of the total respondents with the last education level of SP-2, majority also had a good level of knowledge, namely 33 doctors (82.5%), 6 doctors (15%) had sufficient knowledge level, and 1 doctor (2.5%) had a low knowledge level.

Table 10. Knowledge Levels by Practical Experience

Experience	Knowledge Levels						N
	Good		Sufficicent		Low		
	N	%	N	%	N	%	
<10	26	81,3	5	15,6	1	3,1	32
10-20	26	86,7	4	13,3	0	0	30
>20	7	77,8	1	11,1	1	11,1	9
Total	59	83,1	10	14,1	2	2,8	71

Based on the results of table 10 above, it is obtained that the level of good knowledge of respondents with a length of practice of 10-20 years has the largest percentage of 26 doctors (86.7%), followed by respondents with a length of practice <10 years as many as 26 doctors (81.3%) and respondents with a length of practice >20 years as many as 7 doctors (77.8%). Likewise, the level of sufficient knowledge of respondents with a length of practice <10 years had the largest percentage of 5 doctors (15.6%), followed by respondents with a length of practice of 10-20 years as many as 4 doctors (13.3%) and respondents with a length of practice >20 years as many as 1 doctors (11.1%). The level of insufficient knowledge was not found in respondents with a length of practice of 10-20 years, but was found in groups with a length of practice <10 years and >20 years with 1 doctor each.

Figure 1. Distribution of Knowledge Level Based on Questions

No	Questions	Respondents' Answers			
		Correct	%	Wrong	%
1	Doctor need to be a good communicator as a requirement for 5 star doctors according to WHO	71	100	0	0
2	Good doctor-patient communication should not be carried in superior-inferior position	62	87,3	9	12,7
3	The importance of empathy in doctor-patient communication	60	84,5	11	15,5
4	People who have the authority to give and receive messages in doctor-patient communication	70	98,6	1	1,4
5	The kind/type of doctor-patient communication approach	49	69	22	31
6	Verbal and non-verbal aspects in doctor-patient communication	61	85,9	10	14,1
7	Definition of patient-oriented communication	68	95,8	3	4,2
8	Example of good doctor-patient communication	68	95,8	3	4,2
9	Definition of doctor-oriented communication	48	67,6	23	32,4
10	By applying doctor-patient communication, the time spent will be longer	26	36,6	45	63,4
11	Average time required to communicate with patient according to IDI	64	90,1	7	9,9
12	Use of closed questions in doctor-patient communication	45	63,4	26	36,6
13	When communicating with patients, doctors should pay attention to the patient's body language, avoid looking tired, and lean back against a chair to relax	2	2,8	69	97,2
14	Doctor-oriented communication is more recommended than patient-oriented communication	68	95,8	3	4,2
15	An indicator that good doctor-patient communication has been achieved	68	95,8	3	4,2

Based on figure 1 above, the questions that were answered correctly by all respondents were question number 1 as many as 71 people (100%) while the question that was most often answered incorrectly by respondents was question number 13 as many as 69 people (97.2%).

DISCUSSION

A. Discussion About Result

Based on the results of table 6 above, this result is in line with the research of Basuki et al., 2011 where female doctors have a character that is more supportive of communication, expressive, and has stronger interpersonal relationships than men.[5] Several studies have also shown that female doctors are better at communicating with patients than male doctors. When a patient is consulted, female doctors will spend about 2 minutes longer than male doctors.[6] A study also showed that male doctors often interrupted the patient's conversation at the 47th second as opposed to female doctors who

would wait up to 3 minutes.[7] Studies on the correlation of gender to the level of knowledge have also been carried out in almost all parts of the world, and it is found that women are indeed better than men. Women are more adaptable in various situations during the learning process.[8] Women are not smarter than men, both have the same cognitive abilities. However, women have higher effort and sense of responsibility.[9] Women are also better at self-control so that they are able to focus in class compared to men.[10]

