

Awareness of Healthcare Faculty Students on Telehealth: A Mixed Methods Study

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ABSTRACT

Objective: The aim of the study is to determine the awareness and opinion of students in health professions' faculties about telehealth.

Method: This cross-sectional study was designed using a mixed methods approach including both quantitative and qualitative components. Seven hundred ninety seven second-year students from faculties of Medicine, Pharmacy, Dentistry and Nursing at Ege University were included in the study. A form including a section for personal information of the participants and items to determine students' awareness level on telehealth was created by researchers to collect quantitative data. The qualitative data were collected through semi-structured interviews with three students from each faculty selected by purposive sampling.

The relationship between responses to propositions and participants' socio-demographic characteristics was evaluated using t-test and ANOVA. Chi-square tests were used to evaluate other characteristics of the students according to their schools and their responses to propositions about telehealth. For qualitative data, manual descriptive analysis was used. Interview transcripts were read by two researchers, code was assigned to each concept, and they were grouped under thematic headings.

Results: Of the participants, 28.8% reported that they have already heard of the term telehealth. Students are much less familiar with the terms of telenursing and teledentistry. The average total awareness score of the students was 12.70 ± 7.27 [0-27].

Conclusion: Majority of the students are found to lack sufficient awareness of telehealth. This outcome highlights importance of determining awareness levels of future healthcare professionals, who will use these services in their professional lives; especially given that telehealth services have begun to be used widely around the world and have become legally regulated in our country. It points out the necessity of receiving education on this topic during undergraduate period.

Keywords: telehealth, medical students, dentistry students, nursing students, pharmacy students



INTRODUCTION

Telehealth is commonly used as an “umbrella term”; encompassing education, research, health surveillance, and promotion, in addition to the delivery of healthcare services. The pressures arising from these factors on service delivery have prompted healthcare providers to seek innovative solutions. Telemedicine refers to the use of communication networks to provide healthcare services remotely [1]. The World Health Organization (WHO) defines it as “the delivery of health services where distance is a critical factor, by all health professionals using information and communication technologies, for the diagnosis, treatment, and prevention of disease and injuries, research and evaluation, and the exchange of valid information for continuing education of health service providers” [2,3].

Telemedicine offers a novel approach to the provision of healthcare services across different geographic regions with limited access to facilities [4,5]. There is a significant need to ensure that students in healthcare-related educational institutions should be competent in telehealth applications at the point of graduation. Among the barriers to the integration of telehealth into healthcare services, the absence of education covering telehealth topics in faculties is a notable deficiency. Nowadays, the support of traditional face-to-face healthcare services with virtual and electronic applications seems inevitable. It becomes increasingly important for students to learn how to manage these new applications, enhance their digital literacy, and be prepared for post-graduation working conditions [6,7,8]. Various remote health applications in Türkiye have been introduced during COVID19 pandemic period like e-Nabız [9].

Successful implementation and maintenance of telemedicine in healthcare depend on the competence and efficiency of the

medical professionals using the technology. However, very little is known about the opinions, awareness, skills, and training of our future healthcare providers regarding this issue. Undoubtedly, the younger generation, considered the first cohort of ‘digital natives,’ possesses more expertise in technology compared to the older generation. As medicine continues to integrate technology into patient care, it is crucial for medical schools to introduce students to the technological methods they will use in the future and ensure that they understand and analyze the advantages and disadvantages of these methods [1,5,10,11]. Therefore, it is first necessary to evaluate how much future healthcare professionals know and apply the technologies that are predicted to be used more frequently.

The aim of the study is to determine the awareness and opinions of students, who are the future healthcare professionals, regarding telehealth, a technological method that is becoming increasingly prevalent in patient care.

MATERIALS AND METHODS

Setting: This cross-sectional study was designed using a mixed methods approach including both quantitative and qualitative components. Health professions’ faculties available at Ege University are; medicine, dentistry, nursery and pharmacy. Yet there is no telehealth related content in the curricula of these faculties.

Study Design and Flow

Data was collected voluntarily, at lecture halls where students are gathered together, at the beginning of the academic year of 2024 spring and at the end of the courses in second year students of the four faculties mentioned, under the control of faculty members in the research group. The survey forms were applied anonymously. Verbal and written consent of students participating in the study were taken.

