

Health Literacy Grades of Individuals Applicable to A University Hospital in Türkiye

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Abstract: Being healthy is everyone's fundamental right. For this purpose, states, institutions providing health services, and individuals have very important duties. Health literacy is defined as the ability of an individual to understand and interpret this information and act accordingly when an individual is asked to provide medical information. The aim of this study is to determine the health literacy grades of individuals applying to the University Hospital. This study was conducted in a descriptive manner to examine the health literacy grade of individuals applying to the University Hospital. The study sample consisted of individuals who were hospitalized and applied during the period, and the sample consisted of 167 volunteers who agreed to participate in the study. Data were collected with the Descriptive Characteristics Information Form and the Türkiye Health Literacy Scale (TSOY-32). In the analysis of the data, frequency and percentage values and Cronbach's alpha value of the scale were examined. Ethics committee approval for the research and written consent were obtained from the participants. As a result of the research, it was determined that 97% of the participants had insufficient health literacy scores. It is important to direct individuals to health education and health promotion programs or to organize training on these subjects in hospitals.

Keywords: Health Literacy, Health Promotion, University Hospital, Türkiye.

INTRODUCTION

The concept of Health Literacy (HL) first came to the fore at the International Health Promotion Conference in Ottawa in 1986. This concept, which has become increasingly important in recent years, is defined as the ability to read, understand, and use health information to make appropriate health-related decisions and follow treatment/cure instructions.¹ Health Literation is not limited to just reading and understanding a brochure given to a person. It is also a very comprehensive concept that requires the person to be able to define their own health, know their illness, make appropriate decisions about their health, and know how to use and benefit from the health system.² The American Institute of Medicine (2004) defines HL as “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions”.³ Unlike previous definitions of health literacy that solely focused on patients and their understanding of medical information within healthcare institutions, this revised definition encompasses individuals outside of clinical settings as well. Moreover, health literacy is now recognized to be closely linked with health promotion and preventive behaviors.⁴ Another definition proposed by the World Health Organization (WHO) defines HL more broadly as “cognitive and social skills that determine individuals’ motivation and ability to access, understand, and use information to promote and maintain health.”⁵⁻⁶ This definition further implies that health literacy necessitates a certain level of knowledge, personal skills, and confidence, which empowers individuals to make positive changes in their personal lifestyles and living conditions, ultimately leading to improved personal and community health.⁴ Nutbeam proposed a model of health literacy that consists of three grades, each offering benefits to both individuals and the population. The first grade is basic/functional literacy, which encompasses reading and

writing skills necessary for effective functioning in everyday situations. This grade aligns with the narrow definition of health literacy. The second grade is communicative/interactive literacy, which involves more advanced skills that enable active participation in daily activities, extracting and comprehending information from various sources, and applying new knowledge to changing circumstances. The third grade is critical literacy, which empowers individuals to critically analyze information and use it to gain greater control over life events and situations. In critical health literacy, individuals are expected to accurately interpret and evaluate health information obtained from healthcare providers and the media.⁷

Many factors affect health literacy. These factors, which can be individual or systemic, include age, gender, literacy skills, cognitive skills, physical and psychosocial health, health care beliefs and socio-economic status, characteristics of health care environments, patient demands and requests, old age, culture and language, substance addiction, chronic disease experience, and homelessness. Individuals with different conditions may have lower health literacy grades.³

Individuals with low health literacy grades experience problems such as missing appointments, failure to fill out registration forms, inadequacy in drug treatment, inability to adequately read drug leaflets, inability to provide a sequential health history, and inadequacy in following tests or referrals.⁸ In this context, it is stated that low health literacy has a negative impact on patients' knowledge, experience, and use of health services.³ It is known that as a result of inadequate health literacy, unnecessary hospital expenses increase, hospital stays are prolonged, and unnecessary examination rates are higher. In addition, it has been observed that unnecessary emergency room use by these individuals is increasing. These factors contribute to avoidable workforce losses and subsequently drive up health expenditures.⁹ By enhancing the level of health literacy, individuals gain autonomy and empowerment, promoting health equity, sustainability, and positive health outcomes through informed health behaviors and utilization of healthcare services.¹⁰

When the national literature is examined, while there are many review articles on the subject, the number of studies on health literacy is limited.¹¹⁻¹³ In Türkiye, between 2009-2012, a Health Literacy study was conducted by Tanrıöver and his colleagues in 12 regions and 23 different provinces with 4924 people, with the support of the Health and Social Service Workers Union. According to a study conducted in Türkiye, the overall health literacy index was found to be 30.4. The evaluation revealed that 64% of the population had limited or inadequate health literacy grades. In other words, it was determined that approximately 3 million individuals had insufficient and problematic health literacy grades.¹⁴ In Demirli's study with 454 individuals, it was concluded that the participants had a limited level of health literacy.¹⁵ This study aims to determine the health literacy scores of individuals applying to a university hospital and to contribute to the literature.

