BMIJ
ISSN: 2148-2586

bmij (2025) 13 (2):794-806
doi: https://doi.org/10.15295/bmij.v13i2.2542

Research Article

Health communication problems experienced by university students

Üniversite öğrencilerinin yaşadığı sağlık iletişimi sorunları

Emine Murt[1]

Yılmaz Daşlı[2]

[1] Ph.D, Sivas Cumhuriyet University, Sivas, Turkey, emine.mnrt@gmail.com

ORCID: 0009-0000-0070-8648

[2] Prof. Dr., Sivas Cumhuriyet University, Sivas, Turkey, ydasli@cumhuriyet.edu.tr

ORCID: 0000-0001-6569-1103

Corresponding Author:

Emine Murt,

Sivas Cumhuriyet University, Sivas, Turkey,

emine.mnrt@gmail.com

Submitted: 17/03/2025

Revised: 13/05/2025

Accepted: 26/05/2025

Online Published: 25/06/2025

Citation: Murt, E., & Daşlı, Y., Health communication problems experienced by university students, bmij (2025) 13 (2): 794-806, doi: https://doi.org/10.15295/bmij.v13i2.2542

Abstract

This study aims to identify the health communication challenges faced by university students. The study population consists of 2,695 students enrolled at the Faculty of Health Sciences of Sivas Cumhuriyet University who have received services from healthcare institutions. The sample includes 400 students selected through stratified sampling. The data collection tool used in the study is the "Health Communication Problems Scale" developed by Yeşildal, Akman Dömbekci, and Öztürk. The Cronbach's alpha coefficient for the scale in this study was 0.809. The study found that nursing students ($\bar{X}$ = 2.69) had lower levels of communication barriers compared to students of health management ($\bar{X}$ = 2.97), physiotherapy and rehabilitation ($\bar{X}$ = 2.99), and nutrition and dietetics ($\bar{X}$ = 2.98). The overall Health Communication Problems Scale and the sub-dimension of social communication did not show statistically significant differences according to students' departments ($p > 0.05$). Likewise, average scores on the health communication problems scale and its subdimensions did not differ significantly based on gender, academic year, frequency of visits to healthcare institutions, or family type. A low positive correlation was found between the effective communication sub-dimensions and the social communication (r = 0.370) and communication barriers (r = .483) sub-dimensions. Similarly, there was a low positive correlation between the social communication and communication barriers sub-dimensions (r = 0.324). The study concludes that developing effective health communication strategies and adopting holistic, interdisciplinary, and practice-oriented approaches to solve problems in this field are essential. Such efforts will not only enhance the quality of healthcare services but also strengthen the interaction between patients and healthcare providers, thereby enabling a more effective and humane delivery of health services.

Keywords: Communication, Health Communication, Health Communication Problems

Jel Codes: H51, H52, H53

Öz

Bu çalışmanın amacı üniversite öğrencilerinin yaşadığı sağlık iletişimi sorunlarını ortaya çıkarmaktır. Çalışmanın evrenini sağlık kuruluşlarından hizmet alan, Sivas Cumhuriyet Üniversitesi Sağlık Bilimleri Fakültesinde öğrenim gören 2.695 öğrenci oluşturmaktadır. Çalışmanın örneklemini 400 öğrenci oluşturmakta olup tabakalı örnekleme yöntemi ile katılımcılar belirlenmiştir. Araştırmada veri toplama aracı olarak Yeşildal, Akman Dömbekci ve Öztürk tarafından geliştirilen Sağlık İletişimi Sorunları Ölçeği kullanılmıştır. Araştırma kapsamında ölçeğin Cronbach alfa değeri 0,809 olarak bulunmuştur. Çalışma ile hemşirelik bölümü öğrencilerinin ($\bar{X}$ =2,69) iletişim engelleri düzeyi sağlık yönetimi ($\bar{X}$ =2,97), fizyoterapi ve rehabilitasyon ($\bar{X}$ =2,99) ve beslenme ve diyetetik öğrencilerine ($\bar{X}$ =2,98) göre daha düşük olduğu bulunmuştur. Sağlıkta iletişim sorunları ölçeği ve sosyal iletişim alt boyut düzeyleri öğrencilerin eğitim aldıkları bölüme göre istatistiksel olarak farklılık göstermemektedir (p>0,05). Sağlıkta iletişim sorunları ölçeği ve alt boyut ortalama puanları cinsiyete, sınıfa, sağlık kurumuna başvuru sayısına ve aile türüne göre istatistiksel olarak farklılık göstermemektedir. Etkili iletişim alt boyutu ile sosyal iletişim (r=,370) ve iletişim engelleri (r=,483) alt boyutları arasında pozitif yönlü düşük kuvvetli bir ilişki bulunmaktadır. Sosyal iletişim alt boyutu ile iletişim engelleri alt boyutları arasında (r=,324) düşük kuvvetli pozitif yönlü bir ilişki bulunmaktadır. Çalışma sonucunda, sağlık iletişimi stratejilerinin geliştirilmesi ve alanda karşılaşılan sorunların çözümüne yönelik bütüncül, disiplinler arası ve uygulamaya dönük yaklaşımların benimsenmesi gerektiği, bu sayede hem sağlık hizmetlerinin niteliğinin artacağı hem de hasta ile sağlık çalışanı arasındaki etkileşimi güçlendirerek, daha etkili ve insani bir sağlık hizmeti sunumunun mümkün kılacağı düşünülmektedir.