Participants: A total of 1,330 second year students from the faculties of Medicine (430), Pharmacy (170), Dentistry (250), and Nursing (480) at Ege University were planned to be included in the study. Using the EPI INfo 7.0 program for the sample, it was calculated that at least 434 students should be included in the study, taking the frequency of hearing the term telehealth as 41% (12) and the confidence interval as 99%. These students are the group of students who have not yet progressed to the clinical stage and are generally taking basic courses. In addition, it was preferred that the faculty members in the research team

Main Points

- Fewer of the students reported that they have already heard of the term telehealth. Students are much less familiar with the terms of telenursing and teledentistry.
- Considering that this practice will also become widespread in Türkiye in the very near future; it is clear that there is a need for immediate action in this area, thus it is necessary to receive education on this topic during the undergraduation period of the health sciences students.

teach these classes, as this will facilitate accessibility to students and the execution of the project. The inclusion criteria are; to be a second-year student studying in one of the faculties of Medicine, Nursing, Dentistry and Pharmacy at Ege University and volunteering to fill out the survey form. Students who did not attend school during the data collection period and if there was missing information in the survey forms to be collected anonymously from students, those students were excluded from the study.

Data collection tools: A form including a section for personal information of the participants and items to determine students' awareness level on telehealth was created by researchers to collect quantitative data. This form was delivered to all students. Out of these, 797 students (60.1%) voluntarily completed the survey forms and formed the study group. A questionnaire was prepared to collect data on students' school, gender, level of awareness on science and technology, desire to receive education on telehealth, and post-graduation career plans. To assess students' level of awareness on telehealth, a 27-item form created by researchers in line with the literature was used. Each item had the options "Yes," "No," and "I don't know," with "Yes" answers scoring 1 point and both "No" and "I don't know" responses scored as 0, from which a total score was calculated. The maximum score was 27.

Ethical considerations: The study was ethically approved by the Ege University Faculty of Medicine Medical Research Ethics Committee (30.11.2023, 23-11.2T/42). Permission to collect data was obtained from all faculty administrations within the scope of the survey.

Data Analysis

This study employs both qualitative and quantitative methods for triangulation. This approach enhances the strength of the results and allows for the discovery of potentially overlooked information by integrating multiple research types. The quantitative section of the study identifies participants' awareness levels and related factors regarding telehealth, while the qualitative section provides a more detailed understanding of participants' perspectives. Structured questions were used in the qualitative research section during interviews. Additionally, if new relevant topics emerged, the opinions of all participants on these issues were also taken into consideration. Focus group discussions and qualitative research are dynamic processes where uncertainties and new situations are resolved throughout

the process [13,14].

For qualitative interviews, purposive sampling was used to select three students from each faculty. This sampling technique was preferred because it had allowed the selection of individuals who could better express their awareness about telehealth, their personal experiences and opinions on telehealth applications. The data for the qualitative study were collected using a semi-structured interview form consisting of four main open-ended questions and sub-questions probing for details. The questions posed to the students were:

- How do you relate to technology? We started using electronic infrastructure more during the pandemic and subsequently the earthquake period; what technologies have entered your life in this period?
- What do you know about telehealth?
- What are your thoughts on the effectiveness of telehealth applications?
- What are your thoughts on including telehealth and related topics in the curriculum of your faculty?

A total of four focus group discussions were conducted, each lasting between 30-40 minutes. The discussions were carried out by experienced researchers. Each discussion began with an explanation of the study's purpose and the obtaining of informed voluntary consent.

Quantitative data analysis was performed using SPSS 23.0. Initially, all variables were subjected to a normal distribution fit test, and the suitability to parametric test criteria was assessed. The relationship between responses to propositions and participants' socio-demographic characteristics was assessed using t-test and ANOVA. Benforini tests were used for post hoc analysis. Moreover, chi-square tests were used to evaluate other characteristics of the students according to the schools they attended and their responses to statements about telehealth. For the analysis of qualitative data, manual descriptive analysis was utilized. All interview transcripts were read separately by two researchers, after which common and differing concepts were identified, a code was assigned to each concept, and the codes were grouped under thematic headings. In selecting quotes from participants' opinions, expressions that were frequently repeated or unique, as well as those that were contrasting or not similar, were considered. Quantitative and qualitative data were interpreted together.

The study was ethically approved by the Medical Research Ethics Committee of Ege University Faculty of Medicine (30.11.2023, 23-11.2T/42). Permission to collect data was obtained from the administrations of all faculties involved in the research.

RESULTS

Of the study group, 61% were female, and 76.2% were aged 20 and below, with the majority indicating their intention to pursue further education through master’s or specialty training after graduation. The characteristics of the students are presented in Table 1.