Based on the results of table 7 above, this was supported by the theory by Notoatmodjo, that age was one of the factor that could affect a person's knowledge.[11] According to researchers, the better knowledge of senior doctors as they get older may be due to less busy so that they have more time to read, acquire new knowledge and update their knowledge. Aging may inhibit motor responses, but aging will not limit a person's ability to learn something new.[12] Studies also show that there is a positive correlation between increasing age and level of knowledge and reading time. However, memory capacity will decrease too.[13]

Based on the results of table 9 above, however, this is not in accordance with the theory which states that education can affect one's knowledge. According to researchers, perhaps the knowledge and material presented in Master, PhD, and specialist consultant education focuses more on certain fields so that it rarely touches material regarding doctor-patient communication. Knowledge about doctor-patient communication is not absolutely obtained from formal education, but can also be obtained through seminars and training.

Based on the results of table 10 above, the results obtained are also not in accordance with the theory. This shows that a person's level of knowledge is also influenced by other factors such as socio-culture, motivation, perception, age, and environment which play an important role. In the view of psychologists, motivation can affect a person's willingness to learn new skills, strategies and change one's behavior.[14] Environment is also able to affect one's performance. Someone will try to increase his score if his friend has a higher score than him and vice versa.[15]

B. Discussion about questionnaire

In question number 1 regarding doctor should be a good communicators as one of the requirements to become a 5 star doctor according to WHO, all respondents can answer correctly. From the questions that have been answered, this shows that doctor-patient communication from the research sample has implemented the 5 star doctor pillar which makes communication an important thing in the treatment of a patient. Doctors are expected to be good communicators so that they are able to provide education and effective explanations, and are able to influence the community to improve and live a healthy lifestyle.

In questions 2 about good doctor-patient communication should not be carried in superior-inferior position and questions number 4 about people who have the authority to give and receive messages in doctor-patient communication are doctors, regarding position, rights of doctors and patients in doctor-patient communication, 62 respondents (87.3%) and 70 respondents (98.6%) could answer correctly. This shows something good where the majority of respondents understand that the doctor's position as an expert is not higher than that of the patient, there should be no superior-inferior in between. That way both have the same right to convey and receive information so

that they can get the best thing for the patient.

In question number 3 regarding the importance of empathy in doctor-patient communication, as many as 60 respondents (84.5%) can answer correctly. This shows that the majority of respondents involve empathy in doctor-patient communication so that it is expected to increase satisfaction in patients. Besides being able to increase patient satisfaction, empathy also has many other benefits. Rakel et al., 2011 also found that doctors who involve empathy when communicating can reduce symptoms and accelerate healing in patients suffering from flu.[16] Similar research has also been carried out and got the same results.[17] Therefore, empathy is a crucial and important component for a doctor.

Most of the respondents also known that there are 2 types of doctor-patient communication approach. It can be seen in question number 5 (There is two approaches to communication are oriented communication on the doctor and the communication patient-oriented) that respondents who answered correctly were 69%, question number 7 (Communication based on what is perceived patient about the disease, is oriented communication in patients) was 95.8%, question number 9 (Communication based on importance for diagnosing diseases by way of giving closed question, is oriented communication on the doctor) was 67.6%, and question number 14 (Oriented communication in doctors more recommended compared oriented communication in patients) was 95.8%. This shows that the majority of respondents have also understood the meaning of each of these communication orientations and which type is the best in doctor-patient communication. Patient-oriented communication is more recommended than doctor-oriented communication. Patient-oriented communication not only improves patient comfort, but also increase patients trust and agreement with the treatment options recommended by their doctor, such as surgery.[18] So it can be seen that the type of communication approach also affects the patient's assessment toward their doctor competence.