Anahtar Kelimeler: İletişim, Sağlık İletişimi, Sağlık İletişimi Sorunları

Jel Kodları: H51, H52, H53

Literature review

Communication has been a fundamental process throughout human history, enabling individuals to achieve personal development and actively participate in social life. From the moment we are born, the relationships we establish with our surroundings are not limited to verbal or written expressions but also rely on the sharing of emotions, thoughts, and meanings (Kuşku Özdemir, 2023, p. 1531). In this respect, communication serves as a vital tool that enables individuals to integrate into society, express themselves, and fulfil their social roles (Doğan, 2017, p. 3).

Historically, the concept of communication was used synonymously with the term "correspondence" or "messaging." However, in contemporary contexts, communication has acquired a much broader meaning. Modern understandings of communication emphasise not only the transfer of information but also the development of mutual understanding, the creation of shared meanings, and the facilitation of social interaction. Thus, communication is now considered a multidimensional process, affecting a wide range of domains, from interpersonal interaction to cultural transmission and from the functioning of social structures to the construction of identity (Ertekin, Ilgın, and Ataman Yengin, 2018, p. 299).

Derived from the Latin verb *communicare*, the term "communication" encompasses meanings such as sharing, collaborating, and bringing together (Özmen, 2018, p. 15; Ertekin, Ilgın and Ataman Yengin, 2018, p. 299; Okay, 2020, p. 8). This etymological root suggests that communication is not merely a technical transfer of data but also serves as a means for establishing emotional and social bonds between individuals (Vardarlıer and Öztürk, 2020, p. 2; Kayret and Denizli, 2023, p. 24; Berber, 2024, p. 4).

When approached from an interdisciplinary perspective, communication is addressed in social sciences—such as sociology, psychology, anthropology, and political science—within the framework of individual-society relations. In contrast, it is studied more in terms of technical systems and tools in the fields of engineering and the natural sciences. This diversity reveals that communication holds such a broad scope that it cannot be confined to a single definition (Süllü Durul and Özkan Kutlu, 2024, p. 106).

Modern communication theories generally accept that this process consists of three main stages: the generation of information, its meaningful transmission, and its interpretation by the receiver. However, this technical model may fall short of explaining the emotional and cultural dimensions of communication. Communication is an interactive process in which individuals convey not only their thoughts but also their emotions, values, and beliefs, thereby developing mutual empathy and understanding. This process shapes individual attitudes and behaviours, ensures adherence to social norms, and contributes to the continuity of society (Dugan and Arslan, 2015, p. 78; Kuşku Özdemir, 2023, p. 1531; Kayret and Denizli, 2023, p. 24).

In conclusion, communication plays an indispensable role at both individual and societal levels, building bridges between people and forming the foundation of communal life. An effective communication process supports values such as empathy, understanding, cooperation, and social integration, thereby fulfilling individuals' psychological needs and enabling the healthy development of societies (Yılmaz and Günay, 2022, p. 76).

Health is an essential component of sustainable development and societal well-being (Gedikli, 2024, p. 387). In earlier times, health was primarily defined as the absence of disease. However, the concept has evolved. Advances in technology and changes in the social structure have shaped not only individuals' physiological conditions but also the general understanding of public health. As a result, today, health is addressed within a much broader framework (Mısırlıoğlu and Doğan, 2025, p. 66). When individuals experience health problems, health becomes central in their lives and gains priority. Although it is often defined as "the absence of illness," health is, in fact, a complex and multidimensional phenomenon. The concept of health is not limited to the definition provided by the World Health Organisation (WHO); various disciplines and models have also approached health from different perspectives and developed alternative definitions. Therefore, health is a broad and multifaceted concept that must be evaluated from multiple viewpoints (Yıldırım and Bulut, 2023, p. 54; Yorulmaz and Erdem, 2021, p. 59).

The definition of health introduced by the World Health Organization (WHO) in 1948— "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"—highlights the multidimensional nature of health. Through this definition, WHO emphasises that health encompasses far more than merely the absence of illness or disability. This approach moves beyond a narrow focus on physical health to adopt a broader perspective that encompasses general quality of life and social well-being. Moreover, it defines health as the most fundamental human right—non-transferable and irreplaceable (Koçak and Bulduklu, 2013, p. 5). This

perspective positions health not as a goal but as a holistic state of well-being encompassing an individual's physical, mental, emotional, and social balance (Kuru, 2024, p. 3).

Being healthy is not simply about avoiding illness; it also requires the existence of environmental, social, and economic conditions that enhance the quality of life (İnan and Canoğlu, 2016, p. 114; Çam and Çılgınoğlu, 2021, p. 198). In this sense, health is a multidimensional concept that enables a productive and balanced life at both the individual and societal levels. This broad and dynamic understanding of health further elevates the importance of health communication.

A historical examination reveals that health communication is not merely a product of the modern era. Philosophers such as Hippocrates and Plato emphasised the significance of sharing knowledge on healthy living and disease treatment, illustrating that health communication has deep historical roots (Taşkıran and Yıldız, 2019, p. 114). Access to health information and the ability to comprehend it have always been integral components of achieving the goal of healthy individuals and a healthy society.

The development of health communication as a systematic field began in the mid-20th century in the United States. With the growing interest in healthcare services, it has become increasingly crucial for health-related information to be effectively communicated to the public rather than being confined to medical professionals. This shift transformed health communication into a discipline that extends far beyond the transmission of medical knowledge—it now facilitates individual participation in decision-making processes. It has a positive influence on public health (Sezgin, 2015, p. 95).