Table 2 displays the characteristics of students and the statistical differences according to faculties. The majority of students in the nursing faculty were female. The awareness levels about telehealth among medical students were assessed to be poorer compared to other faculties. The students from the nursing faculty were more eager to receive information about telehealth.

28.8% of the students participating in the study have reported having heard of the term telehealth. The students were much less familiar with terms such as telenursing and teledentistry (Table 3).

The average total awareness score of the students was 12.70±7.27 [0-27] Pharmacy faculty students; were mostly female students; those with a good perception of telehealth awareness and willing to receive telehealth education. They believed that telehealth topics should be included in the curriculum. They had statistically significantly higher awareness scores when compared to the other faculties (Table 4).

Qualitative Findings

The qualitative findings were examined under three thematic headings: students’ awareness and use of technology, their awareness of telehealth, and their perceptions of the place of telehealth in undergraduate educational programs.

Theme1: Technology Use and Familiarity

Students participating in the interviews were from various cultures, cities and had succeeded in entering Ege University from schools with different educational methods. They mentioned they had used computers and internet technologies for purposes such as gaming, communication, preparing homework and had got acquainted with teleconference applications [like Zoom, Teams] during the remote education sessions conducted after the

pandemic and the major earthquake disaster in Türkiye. Some of the student statements within this theme were as follows:

Medical student 1 (male): “We hardly experienced any technical problems during this period.”

Pharmacy student 1 (male): “I feared that school might continue online for a long term because I feel I learn less without the compulsory attendance and coming to school increases discipline.”

Nursing student 1 (female): “We manage everything on our phones. we even downloaded 3D applications to study for anatomy classes.”

Dentistry student 3 (female): “Not only us but also educators need to be aware of this issue and equipped in this area.”

Table 1. Characteristics of Students

Characteristics	Number	%
Faculty		
Dentistry	143	17.9
Pharmacy	157	19.7
Nursing	258	32.4
Medical School	239	30.0
Gender		
Female	487	61.0
Male	310	38.8
Age Group		
20 and under	609	76.2
21+	188	23.5
Awareness of Telehealth		
Poor	116	14.5
Medium	561	70.2
Good	117	14.6
Desire to Receive Telehealth Education		
Yes	464	58.1
No	325	40.7
Opinion on Including Telehealth in the Curriculum		
Should be included	613	76.7
Not necessary	174	21.8
Career Plan		
Post-Graduation Work	235	29.4
Specialization	386	48.4
Academic Education	107	13.4
Other	8	1.0

Table 2. Some Characteristics of Students and Their Awareness about Tele-Health According to Faculties

Characteristics	Faculty				Total	Chi-square, p
	Nursing	Medicine	Dentistry	Pharmacy		
	Number(%)	Number(%)	Number(%)	Number(%)	Number(%)	
Gender						
Female	211 (81.8)	106 (44.4)	73 (51.0)	97 (61.8)	487 (61.1)	80.755 0.001
Male	47 (18.2)	133 (55.6)	70 (49.0)	60 (38.2)	310 (38.9)	
Awareness of Telehealth						
Poor	34 (13.3)	49 (20.5)	15 (10.5)	18 (11.5)	116 (14.6)	15.787 0.015
Medium	188 (3.7)	151 (63.2)	112 (78.3)	110 (70.1)	561 (70.7)	
Good	33 (12.9)	39 (16.3)	16(11.2)	29 (18.5)	117(14.7)	
Willingness to Receive Education on Telehealth	182 (71.7)	109 (46.0)	65 (45.5)	108 (69.7)	464 (58.8)	51.458 0.001
Heard of Telehealth	58 (22.5)	58 (24.4)	33 (23.1)	81 (50.9)	230 (28.8)	47.58 0.001
Heard of Telemedicine	32 (12.4)	45 (19.1)	26 (18.4)	47 (29.6)	150 (18.9)	18.92 0.001
Heard of Telenursery	25 (9.7)	16 (6.8)	11 (7.7)	17 (10.7)	159 (8.7)	2438 0.49
Heard of Teledentistry	16 (6.2)	15 (6.3)	22 (15.4)	13 (8.2)	66 (8.3)	12.21 0.007
Heard of Telepharmacy	16 (6.2)	18 (7.7)	12 (8.4)	35 (22.3)	81 (10.3)	31.16 0.001