METHOD

Population and Sample

The population of the research consisted of individuals who were hospitalized and admitted during the research period. No sampling method was used in the research, and 167 volunteers who agreed to participate in the research constituted the sample.

Design of the study

The descriptive research was conducted in a University Hospital between March and May 2021.

Data Collection Tools

The data of the study were collected with the Introductory Characteristics Information Form and the Türkiye Health Literacy Scale (TSOY-32). The scale was developed by Okyay and Abacıgil¹⁶ to assess health literacy in people over the age of 15 who are literate. The scale consists of two sub-dimensions: "Cure and Service" and "Illness Prevention/Health Conservation." In this study, the Cronbach alpha value of the scale was determined as 0.949, the Cure and Service sub-dimension as 0.923, and the Illness Prevention/Health Conservation sub-dimension as 0.901.

Health literacy level was assessed in four categories according to the score obtained:¹⁶

(0-25) points: Insufficient health literacy

(>25-33): Annoyed health literacy

(>33-42): Sufficient health literacy

(>42-50): Perfect health literacy

Analysis of Data

The data obtained from the individuals participating in the study were transferred to the computer environment and evaluated using the Social Sciences Statistical Package (SPSS) 15.0 program. The frequencies and percentages of the individuals were examined according to their socio-demographic characteristics. The frequency and percentage values of the data and the Cronbach alpha value of the scale were examined.

RESULT

Of the participants in the study, 62.3% were female and 37.7% were male. There were, 70.1% of the participants married, 29.9% were single, 53.3% went to polyclinics, 23.4% applied and received treatment in inpatient units, 19.2% went to emergency services, and 4.1% went to other units. 65.9% of the participants lived in the province, 22.8% lived in districts, and 11.4% lived in villages. There, 12.6% had a fairly good general health status, 45.5% had a good health status, 37.7% had a fair health status, and 4.2% had a poor general health status.

When asked about the most reliable source of health information, 79.6% said from health workers, 9.6% said from the internet, 8.4% said from family members, and 2.4% said from radio and television. When asked about the first place they go when they experience a health problem, 73.1% of the participants responded that they go to the hospital, and 26.9% responded that they go to a family health center (Table 1).

Table 1. Demographic data of participants (n=167)

Demographic Veriler		n	%
Gender	Female	104	62.3
	Male	63	37.7
Marital Status	Married	117	70.1
	Single	50	29.9
Clinic Referred	Policlinic	89	53.3
	Inpatient Unit	39	23.4
	Emergency	32	19.2
	Other	7	4.1
Long-Term Living Place	Province	110	65.9
	District	38	22.8
	Village	19	11.4
General Health Status	Pretty Good	21	12.6
	Good	76	45.5
	No Bad	63	37.7
	Bad	7	4.2
The Most Reliable Source of Health Information	Health Employee	133	79.6
	Radio - TV	4	2.4
	Internet	16	9.6
	Family Members	14	8.4

The First Place to Visit When Having Health-Related Problem	Hospital	122	73.1
	Family Health Center	45	26.9

When the general health literacy grades of the patients were examined, it was determined that 97% were inadequate, 1.8% were limited, and 1.2% were sufficient. When the sub-dimensions were examined, it was determined that 75.4% of the patients' Cure and Service sub-dimension levels were inadequate, 18.6% were limited, and 6% were sufficient. In the Illness Prevention/Health Conservation sub-dimension, 71.9% of the patients were inadequate, 19.1% were limited, and 9% were sufficient (Table 2).

Table 2. HealthLiteracy Grades of Participants

	Insufficient (%)	Annoyed (%)	Sufficient (%)	Perfect (%)
General Health Literacy Grade	97	1.8	1.2	0
Cure and Service Sub-dimension	75.4	18.6	6	0
Illness Prevention/Health Conservation Sub-dimension	71.9	19.1	9	0

DISCUSSION

The World Health Organization sees health literacy as the key to increasing health grades.¹⁷ One of the most fundamental rights of individuals is to be healthy. In this regard, both health institutions and individuals bear significant responsibilities. Individuals are tasked with staying informed about health and diseases and embracing a lifestyle aimed at minimizing their susceptibility to health issues. Nevertheless, numerous biological, environmental, and social factors impact individuals' health. Among the social determinants of health, health literacy stands out as a crucial factor, playing a significant role in mitigating health disparities and reducing healthcare expenses.¹⁸