Throughout the 1970s, health communication rapidly evolved into a professional discipline. Prominent organisations such as the International Communication Association (ICA) and the Speech Communication Association (SCA) laid its scientific foundations and promoted its application in practice. The first health communication study conducted by the ICA in 1972 marked a turning point in conceptually defining the field and gaining its academic recognition. The university-based research, conferences, and publications initiated by ICA demonstrated that health communication was not only a theoretical field but also one of practical significance. In 1985, the SCA established its first commission focused on health communication, contributing to further research and helping the discipline mature professionally. The establishment of this commission was a significant step toward integrating scientific and practical efforts in the field of health communication. The unification of ICA and SCA in 1992 significantly accelerated developments in the field and led to more comprehensive and practical national and international research on health communication (Vardarlıer and Öztürk, 2020, p. 2; Başol, 2018, p. 5; Öztürk, 2009, p. 43; Rogers, 1994, p. 211).

In the 21st century, health communication has continued to grow as a multidisciplinary concept and has gained increasing importance globally. In this context, the "Healthy People" projects have served as a vital platform that placed health communication at the core of global health goals. While the early stages of the "Healthy People 2010" initiative ensured the official recognition of health communication, the subsequent "Healthy People 2020" project further expanded the field by integrating health information technologies with health communication. These developments underscore the growing significance of health communication as a multidisciplinary field and indicate its increasingly central role in improving public health in the future (Vardarlıer and Öztürk, 2020, p. 3).

As a result of these developments, health communication now plays a critical role not only in enhancing individuals' health literacy and preventing diseases but also in improving public health. Theories and practices from communication sciences possess immense potential to raise awareness about health, promote healthy lifestyles, and provide the public with accurate health information. With a multidisciplinary perspective, health communication aims to develop more effective and comprehensive strategies to enhance community health through collaboration among various fields (Taşkıran and Yıldız, 2019, p. 114). In this regard, health communication emerges as a vital tool in public health, aiming to facilitate the exchange of information between individuals and communities to promote health and prevent diseases (Ishikawa and Kiuchi, 2010, p. 1).

This role extends beyond the treatment of illness or the provision of healthcare services; it also encompasses promoting healthy habits, disseminating health education, and enhancing public health awareness. Health communication, which aims to integrate both social sciences and medical sciences, seeks to ensure that health-related information is conveyed to societies accurately and effectively. It plays a crucial role in strengthening information exchange between health professionals and patients, disseminating health knowledge to the public, and enhancing the efficiency of health services (Göksu, 2018, p. 15). Moreover, it significantly contributes to encouraging individuals to adopt healthy behaviours, raising awareness about health issues, and informing the development of public health policies (Avcı and Avşar, 2014, p. 182).

Health communication is of utmost importance for establishing healthy relationships between healthcare professionals and patients at both individual and institutional levels. For health communication to be successful, fundamental components such as empathy, active listening, trust, clarity, and mutual understanding must be utilised effectively. Healthcare professionals must also consider the emotional state of their patients, gain their trust, and actively involve them in the treatment process (Büyükaslan, 2018, pp. 3–4). Effective communication between healthcare providers and patients enhances the success of treatment processes and improves health outcomes. It also helps reduce health risks, prevent illnesses, and increase public health awareness (Ishikawa and Kiuchi, 2010, p. 1).

The stronger the communication in healthcare services, the greater the patient satisfaction, adherence to treatment, and the likelihood of positive treatment outcomes. Open, understanding, and empathetic communication by healthcare professionals not only improves the quality of healthcare services but also ensures better patient engagement in treatment. Conversely, problems in health communication may result in severe consequences between patients and healthcare workers. Such issues may lead to medical errors or even escalate into broader healthcare crises. Therefore, health communication is a critical factor that directly impacts the success of medical interventions and patient outcomes (Wynia and Osborn, 2010, p. 2; Başol, 2018, p. 5).

In conclusion, as in all aspects of social life, communication processes within healthcare institutions are often disrupted, resulting in the emergence of various problems. Communication failures in healthcare settings can cause more severe consequences compared to other domains of social life. Thus, effective health communication can help prevent numerous problems. Efforts to protect and improve health underlines the significance of health communication (Temel and Güzel, 2025, p. 189). When communication issues stem from healthcare professionals, they can lead to public distrust toward health workers and institutions, potentially triggering serious social problems such as violence against healthcare staff. On the other hand, when patients are the source of such issues, conflict and the emergence of complex patient profiles hinder effective treatment processes. In health communication, problems may arise from both patients and professionals (Başol, 2018, p. 6). Patients' inability to express themselves, shyness, or difficulty understanding medical terms complicate the treatment process. Likewise, institutional factors such as overcrowded facilities, lack of guidance, stressful working conditions, rapid consultations, long waiting times, and insufficient attention to patients can result in communication problems attributed to healthcare providers (Uludağ, 2011, p. 655).

This study focuses on health communication among students of the Faculty of Health Sciences, as these individuals are positioned both as future healthcare providers and, occasionally, as recipients of healthcare services. This dual perspective enables students to evaluate the communication process more comprehensively and empathetically from both the patient and healthcare provider viewpoints. Consequently, they gain a deeper understanding of the role of effective communication in enhancing the quality of healthcare services. They are better equipped to integrate these skills into their future professional practice. This approach not only enhances their professional competence but also contributes to improving the overall quality of healthcare delivery.

Method

This study, which is descriptive and cross-sectional in design, was conducted between October 1 and October 31, 2024, among students enrolled at the Faculty of Health Sciences at Sivas Cumhuriyet University. The study population consisted of 2,695 students enrolled in the faculty. The sample size was calculated using the formula applicable when the population size is known: $n = N \cdot t^2 \cdot p \cdot q / [d^2 \cdot (N-1) + t^2 \cdot p \cdot q]$ with a 95% confidence level and a 5% margin of error (p = 0.50, q = 0.50, d = 0.05, t = 1.96) (Karasar, 2016).