Table 3. Students' Responses to Statements (%) about Telehealth

Statements	Agree %	Disagree %	Unsure %
1. I have heard of the term telehealth before	28.8	56.8	14.4
2. I have heard of the term telemedicine before	18.9	66.1	15.0
3. I have heard of the term tele-nursing before	8.7	75.4	15.9
4. I have heard of the term tele-dentistry before	8.3	75.8	15.9
5. I have heard of the term tele-pharmacy before	10.3	73.0	16.8
6. Telehealth is the use of telecommunications to provide health information and services	51.9	6.8	41.3
7. Telehealth requires performance tools and a strong internet infrastructure	57.0	6.5	36.6
8. Telehealth can apply treatment management strategies like physiotherapy. psychotherapy. and medication therapy	44.8	11.9	43.3
9. Health consultancy can be provided through telehealth applications	65.2	4.2	30.7
10.Patient examinations can be evaluated and monitored through telehealth	60.5	7.2	32.3
11.Telehealth is a good alternative in situations where access to healthcare institutions is difficult	68.0	4.0	28.0
12.Using telehealth in situations that require face-to-face consultation with the patient can create risks	55.9	8.9	35.2
13.Telehealth services shorten the waiting time	63.8	4.7	31.5
14.Telehealth alone is an effective method for solving all kinds of health problems	10.5	60.1	29.5
15.Telehealth services are initiated after a face-to-face meeting	33.9	10.0	56.1
16.A face-to-face meeting may be required after telehealth service	61.9	3.8	34.3

17.Telehealth reduces direct contact between healthcare workers and patients	64.8	6.3	28.9
18.Telehealth applications allow for effective time use for both healthcare workers and patients	67.9	4.2	27.9
19.Telehealth can be widely used in general practitioners' monitoring of chronic diseases/pregnancy/ infant/child/vaccinations	48.2	11.0	40.8
20.Telehealth applications can be effectively used in individual and community health education	64.4	6.6	29.0
21.Telehealth can be used more widely in extraordinary situations like the Covid-19 pandemic	68.9	3.7	27.4
22.Telehealth applications can transmit images related to the disease using digital cameras, mobile phones etc.	63.3	6.3	30.4
23.Electronic patient monitoring devices such as blood pressure monitors and thermometers can be used in telehealth applications	30.2	21.1	48.7
24.Telehealth applications are reliable in terms of respecting patient confidentiality and protecting personal data	38.1	14.9	47.0
25.The use of telehealth strengthens communication between healthcare professionals and patients	43.9	19.3	36.7
26.Telehealth applications can reduce healthcare costs	62.0	5.7	32.3
27.Telehealth applications will become more widespread in the future	69.4	3.3	27.3

Table 4. Telehealth Awareness Scores According to Certain Characteristics of Students

	Awareness Score Mean±SD	t-test/ANOVA
Faculty		
Dentistry	13.27±6.87	F:6.79 P:0.001
Pharmacy*	14.81±6.82	
Nursing	11.57±7.47	
Medical School	12.08±7.29	
Gender		
Female*	13.10±6.84	t:3,955 p:0.045
Male	11.97±7.88	
Age Group		
20 and under	12.73±7.22	
21+	12.50±7.42	
Awareness of Telehealth		
Poor	9.31±7.10	F:12.609 P: 0.001
Medium	13.03±7.21	
Good*	13.93±6.91	
Willingness to Receive Education on Telehealth		
Yes*	13.39±7.12	t:2.905 p:0.004
No	11.78±7.36	
Opinion on Including Telehealth in the Curriculum		
Should be included*	13.34±7.12	t:3,955 p:0.001
Not necessary	10.75±7.24	

(*)Pharmacy faculty students, female students, students with good awareness of telehealth, students that want to receive education on telehealth and students that want telehealth to be included in curriculum are the groups found to make the difference

Theme 2: Opinion on the Awareness and Effectiveness of Telehealth

The students interviewed did not have sufficient awareness about telehealth. They believed that telehealth applications could not replace traditional medical consultations involving touch and face-to-face communication. They acknowledged that telehealth could facilitate some aspects for doctors and patients also supported the idea that telehealth could be very beneficial for older individuals and patients requiring monitoring for chronic diseases as it could reduce transportation costs and prevent waiting in crowds at healthcare institutions. Additionally, they mentioned that telehealth applications could reduce the physical burden on the institutions providing the service and prevent unnecessary emergency room visits. On the other hand, they also discussed the limitations of telehealth applications; emphasizing issues such as the need for technical infrastructure and the ability to use technological tools. It was pointed out that older individuals and people living in socioeconomically disadvantaged areas of Türkiye might not have the infrastructure or the capability to use this technology. It was also highlighted that making healthcare services more accessible and easier, could lead to overuse and strain on the system or cause problems in their own treatment processes. The students emphasized on the need to paying attention to issues like the privacy of personal data. Student statements related to this theme included:

Medical student 2 (female) “It could be possible in some specialties. for instance; it would be very useful for psychiatry. Consulting could be provided. For example, if someone has complaints, should they visit a hospital or can it be resolved on their own?”