In Türkiye, the "Reliability and Validity Study of Türkiye Health Literacy Scales" conducted in 2016 with a large team under the editorship of Okyay and Abacıgil found that 52.7% of the participants had inadequate health literacy grades.¹⁶ In a study conducted in 2020 using the TSOY-32 scale, it was determined that 57.9% of the participants had inadequate health literacy grades.¹⁴ In the study conducted by Biçer and Malatalı with 870 university students, it was stated that the health literacy level of university students was sufficient and excellent.¹⁹ Akpınar et al.'s study focused on 332 individuals over the age of 18 with chronic diseases in a rural area. The level of health literacy was examined, and it was stated that they had an insufficient level of health literacy.²⁰ The importance of health literacy has become clear in the COVID-19 pandemic. For example, in Europe, almost half of adults report having problems with health literacy and lacking the relevant competencies to care for their own and others' health.²¹ Health literacy is often interpreted as the ability to use general literacy skills (reading, writing, arithmetic, listening, and speaking).²² In this study, 98% of the participants had inadequate health literacy grades, and this rate was evaluated as very high. The grades of health literacy are a global problem. The fact that the grades of health literacy in Kırıkkale province are very inadequate is thought to be due to the low level of education and low socio-economic level of the people in the province.

When the health literacy sub-dimensions were examined in this study, it was determined that 75.4% of the patients' cure and service sub-dimension levels were inadequate, and 71.9% of the patients' illness prevention/health conservation sub-dimension was inadequate. In the study by Okyay and Abacıgil¹⁶, it was stated that 47.7% of the patients' cure and service sub-dimension levels were inadequate, and 48.2% of the patients' illness prevention/health conservation sub-dimension was inadequate. It was also seen that the sub-dimensions were quite low in this study. In a study conducted in the USA, it was revealed that low health literacy meant that the person could not read appointment papers, drug labels, prospect uses, and thermometers.²³ According to the integrated health literacy model defined by Sorenson et al. from Massachusetts University in 2012, the health literacy process, starting from the acquisition of core competencies, provides access to the knowledge and skills required for the three areas of health care, disease prevention, and health promotion. With this model, in which the therapeutic features of health literacy are

blended with the public health perspective, an integrated model is presented, starting from the individual level and progressing to the social level. Health literacy level determines health costs and health outcomes by affecting individuals' use of health services and health behaviors. Increasing the level of health literacy increases the level of quality of life by providing individual autonomy and empowerment.²⁴⁻²⁶

CONCLUSION

This study concludes that the individualistic health literacy grade is quite inadequate. In this context, applications that can increase the health literacy grade of individuals are needed. It is recommended that group seminars on health literacy be given to adults through family physicians.

ETHICAL CONSIDERATIONS

The research was approved by the ethics committee (27.06.2018- 2018/03), and the institution's written and verbal permission was obtained from the individuals participating in the research.

LIMITATIONS

This study was limited to a university hospital. The data obtained was limited to the responses of the individuals who participated in the study.

CONFLICT OF INTEREST

The authors have no conflict of interest.

REFERENCES

1. Weiss BD. Health literacy. American Medical Association. 2003;253. Available from: <http://lib.ncfh.org/pdfs/6617.pdf>
2. Nutbeam D. Health promotion glossary. Health Promot Int. 1998;13(4):349-64. Available from: <https://www.jstor.org/stable/45153790>
3. Kırac R, Öztürk YE. Halkın Sağlık Okuryazarlık Düzeyi İle Sağlık Kaygısı Arasındaki İlişkisi. Sosyoloji Araştırmaları Dergisi. 2020;23(2):214-43. Available from: <https://dergipark.org.tr/en/pub/sosars/article/819000>
4. Ishikawa H, Kiuchi T. Health literacy and health communication. BioPsychoSocial Med. 2010;4:1-5. Available from: <https://link.springer.com/article/10.1186/1751-0759-4-18>
5. Kickbusch I, Pelikan JM, Apfel F, Tsouros AD. Health literacy: The solid facts. World Health Organization Regional Office for Europe. Copenhagen, Denmark. 2013. Available from: http://www.iahm.org/journal/vol_15/num_1/text/vol15n1p12.pdf
6. Şantaş G, Şantaş F, Kaya S. Sağlık Okuryazarlık Düzeyi İle Sağlık Arama Davranışı Arasındaki İlişki: Bir Alan Araştırması. Hacettepe Sağlık İdaresi Dergisi. 2023;26(3):781-96. Available from: <https://dergipark.org.tr/en/pub/hacettepesid/issue/80040/1262135>
7. Sezgin D. Sağlık okuryazarlığını anlamak. İletişim. 2013;73-92. Available from: <http://iletisimdergisi.gsu.edu.tr/en/download/article-file/82916>
8. Mahadevan R. Health Literacy Fact Sheets. Center For Health Care Strategies. USA. 2013. Available from: <http://www.chcs.org/resource/health-literacy-fact-sheets>
9. Çopurlar CK, Kartal M. Sağlık Okuryazarlığı Nedir? Nasıl Değerlendirilir? Neden Önemli? TJFM&PC. 2016;10(1):42-7. Available from: <https://dergipark.org.tr/tr/pub/tjfmipc/issue/24141/256215>
10. Taş TA, Akış N. Sağlık okuryazarlığı. Sürekli Tıp Eğitimi Dergisi. 2016;25(3):119-24. Available from: <https://www.researchgate.net/.../Food-and-drug-interactions-in-the-elderly.pdf#page=35>
11. Bilir N. Sağlık okur-yazarlığı. Turkish J Public Health. 2014;12(1):61-8. Available from: <https://dergipark.org.tr/en/pub/tjph/article/173029>
12. Sezgin D. Sağlık okuryazarlığını anlamak. İletişim. 2013;73-92. Available from: <http://iletisimdergisi.gsu.edu.tr/en/download/article-file/82916>
13. Tözün M, Sözen MK. Halk sağlığı bakışı ile sağlık okuryazarlığı. Smyrna Tıp Dergisi. 2015; 2:48-54. Available from:

- <https://www.smyrnatipdergisi.com/.../Sa%C4%9Fl%C4%B1k%20okuryazarl%C4%B1%C4%9F%C4%B1486417076.pdf>
14. Tanrıöver M. Türkiye sağlık okuryazarlığı araştırması. 2014. Available from: <http://www.sagliksen.org.tr/.../vYcK-1419245270-mA r.pdf>
 15. Demirli P. Bireylerin sağlık okuryazarlığı üzerine bir araştırma: Edirne ili örneği. Trakya Üniversitesi Sosyal Bilimler Enstitüsü Sağlık Kurumları Yöneticiliği Anabilim Dalı Yüksek Lisans Tezi. Edirne. 2019. Available from: <https://dspace.trakya.edu.tr/>
 16. Okyay P, Abacıgil F. Türkiye Sağlık Okuryazarlığı Ölçekleri Güvenilirlik ve Geçerlilik Çalışması. Anıl Matbaa. Ankara. 2016;1-104. Available from: <https://ekutuphane.saglik.gov.tr/Yayin/530>
 17. World Health Organization. Health literacy solid facts. Denmark: World Health Organization Regional Office for Europe UN City. 2013. Available from: <https://iris.who.int/>
 18. Gözlü K. A Social Determinant Of Health: Health Literacy. Med J SDU. 2020;27(1):137-44. Available from: <https://dergipark.org.tr/>
 19. Biçer EB, Malatyalı İ. Sağlık okuryazarlık düzeyinin belirlenmesi: Sivas Cumhuriyet Üniversitesi örneği. Ankara Sağlık Hizmetleri Dergisi. 2018;17(2):1-15. Available from: <https://dergipark.org.tr/>
 20. Akpınar CV, Mandıracıoğlu A, Özvurmaz S, Kurt F, Koç NK. Kırsal bir bölgede kronik hastalığı olan bireylerin tedaviye uyumu ve sağlık okuryazarlığı. Ege Tıp Dergisi. 2023;62(3):406-17. Available from: <http://egetipdergisi.com.tr/>
 21. Nutbeam D. Discussion paper on promoting, measuring and implementing health literacy. World Health Organ. 2017;4:1-29. Available from: <https://www.researchgate.net/>
 22. Liu C, Wang D, Liu C, Jiang J, Wang X, Chen H, et al. What does health literacy mean? A systematic review and qualitative synthesis. Fam Med Public Health. 2020;8(2). Available from: <https://www.ncbi.nlm.nih.gov/>
 23. Baker DW, Gazmararian JA, Williams MV, Scott T, Parker RM, Green D, et al. Functional health literacy and the risk of hospital admission. Am J Public Health. 2002;92(8):1278-83. Available from: <https://ajph.aphapublications.org/>
 24. Sorensen K, Broucke SV, Fullam J, Doyle G, Pelikan J, Slonska Z, et al. Health literacy and public health: A systematic review and integration of definitions and models. BMC Public Health. 2012;12(1). Available from: <https://pubmed.ncbi.nlm.nih.gov/22276600/>
 25. Taş TA, Akış N. Health Literacy. J Contin Med Educ. 2016;24(3). Available from: <https://search.trdizin.gov.tr/>
 26. Şimşekoğlu N. Health Literacy. In: Interdisciplinary Media and Communication Studies. Serüven Yayınevi. 2023.