A stratified sampling method was employed in the research, with each department within the Faculty of Health Sciences (Nursing, Midwifery, Health Management, Physiotherapy and Rehabilitation, and Nutrition and Dietetics) constituting a separate stratum.

The data collection tool used in the study consisted of two sections: the first section was a Personal Information Form that included demographic questions; the second section comprised the Health Communication Problems Scale developed by Yeşildal, Akman Dömbekci, and Öztürk (2021).

The Health Communication Problems Scale includes 13 items, 5 of which are reverse-coded, and is divided into three sub-dimensions: Effective Communication (items 1–6), Social Communication (items 7–9), and Communication Barriers (items 10–13). The scale uses a five-point Likert format, with total scores ranging from 13 to 65. According to Yeşildal, Akman Dömbekci, and Öztürk (2021), Cronbach's alpha reliability coefficients were reported as follows: 0.880 for the overall scale, 0.830 for the Effective

Communication subscale, 0.780 for Social Communication, and 0.770 for Communication Barriers. In the current study, the overall Cronbach's alpha value was calculated as 0.809, indicating a high level of reliability.

The research data was collected through face-to-face surveys. The data obtained were analysed using quantitative analysis methods. Descriptive statistics (frequency, percentage, mean, median, standard deviation, skewness, and kurtosis) were used to summarise the data. After confirming that the data followed a normal distribution, inferential statistical tests such as the independent samples t-test, one-way ANOVA, and post hoc tests (Tamhane's T2 and LSD) were applied to analyse differences in means. Pearson correlation coefficient analysis was used to determine the relationships between the scale dimensions.

For this study, ethical approval was obtained from the Ethics Committee for Scientific Research Proposals in the Social Sciences at Sivas Cumhuriyet University, with Decision No. 25, taken at Meeting No. 4, dated March 20, 2024. Before conducting the research, written permission was also obtained from the relevant institution.

Before initiating the study, participation was based on voluntary consent. Students who agreed to participate were included in the research. Participants were informed that the data collected would be used solely for research purposes and that personal information would be kept confidential after being shared with the researcher. Written and verbal informed consent was obtained following a clear explanation of the purpose and duration of the study.

Table 1: Reliability Analyses of the Health Communication Problems Scale and Its Subdimensions

	Cronbach's Alpha	Number of Items
Effective Communication	0.740	6
Social Communication	0.615	3
Communication Barriers	0.715	4
Health Communication Problems (HCP)	0.809	13

As shown in Table 1, reliability analyses were conducted for the subdimensions of the scale used. The Cronbach's Alpha coefficient for the Effective Communication subdimension was found to be 0.740, consisting of 6 items. The reliability coefficient for the Social Communication subdimension was 0.615, which includes three items. For the Communication Barriers subdimension, Cronbach's Alpha coefficient was calculated as 0.715 with four items. The Health Communication Problems (HCP) dimension, comprising 13 items in total, yielded a Cronbach's Alpha value of 0.809. These results indicate that the scale has an overall adequate level of internal consistency.

Table 2: Descriptive Statistics and Normality Test Results of the Health Communication Problems Scale and Its Subdimensions

	K-S	**p**	**Min**	**Max**	$\bar{X}$	**S.D.**	**Med.**	**Skewness**	**Kurtosis**
Effective Communication	0.075	0.000	1.00	5.00	2.50	0.69	2.50	0.048	0.399
Social Communication	0.109	0.000	1.00	5.00	2.56	0.84	2.66	0.161	-0.340
Communication Barriers	0.091	0.000	1.00	5.00	2.82	0.81	2.87	0.159	0.167
Health Communication Problems (HCP)	0.060	0.001	1.00	4.54	2.61	0.59	2.65	-0.192	0.292

The study examined the distribution characteristics of variables related to effective communication, social communication, communication barriers, and overall health communication problems. The results of the Kolmogorov-Smirnov test were significant for all variables ($p < .05$), indicating a deviation from normal distribution. In terms of mean scores, the highest average was observed in Communication Barriers ($\bar{X} = 2.82$), while the lowest was in Effective Communication ($\bar{X} = 2.50$). The fact that the median values are close to the means suggests that extreme values did not heavily influence the distributions. Furthermore, skewness and kurtosis values indicate that the distributions were largely symmetrical and approximately regular (George and Mallery, 2010).

Findings

Table 3: Socio-Demographic Characteristics of the Participants

Gender	**N**	**%**
Female	346	86.5
Male	54	13.5
Department	**N**	**%**
Nursing	187	46.8
Midwifery	97	24.3
Health Management	54	13.5
Physiotherapy & Rehabilitation	43	10.8
Nutrition and Dietetics	19	4.8
Year of Study	**N**	**%**
1st Year	59	14.8
2nd Year	119	29.8
3rd Year	112	28.0
4th Year	110	27.5
Number of Healthcare Visits (Last Year)	**N**	**%**
1-3	197	49.3
4-7	144	36.0
8 or more	59	14.8
Family Type	**N**	**%**
Nuclear Family	332	83.0
Extended Family	56	14.0
Single Parent / Incomplete	12	3.0
Age ($\bar{X}$±s.s.)	21.10±1.87	

Upon examining the socio-demographic distribution of the study participants, 86.5% were female, and 13.5% were male. In terms of academic departments, 46.8% of the students were enrolled in Nursing, 24.3% in Midwifery, 13.5% in Health Management, 10.8% in Physiotherapy and Rehabilitation, and 4.8% in Nutrition and Dietetics. Regarding the year of study, 14.8% were first-year students, 29.8% were second-year students, 28% were third-year students, and 27.5% were fourth-year students.