Pharmacy student 3 (female): “For patients with chronic diseases using it for things like prescription refills would be very functional; saving both time and money. I don’t think it would be feasible in dentistry or nursing. It’s not suitable for psychiatry or general surgery. Examination or close consultation is essential.”

Nursing student 1 (female): “Some home visits by nurses could be done via telenursing saving the nurse’s time and strengthening the patient-nurse connection by allowing more frequent communication with the community they serve.”

Dentistry student 2 (male): “In an emergency; if a child loses a tooth from a fall we can advise the parent not to throw the tooth away. It can be very beneficial like teaching how to brush

teeth for preventive oral, dental health. Not suitable for all areas of dentistry. Could be used for monitoring in orthodontic treatment.”

Theme 3: Telehealth Education in Undergraduate Curriculum

The students in focus group discussions, agreed that these topics should be included at some stage of their education. It has also been mentioned that; it could be used as a method to enhance professional experience at their postgraduate period. Some examples of student statements related to this theme are:

Medical student 2 (female): “I think it should be included in specialty training; it’s too early for medical education.”

Pharmacy student 1 (male): “It might be an elective or compulsory course; or information on this topic might be included within a course.”

Nursing student 1 (female): “It might be an elective course; or it might be included in the program without increasing our course load.”

Dentistry student 1 (female) “It might be included in our curriculum. If we are going to use these services when we graduate, we should start learning about them now. We wouldn’t want our curriculum to include topics that won’t be useful after graduation.”

DISCUSSION

It’s the first study in Türkiye to investigate healthcare students’ awareness on telehealth. The majority was found to lack sufficient awareness of telehealth. This outcome highlights the importance of determining the awareness levels of future healthcare professionals, who will use these services in their professional lives; especially given that telehealth services have begun to be used widely around the world and have become legally regulated in Türkiye. It points out the necessity of receiving education on this topic during the undergraduate education period. Educators, who are digital immigrants and were introduced to technology in later stages of their life, might have limited use of these technologies. The literature emphasizes the importance for the younger generation described as digital natives to be familiar with the healthcare technologies they will use in the future: to analyze and understand the advantages and disadvantages of these methods and to become proficient in using them comfortably through experiences during their education [1,5,10,11].

According to the results of this cross-sectional study; of the participants, 28.8% reported having heard of the term telehealth, while significantly fewer students were familiar with terms like telemedicine, telenursing, teledentistry and telepharmacy. As determined in the qualitative part of the study; it is clear that students were not aware of these terms. Studies with medical students have shown that between 41.5% and 86.9% of students reported having heard of the terms telehealth and telemedicine [15,16,17]. In Indonesia, it was reported that only a quarter of pharmacy students were aware of telepharmacy applications [18]. The literature shows that awareness of teledentistry among dental students ranges from 17.2% to 79.1% [19,20,21]. Another study reported that 82% of nursing students were aware of telemedicine while only 75.2% were aware of telenursing [22].

In this study; pharmacy students were found to be more likely to believe they had good awareness of telehealth. On the other hand, the eagerness to learn about this topic was observed more among nursing students. A study in the USA reported that 35.2% of medical students believed that the topic of telemedicine should be included in the curriculum [23]. In Poland, 69.5% and in Iran 72.3% of nursing students expressed their desire to see telenursing topics in their courses [22,24]. Another study reported that 71.2% of students believed that teledentistry should be included in the curriculum [21]. Researchers worldwide emphasize the necessity of including these topics in the curricula of all faculties training health personnel [11,25,26,27]. By including the topics in the curricula for instance familiarizing trainees with telemedicine practices might enhance their confidence and proficiency, leading to a more favorable learning experience [28].

It is striking that the awareness of Ege University students about increasingly popular telehealth applications is much lower compared to many countries. Considering that this practice will also become widespread in Türkiye in the very near future; it is clear that there is a need for immediate action in this area.