In question number 6 regarding the importance of non-verbal aspects in doctor-patient communication, as many as 61 respondents (85.9%) can answer correctly. This shows that in showing empathy for patients in the patient-doctor communication process, respondents have understood not only through verbal aspects but through body gestures as non-verbal aspects are also important in doctor-patient communication and can show empathy for patients. The non-verbal aspect is equally important and is believed to increase patient confidence and openness. Therefore as a doctor must pay attention to non-verbal aspects such as eye contact, posture and body movements, facial expressions and voice intonation when dealing with patients.[19]

In questions 8 (doctors who actively give ideas and patients who passive listening is examples of the results of good communication) and 15 (indicators good doctor-patients communication have is the satisfaction of the doctor) regarding examples and indicators that good communication has been achieved, almost all respondents can answer correctly, namely 68 people (95.8%) and 68 people (95.8%). This shows that respondents have known that how good indicators in doctor-patient communication activities, where the provision of open questions and the two parties are active with each other in making medical decisions is the best thing to achieve. In doctor-patient communication, both must be actively

involved. If communication has been carried out properly, the patient will feel satisfied, understand the disease he is suffering, adhere to treatment and healing process will be faster.[20] In addition, good communication can reduce work-related stress levels for doctors.[21]

In question number 10 (by applying doctor-patient communication, then the time spent will take more time), the number of respondents who can answer correctly is only 26 people (36.6%). This means that the majority of respondents feel that it will take more time if they apply doctor-patient communication in a good and correct way. This opinion is wrong and seems to be straightened out. Actually a good communication doesn't take long if it's done effectively.[22]

In question number 11 (moderate time to face-to-face with the patient between 8-15 minutes or about 4 patient in an hour), the number of respondents who can answer correctly is 64 people (90.1%). This means that respondents have carried out doctor-patient communication according to guidelines published by the Indonesian Doctors Association which states that face-to-face time between doctors and patients varies according to the patient's condition and needs. The average time needed is in the range of 8-15 minutes or about 4 patients in one hour.[23]

In question number 12 (give close-ended questions to the patient show doctors are interested in patient complains), the number of respondents who can answer correctly is only 45 people (63.4%). This shows that there are still many doctors who agree that the use of close-ended questions makes patients feel that doctors are interested in their complaints. The opinion is wrong and seems to be straightened out. The use of open questions is more recommended because it can foster good relationships and make patients to be more open, because it shows that we are interested in what they are talking about.[24] In addition, the use of open-ended questions also makes it easier for doctors to obtain more information.[25]

In question number 13 (in communicating with patients, doctors should pay attention to patient's body language, avoiding appearing tired, sitting back on the chair to relax), the number of respondents who can answer correctly is only 2 people (2.8%). This may indicate that the average doctor feels that when communicating with the patient, sitting back is okay to appear relaxed. That opinion should be corrected. According to research conducted by Larsen and Smith, it was found that if the doctor leaned back, it would reduce the level of patient satisfaction and vice versa.[26] Therefore, the position of the doctor's body should lean forward, so that the patient feels that the doctor is interested and understands what he is complaining about.

CONCLUSION

The majority of doctors as well as teaching staff at the Faculty of Medicine, University of North Sumatra have a good level of knowledge about doctor-patient communication. But there are still some questions that are answered incorrectly. For Medical Education Institutions, hoped that they can hold regular training and socialization regarding doctor-patient communication to students or doctors. Researchers hoped that doctors can apply this knowledge while carrying out their daily profession so that patients and doctors themselves can feel the benefits.

RECOMMENDATIONS

For medical education institutions, it is expected to hold training and socialization regularly regarding doctor-

patient communication to students or doctors. It is expected for doctors to apply their knowledge in daily livings so that patients and the doctor himself can feel the benefits and in the next research, it's better if this study is conducted on a wider sample, better sampling methods, and assess other factors that can affect level of knowledge such as sources of information, seminar history or training history. In this study, researchers realized the limitations in measuring the level of respondent's knowledge. This research was conducted online which should have been offline due to the COVID-19 pandemic. As a result, the results obtained may be inaccurate and biased.

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