The number of healthcare institution visits in the past year showed that 49.3% of the students had visited once or twice, 36% had visited 3–7 times, and 14.8% had visited eight or more times. In terms of family structure, 83% came from nuclear families, 14% from extended families, and 3% from single-parent or incomplete families. The mean age of the participants was 21.10 ± 1.87 years.

Table 4: Analysis of Differences in Health Communication Problems and Subdimension Levels According to Participants' Socio-Demographic Characteristics

		Effective Communication	**Social Communication**	Communication Barriers	Health Communication Problems (HCP)
Gender	Female	2.51±0.69	2.58±0.85	2.82±0.78	2.62±0.59
	Male	2.44±0.66	2.41±0.76	2.82±95	2.55±0.60
t/p		0.73/0.46	1.37/0.17	0.03/0.97	0.85/0.39
Department	Nursing	2.43±0.76	2.51±0.87	2.69±0.81	2.53±0.64
	Midwifery	2.47±0.63	2.65±0.79	2.88±0.77	2.64±0.56
	Health Management	2.52±0.57	2.60±0.86	2.97±0.89	2.68±0.52
	Physiotherapy & Rehabilitation	2.73±0.64	2.37±0.73	2.99±0.74	2.72±0.55
	Nutrition and Dietetics	2.78±0.48	2.77±0.93	2.98±0.73	2.84±0.47
F/p		2.46/0.045*	1.29/0.27	2.45/0.045*	2.15/0.07
Year of Study	1st Year	2.45±0.68	2.60±0.96	2.82±0.73	2.60±0.58
	2nd Year	2.44±0.75	2.53±0.83	2.74±0.80	2.55±0.62
	3rd Year	2.56±0.66	2.50±0.82	2.79±0.76	2.61±0.56
	4th Year	2.54±0.65	2.62±0.80	2.95±0.89	2.68±0.60
F/p		0.82/0.48	0.47/0.69	1.37/0.25	0.96/0.40
Healthcare Utilization	1-3	2.46±0.72	2.52±0.83	2.78±0.83	2.57±0.61
	4-7	2.52±0.64	2.57±0.79	2.87±0.82	2.64±0.58
	8 or more	2.58±0.71	2.66±0.98	2.87±0.71	2.69±0.56
F/p		0.75/0.47	0.64/0.52	0.65/0.52	1.05/0.34
Family Type	Nuclear Family	2.52±0.67	2.55±0.83	2.84±0.81	2.63±0.58
	Extended Family	2.34±0.79	2.57±0.97	2.64±0.80	2.49±0.69
	Single-Parent / Incomplete Family	2.80±0.66	2.58±0.60	3.10±0.70	2.84±0.51
F/p		2.74/0.06	0.02/0.98	2.19/0.11	2.20/0.11
Income	2000 TL or less	2.40±0.66	2.58±0.85	2.76±0.81	2.55±0.59
	2001-4000 TL	2.53±0.67	2.54±0.84	2.82±0.78	2.62±0.59
	4001 TL or more	2.77±0.81	2.52±0.85	3.09±0.92	2.81±0.61
F/p		4.87/0.008*	0.12/0.88	2.59/0.07	3.00/0.05

To determine the differences in health communication problems and subdimension levels among students of the Faculty of Health Sciences based on their socio-demographic characteristics, independent samples t-tests were used for variables with two groups, and one-way analysis of variance (ANOVA) was used for variables with more than two groups.

According to the results, the mean scores of the Health Communication Problems Scale and its subdimensions did not differ significantly by gender, year of study, number of healthcare visits in the past year, or family type at the 95% confidence level ($p > 0.05$).

However, the subdimension of Effective Communication showed a statistically significant difference among academic departments at the 95% confidence level ($F = 2.460$; $p < 0.05$). Since the data did not meet the assumption of homogeneity of variances, Tamhane's T2 test was used for post hoc analysis. According to the results, students in the Nursing ($\bar{X} = 2.43$) and Midwifery ($\bar{X} = 2.47$) departments had lower effective communication scores compared to students in Physiotherapy and Rehabilitation ($\bar{X} = 2.73$) and Nutrition and Dietetics ($\bar{X} = 2.78$).

Similarly, the Communication Barriers subdimension showed a significant difference among departments ($F = 2.458$; $p < 0.05$). Since the data were homogeneous, the least significant difference

(LSD) test was used for post hoc comparison. Results indicated that Nursing students ($\bar{X}$ = 2.69) had lower communication barrier scores compared to students in Health Management ($\bar{X}$ = 2.97), Physiotherapy and Rehabilitation ($\bar{X}$ = 2.99), and Nutrition and Dietetics ($\bar{X}$ = 2.98). No statistically significant differences were found in the Social Communication subdimension or overall HCP scores among departments ($p > 0.05$).

A statistically significant difference was also found in Effective Communication scores across income groups ($F = 4.874$; $p < 0.05$). Since the data were homogeneous, the LSD test was again used for post hoc analysis. According to the results, students with a monthly income of 2000 TL or less ($\bar{X}$ = 2.40) had significantly lower effective communication scores than those with incomes of 2001–4000 TL ($\bar{X}$ = 2.53) and 4001 TL or more ($\bar{X}$ = 2.77). No significant differences were found in Social Communication, Communication Barriers, or overall HCP scores according to income level.