According to the quantitative results of the study the propositions that students most agreed upon are that telehealth applications will become more widespread in the future, can be more commonly used in extraordinary situations such as COVID19 pandemic, serve as a good alternative in situations; where access to healthcare institutions is difficult, and reduce waiting times to take healthcare. The outcome of the qualitative study also support these results. Many countries report that

telehealth applications may be an alternative for the increasing homecare needs of elderly population and may direct patient care services at home [4,20,29]. In group discussions of the study, students mentioned that telehealth services might be used for on-line self-diagnosis and triage. Similarly, more than half of the medical students in China reported that telemedicine services might be used for the same purposes [15]. On the other hand; in focus group discussions, students anticipated possible barriers to the use of telehealth, those lacking technological infrastructure, awareness, skills to use it would not be able to benefit from these services [14]. Additionally; it was argued that information, communication technologies provide an opportunity for developing countries effectively reach vital development goals such as reducing poverty, basic healthcare services, and education [30].

Malhotra et al, reported that students taking clinical courses are generally more aware of telemedicine than other students [4]. Another study reported that nursing students with clinical experience had higher levels of telenursing awareness [31]. Ellatif et al, found that 35,5% of nursing students had a good level of awareness about telenursing [32]. It becomes evident that these students, who will be part of the future healthcare team, need to be prepared for future service models before graduation.

According to the quantitative results of this study, pharmacy students, female students, those with a good awareness of telehealth, those interested in receiving telehealth education, and those believing that telehealth topics should be included in the curriculum, statistically have higher awareness scores regarding telehealth. These results indicate that students are interested in the topic, are more eager to learn. Although our study found that female students were more interested, the literature suggests that the relationship between students' telehealth awareness and their demographic characteristics may be coincidental as some studies did not find a significant association [4,31,33]. A study involving medical faculty staff and students found lower telemedicine awareness among students [34]. Conversely; a study with medical students showed that those who had received education on telemedicine or believed in the necessity of such education had better telehealth awareness [35].

Limitations and Strengths of the Study

The study is limited as being conducted at a single university and the sample scope is restricted to only second year students that have not yet taken a course on this subject until this grade. The

outcome of the study is not generalizable as the cross-sectional nature of it; limiting the ability to explain causality, and the reliance on student self-reports. On the other hand, it is the only study in Türkiye conducted with the participation of students from pharmacy, nursing, dentistry, and medical faculties simultaneously. Since the form used for the cross-sectional study was not intended as a scale, validity and reliability analyzes were not performed. It may be considered as the validity evidence of the data collection tool is limited. Therefore, we recommend future studies to use validated data collection tools. It is one of the few studies in the literature that examines telehealth from the students' perspective. The use of both qualitative and quantitative methods strengthens the results. The combination of quantitative and qualitative methods is important for accessing information that might be overlooked when using only one type of research and for enhancing the strength of the finding. While the quantitative part of the study identifies the awareness status of participants on telehealth and related factors, the qualitative part guides a more detailed examination of participants' perspectives. Considering the limited literature in this field, we believe this study will provide useful information and guidance for educators and policymakers in pharmacy, dentistry, nursing and medical education. Developing and enhancing educational programs that include telehealth will accelerate high-quality, safe practices.

This study found that only one-third of students had heard of the term telehealth; even fewer were aware of telepharmacy, telenursing, teledentistry. It is necessary that educational programs in all faculties offering health sciences education support theoretical lessons with applications and include clinical practices open to student participation. The fact that the study group consisted of students (second grade students) who have not yet taken clinical courses and that none of the four faculties' curricula currently include telehealth could be the reason for this result. Conducting telehealth applications in environments with legal regulations for personal data protection, similar to councils with doctors from different disciplines, will lead to beneficial outcomes for patients and strengthen collaboration among physicians. Discussions bringing together different health professional groups could also be conducted. These environments will offer unique experiences for students, providing opportunities to learn in real-life settings, evaluate and understand topics from different perspectives. Considering the active use of artificial intelligence in professional practices, absence of telehealth in educational curriculum should be seen

as a significant deficiency.

CONCLUSION

Majority of the participants exhibited inadequate awareness of telehealth in this study. This emphasizes the importance of assessing the awareness levels of prospective healthcare practitioners, who will integrate these services into their professional domains. This is particularly crucial as telehealth services are increasingly adopted globally; consequently, there is an emerging need to incorporate telehealth education into the undergraduate curriculum.

Conflict of Interest: The authors declare that they have no conflict of interest.

Informed Consent: Informed consent document was obtained from the study participants.

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