Table 5: Correlation Analysis of the Subdimensions of the Health Communication Problems Scale

	Effective Communication	Social Communication	Communication Barriers	Health Communication Problems (HCP)
Effective Communication	1	0.370**	0.483**	0.857**
Social Communication		1	0.324**	0.660**
Communication Barriers			1	0.782*
Health Communication Problems (HCP)				1

According to the results of the correlation analysis, there was a statistically significant and positive relationship between Effective Communication and Social Communication (r = 0.370, $p < .01$). Additionally, a strong and positive correlation was found between Effective Communication and Communication Barriers (r = 0.483, $p < .01$), as well as between Effective Communication and the overall Health Communication Problems (HCP) score (r = 0.857, $p < .01$). There were also statistically significant positive correlations between Social Communication and Communication Barriers (r = 0.324, $p < .01$), and between Social Communication and the overall HCP score (r = 0.660, $p < .01$). Finally, a strong and significant correlation was observed between Communication Barriers and HCP (r = 0.782, $p < .01$). These findings suggest strong interrelationships among the communication components.

Discussion and conclusion

This study was conducted among students at the Faculty of Health Sciences at Sivas Cumhuriyet University to identify the communication problems they experience within healthcare institutions. Since these students are both future healthcare professionals and, at times, recipients of healthcare services themselves, the aim was to enable them to evaluate the communication process from both the patient and provider perspectives through the lens of empathy.

The study included 400 students, of whom 86.5% were female and 13.5% were male. No statistically significant difference was found between gender and the Health Communication Problems Scale. Similar findings have also been reported in the literature (Gül and Akman Dömbekçi, 2023). Although not statistically significant, female students had higher mean scores across all subdimensions compared to male students. These findings are consistent with the results of studies conducted by Gül and Akman Dömbekçi (2023) and Arslanoğlu and Özargun (2023).

Among academic departments, students in the Nutrition and Dietetics program had the highest mean scores across nearly all subdimensions, while Nursing students had the lowest. This is noteworthy, considering that nursing students who are expected to engage in more frequent and direct patient interaction reported lower communication scores than their peers.

A statistically significant difference ($p < .05$) was found between income levels and the *Effective Communication* subdimension. Students with lower income levels reported lower effective communication scores compared to students with higher income levels. This is also supported by previous studies in the literature (Gül and Akman Dömbekçi, 2023; Arslanoğlu and Özargun, 2023; Temel and Güzel, 2025).

The overall mean score for the Health Communication Problems Scale was found to be $\bar{X}$ = 2.61. The mean score for the *Effective Communication* subdimension was $\bar{X}$ = 2.50. For *Social Communication,* it was $\bar{X}$ = 2.56, and for *Communication Barriers,* it was $\bar{X}$ = 2.82, indicating the highest level of reported issues in that subdimension. In a similar study conducted by Gül and Akman Dömbekçi (2023) in Manisa, the average score for *Communication Barriers* was reported as $\bar{X}$ = 3.14, further supporting the findings of this research.

Correlation analysis revealed a weak but positive and statistically significant relationship between *Social Communication* and *Communication Barriers* (r = .324). No statistically significant differences were found in the scale or subdimensions about most demographic variables ($p > .05$).

Desmond and Copeland (2010) have emphasised that physicians with strong communication skills contribute to patients feeling more comfortable and participating more actively in their treatment. Nal (2021) emphasised the importance of trust in healthcare professionals and institutions in facilitating effective communication with patients. Kızılkaya (2023) found that loyalty to physicians was negatively associated with health communication problems, mistrust in the healthcare system, effective communication, social communication, and communication barriers. At the same time, significant positive correlations were found between health communication problems and mistrust in healthcare systems, as well as between communication effectiveness, social interaction, and communication barriers.

In a U.S.-based study, Glos and Pinet-Peralta (2023) reported that marital status was not a determining factor in health communication and interaction. In South Korea, Lee et al. (2019) found that education has a positive influence on socially oriented health communication behaviours. Singh et al. (2017) noted in their study on socio-demographic factors affecting healthcare utilisation and communication that older adults communicated more effectively with providers, possibly due to differing information needs and expectations. Başol (2018) found that negative perceptions of healthcare personnel were most common among individuals with secondary and undergraduate education. Similarly, in their study, Gemlik et al. (2022) reported communication issues between patients and healthcare professionals, citing the leading causes as patients not listening, being overly persistent, and lacking information.

This study's findings reveal that health communication plays a vital role in the effectiveness of healthcare services. Health is a multidimensional phenomenon that encompasses not only biomedical processes but also social, psychological, and cultural dimensions. Therefore, solving communication-related problems in healthcare requires not only the contributions of health sciences but also the involvement of the social sciences. The research results demonstrate that deficiencies in communication during the delivery of healthcare services can hurt both patient satisfaction and service quality.

The study also revealed significant differences in communication skills based on students' departments and socioeconomic status. Nursing students were found to have lower communication scores compared to students from other departments, and students with lower income levels displayed more limited communication skills. These results suggest that the content and instructional methods of health communication education require reassessment.

Based on the study's results, the following recommendations have been developed:

Enhancing Educational Curricula: Theoretical and practical courses aimed at strengthening communication skills among students in health sciences faculties should be increased. Additionally, communication-focused seminars and workshops should be integrated into the educational process.

Department-Based Curriculum Adjustments: For departments such as nursing, where communication scores were lower, curricular revisions should be made to emphasise communication-focused content and learning outcomes.

Sensitivity to Socioeconomic Factors: Special training programs and social support mechanisms should be developed to support the communication skills of students from low-income backgrounds.

Practices to Reduce Communication Barriers: Healthcare institutions should develop structural and functional strategies to facilitate effective communication between patients and healthcare professionals. These strategies could include creating open communication environments, providing staff training, and offering counselling services.

Complementing Qualitative Research: In addition to quantitative data, in-depth interviews and focus group discussions with students can provide more detailed insights into the underlying causes of communication problems.

Comparative and Observational Research: Comparative studies among universities and observational research during clinical practice would be valuable in evaluating how communication skills are reflected in real-world settings.

Graduate–Student Comparisons: To better assess the long-term impact of health communication education, comparative studies between current students and graduates actively working in the healthcare sector should be conducted.

In conclusion, health is a complex, multidimensional concept that cannot be confined to a purely biomedical framework. Thus, addressing issues in the field of healthcare requires interdisciplinary contributions, especially from sociology, communication studies, and psychology. Health communication, situated at the intersection of these disciplines, has the potential to resolve many issues naturally when applied effectively and correctly. For example, incidents of violence in healthcare settings often stem from ineffective or inadequate communication. In this regard, developing strategic approaches to health communication is crucial.

Adopting holistic, interdisciplinary, and practice-oriented approaches to solving problems in health communication will not only improve the quality of healthcare services but also strengthen the relationship between patients and healthcare providers.

Peer-review:

Externally peer-reviewed

Conflict of interests:

The authors have no conflict of interest to declare.

Grant Support:

The authors declared that this study has received no financial support.

Acknowledgement:

If the authors are to thank someone, they can write in this section.

Ethics Committee Approval:

Ethics committee approval was received for this study from the Sivas Cumhuriyet University Scientific Research Proposals in Social Sciences Ethics Committee on 20/03/2024, document number 4/25.

Author Contributions:

Idea/Concept/ Design: **E.M., Y.D.** *Data Collection and/or Processing*: **E.M., Y.D.** *Analysis and/or Interpretation:* **E.M., Y.D.** *Literature Review:* **E.M., Y.D.**, *Writing the Article*: **E.M., Y.D.** *Critical Review*: **E.M., Y.D.**, *Approval*: **E.M., Y.D.**

References

Arslanoğlu, A. and Özargun, G. (2023). The impact of health communication problems on the treatment process. Journal of Health and Social Welfare Research, 5(2), 212–223. https://doi.org/10.55050/sarad.1296929

Avcı, K. and Avşar, Z. (2014). Health communication and new media. Journal of Communication Theory and Research, 39, 181–190.

Başol, E. (2018). Communication problems and solution suggestions between patients and healthcare professionals (doctors and nurses). International Anatolia Academic Online Journal: Social Science Journal, 4(1), 1–18.

Berber, G. (2024). An analysis of studies conducted in Turkey on new media in health communication. Tirebolu Faculty of Communication Academic Journal, 1(1), 1–23.

Büyükaslan, A. (2018). Sectoral observations in health communication. Erciyes Journal of Communication, 5(3), 2–10. https://doi.org/10.17680/erciyesakademia.313921

Çam, O. and Çılgınoğlu, H. (2021). Prominent health practices in medical tourism within the scope of health tourism. Oğuzhan Journal of Social Sciences, 3(2), 197–216.

Desmond, J. and Copeland, L. (2010). Communication with today's patients (D. Yamaç & E. Tekin, Trans.). Eflatun Publishing.

Doğan, A. (2017). The concept and process of communication. In Introduction to Communication (pp. 4–22). Atatürk University Open Education Faculty. https://adm.ataaof.edu.tr/pdf.aspx?du=/1cmhhxhp9vvhvi04o9/ba==

Duğan, Ö. and Arslan, A. (2015, November). A review of violence in healthcare in the context of healthcare worker–patient communication. Health Communication Symposium, Eskişehir. https://www.dropbox.com/scl/fo/owrgqph2xinu4a6i2kvpm/AAuStgvdRhKzvx_KqS5qc6Y?dl=0

Ertekin, İ., Ilgın, H. Ö. and Ataman Yengin, D. (2018). Organisational communication theories. The Turkish Online Journal of Design, Art and Communication, 8(2), 297–311.

Gedikli, E. (2024). Evaluation of problems in the Turkish healthcare system from the perspective of health management students as service recipients. BANU Journal of Health Sciences and Research, 6(2), 386–393. https://doi.org/10.46413/boneyusbad.1435406

Gemlik, N., Şeker, R., Arslanoğlu, A. and Çengel, Ö. (2022). A qualitative study on communication problems and solution proposals among employees in health boards. Journal of Health Academicians, 9(4), 344–350. https://doi.org/10.52880/sagakaderg.1193525

George, D. and Mallery, P. (2010). SPSS for Windows step by step: A simple guide and reference 17.0 update (10th ed.). Pearson.

Glos, L. and Pinet-Peralta, L. M. (2023). The influence of institutional factors on patient–provider communication and interactions in the U.S. healthcare system. Journal of Public Health: From Theory to Practice, 31, 123–134. https://doi.org/10.1007/s10389-020-01426-5

Göksu, N. F. (Ed.). (2018). Health communication. Istanbul University Faculty of Open and Distance Education.

Gül, N. and Akman Dömbekci, H. (2023). The effect of health literacy on health communication problems: An evaluation for the province of Manisa. Vizyoner Dergisi, 14(38), 649–665. https://doi.org/10.21076/vizyoner.1197691

İnan, H. and Canoğlu, M. (2016). An analysis of organisational marketing efficiency and promotion strategies of health institutions within the scope of medical tourism in Turkey. Çukurova University Journal of Social Sciences Institute, 25(2), 113–126. https://dergipark.org.tr/en/pub/cusosbil/issue/32037/353086

Ishikawa, H. and Kiuchi, T. (2010). Health literacy and health communication. Biopsychosocial Medicine, 4(1), 1–5. https://doi.org/10.1186/1751-0759-4-18

Karasar, N. (2016). Scientific research method: Concepts, principles, techniques (31st ed.). Nobel Publishing.

Kayret, G. and Denizli, U. (2023). A study on the communication skills and job commitment levels of healthcare workers. International Journal of Entrepreneurship and Management Inquiries, Special Issue 2, 22–35. https://doi.org/10.55775/ijemi.1362654

Kızılkaya, S. (2023). The mediating role of physician loyalty in the relationship between health communication problems and mistrust in health systems. Bingöl University Journal of Social Sciences Institute, 26, 293–302. https://doi.org/10.29029/busbed.1298753

Koçak, A. and Bulduklu, Y. (2013). Health communication: Motivation of elderly individuals to watch health programs on television. Selçuk Communication, 6(3), 5–17. https://doi.org/10.18094/si.72403

Kuru, H. (2024). Examination of the concepts of health, wellness, and well-being. The Journal of Istanbul Rumeli University Health Sciences, 2(4), 1–11.

Kuşku Özdemir, E. (2023). Perceptions regarding the role of language and communication skills in health communication: A qualitative evaluation for healthcare professionals. Korkut Ata Journal of Turkic Studies, Special Issue 1, 1529–1549. https://doi.org/10.51531/korkutataturkiyat.1357996

Lee, M., Ju, Y. and You, M. (2019). The effects of social determinants on public health emergency preparedness mediated by health communication: The 2015 MERS outbreak in South Korea. Health Communication. https://doi.org/10.1080/10410236.2019.1636342

Mısırlıoğlu, A. and Doğan, F. (2025). Examination of studies in the field of health management in international literature through word cloud analysis. International Journal of Social and Humanities Sciences Research (JSHSR), 12(115), 66–72. https://doi.org/10.5281/zenodo.14787245

Nal, M. (2021). Trust in the healthcare services system in Turkey. BANÜ Journal of Health Sciences and Research, 3(1), 1–10. https://doi.org/10.46413/boneyusbad.863269

Okay, A. (2020). Health communication. Der Publishing.

Özmen, S. (2018). Introduction to health communication. In N. F. Göksu (Ed.), Health communication (pp. xx–xx). Istanbul University Open and Distance Education Faculty Press.

Öztürk, Ş. (2009). The transformation of human-centered relationships in the health sector. Health Thought and Medical Culture Platform, 8, 42–47. https://www.medipol.edu.tr/sites/default/files/document/SD_Dergi_Sayi8-43-48.sayfalar_Sule_Yuksel_Ozturk.pdf

Rogers, E. M. (1994). The field of health communication today. American Behavioral Scientist, 38(2), 208–214. https://doi.org/10.1080/108107396128202

Sezgin, D. (2015). The need for a paradigm in health communication: A call for interdisciplinary cooperation. Ankara University Faculty of Medicine Journal, 68(3), 95–101. https://doi.org/10.1501/Tıpfak_000000897

Singh, S., Evans, N., Williams, M., Sezginis, N. and Baryeh, N. A. K. (2017). Influences of socio-demographic factors and health utilisation factors on patient-centered provider communication. Health Communication. https://doi.org/10.1080/10410236.2017.1322481

Süllü Durul, S. and Özkan Kutlu, T. (2024). Violence in online environments: Studies in the field of communication. In 11th International Communication Days / Digital Inequality and Data Colonialism Symposium (p. 106). Istanbul, Türkiye.

Taşkıran, H. B. and Yıldız, E. (2019). The role of health communication campaigns and new media in preventing health-related risks. Fourth Estate International Refereed Journal, 2(2), 111–133. https://doi.org/10.33464/dorduncukuvvet.582332

Temel, Ş. and Güzel, Ş. (2025). The relationship between health communication problems and digital health information-seeking behavior and patient empowerment: A cross-sectional and descriptive study. Turkish Clinics Journal of Health Sciences, 10(1), 188–197. https://doi.org/10.5336/healthsci.2024-102959

Uludağ, A. (2011). Perspective of hospital patient rights boards on communication-related complaints: The case of Konya hospitals. Turkish Clinics Journal of Health Sciences, 31(3), 653–663. https://doi.org/10.5336/medsci.2009-16481

Vardarlıer, P. and Öztürk, C. (2020). The role of social media use in health communication. Sociological Thought, 5(1), 1–18. https://doi.org/10.37991/sosdus.730815

Wynia, M. K. and Osborn, C. Y. (2010). Health literacy and communication quality in health care organisations. Journal of Health Communication, 15(2), 102–115. https://doi.org/10.1080/10810730.2010.499981

Yeşildal, M., Akman Dömbekci, H. and Öztürk, Y. E. (2021). Health communication problems: A scale development study. Turkish Journal of Social Work Research, 5(2), 108–119.

Yıldırım, N. and Bulut, M. (2023). A critical view of the concept of health. Journal of Civil Society, 33(2), 55–62.

Yılmaz, D. and Günay, M. A. (2022). Health communication in Turkey: A study on healthcare professionals. İNİF E-Journal, 7(1), 75–91. https://doi.org/10.47107/inifedergi.977601

Yorulmaz, R. and Erdem, R. (2021). A conceptual framework on healthy living. International Journal of Health Management and Strategies Research, 7(1), 57–74.