

Chapter 7

HEALTH LITERACY

Mehmet DOĞAN¹

Literacy is the ability to read, write, speaks, and process information. Literacy improves an individual's knowledge and potential, and makes it easy to achieve their goals, and provides. Provides the functions of social and business life (1). While literacy is limited to the act of reading and writing, it is in the process of change due to factors such as changing living conditions, rapidly advancing communication technologies and urbanization. Literacy is one of the most important of the criteria that show both the success of a person in society (school, job, life achievement) çıkarılacak as and the state of development of society (2).

The basis of literacy is lifelong learning. It makes it possible for individuals to access new opportunities and to participate in society in new ways (1). Literacy helps understand knowledge, skills and social norms in society, is also a means of transferring these to future generations (3). Literacy is multidimensional and requires both social and cognitive competence. Competence means having an effective function in health care (4).

Literacy enables individuals to benefit from social accumulation, to learn how to use the necessary information and to create effective changes. As well as the assimilation of knowledge, the construction of new types of literacy on acquired knowledge is of great importance. The concept of literacy is diversified with different functions (5).

Technological change in information technologies has created multiple and new types of literacy, including that of health. Multiple intelligence applications, differentiation demands, interdisciplinary point of view, cultural structure and changing society requirements increase literacy diversity. New expectations for literacy competencies now exist (5-7). In parallel with the development of communication technologies, it has introduced new types of literacy have been introduced to define its knowledge about a specific subject or area. In this context, visual literacy, media literacy, cinema literacy, television literacy, computer literacy, food literacy, financial literacy, science and health literacy can be mentioned (8-11).

Literacy is one of the social determinants of health. Literacy forms the scope

¹ Dr. Mehmet DOĞAN, Health Services Vocational School, Erciyes University.
mehmetdogan@erciyes.edu.tr

al may giving them feel even more confused. Therefore the health professional should determine the extent to which the individual being educated understands the information transferred and should play a key role in directing communication (99).

REFERENCES

1. UNESCO Report (2008). The Global Literacy Challenge: A profile of youth and adult literacy at the mid-point of the United Nations Literacy Decade 2003–2012. (Access date: 05/08/2019 <https://unesdoc.unesco.org/ark:/48223/pf0000163170>).
2. Aşıcı M. Kişisel ve Sosyal Bir Değer Olarak Okuryazarlık. *Değerler Eğitim Dergisi*. 2009;7(17):9-26
3. Altun A. (2005). *Gelişen Teknolojiler ve Yeni Okuryazarlıklar*. (Birinci Baskı). İstanbul: Anı Yayıncılık.
4. Mancuso JM. Health literacy: A concept/dimensional analysis. *Nursing & Health Sciences*. 2008;10:248–255. Doi: 10.1111/j.1442-2018.2008.00394.x.
5. Önal İ. Tarihsel Değişim Sürecinde Yaşam Boyu Öğrenme ve Okuryazarlık: Türkiye Deneyimi. *Bilgi Dünyası*. 2010;11(1):101-121.
6. Kurudayıoğlu M, Tüzel MS. 21.Yüzyıl Okuryazarlık Türleri, Değişen Metin Algısı ve Türkçe Eğitimi, *TÜBAR-XXVIII-/2010-Güz*: 283-298.
7. Tüzel MS. Görsel Okuryazarlık, *TÜBAR-XXVII-/2010-Bahar*: 691-705.
8. Bilici İE. (2014) *Medya Okuryazarlığı ve Eğitimi*. (Birinci Baskı). Ankara: Nobel Akademik Yayıncılık.
9. Diamond JJ. Development of a reliable and construct valid measure of nutritional literacy in adults. *Nutrition Journal*. 2007; 6 (5): 1-4. Doi:10.1186/1475-2891-6-5.
10. Taylor S, Wagland S. Financial Literacy: A review of government policy and initiatives. *Australasian Accounting Business and Finance Journal*. 2011; 5(2): 101-125.
11. Keleher H, Hagger V. Health literacy in primary health care. *Aust J Prim Health*. 2007;13:24–30. Doi.org/10.1071/PY07020.
12. Parker RM, Baker DW, Williams MV, Nurss JR. The test of functional health literacy in adults: A new instrument for measuring patients' literacy skills. *JGIM*. 1995;10:537-541. Doi: 10.1007/bf02640361.
13. Nielsen-Bohlman L, Panzer MA, Kindig DA. (2004). *Health Literacy: A Prescription to End Confusion*. Institute of Medicine. Washington: the National Academies Press.
14. Morris NS, MacLean CD, Chew LD, et al. The single item literacy screener: Evaluation of a brief instrument to identify limited reading ability. *BMC Fam Pract*. 2006;7(21):1-7. Doi.org/10.1186/1471-2296-7-21.
15. Ratzan SC. Health literacy: Communication for the public good. *Health Promotion International*. 2001; 16 (2): 207–214. Doi.org/10.1093/heapro/16.2.207.
16. Parker RM, Williams MV, Weiss BD, et al. Health literacy: Report of the council of scientific affairs. Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs, American Medical Association. *JAMA* 1999;281(6): 552-557. Doi:10.1001/jama.281.6.552.
17. Nutbeam D. Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st Century. *Health Promot Int*. 2000;15(3):259-267. Doi.org/10.1093/heapro/15.3.259.
18. Speros C. Health literacy: concept analysis. *J Adv Nurs*. 2005;50(6):633-640. Doi: 10.1111/j.1365-2648.2005.03448.x.
19. Selden CR, Zorn M, Ratzan SC, Parker RM, Editors. (2000) *Current Bibliographies in Medicine: Health Literacy*. National Institutes of Health, U.S, Department of Health and Human Services. (Access date: 05/08/2019, <http://www.nlm.nih.gov/archive/20120907/pubs/resources.html>)
20. U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Im-*

- proving Health. (Access date: 05/08/2019, <http://www.healthypeople.gov/2010>)
21. Tokuda Y, Doba N, Butler JP, et al. Health literacy and physical and psychological wellbeing in Japanese adults. *Patient Educ Couns.* 2009;75:411-417. Doi:10.1016/j.pec.2009.03.031.
 22. Pelikan JM, Röthlin F, Ganahl K. HLS-EU CONSORTIUM (2012): Comparative Report of Health Literacy in Eight EU Member States. The European Health Literacy Survey HLS-EU, Online Publication: <http://www.health-literacy.eu>
 23. Durusu-Tanrıöver M, Yıldırım HH, Demiray-Ready FN, Çakır B ve Akalın HE. (2014). Türkiye Sağlık Okuryazarlığı Araştırması. (Birinci Baskı). Ankara: Sağlık-Sen Yayınları.
 24. Ozdemir H, Alper Z, Uncu Y, et al. Health literacy among adults: a study from Turkey. *Health Educ Res.* 2010;25(3):464-477. Doi:10.1093/her/cyp068.
 25. Jovic-Vranes A, Bjegovic-Mikanovic V. Which women patients have better health literacy in Serbia? *Patient Educ Couns.* 2012;89(1):209-212. Doi.org/10.1016/j.pec.2012.06.001.
 26. Adams RJ, Appleton SL, Hill CL, et al. Risks associated with low functional health literacy in an Australian population. *Med J Aust.* 2009;191:530-534.
 27. Patel PJ, Steinberg J, Goveas R, et al. Testing the utility of the newest vital sign (NVS) health literacy assessment tool in older African –American patients. *Patient Educ Couns.* 2011;85:505-507. Doi: 10.1016/j.pec.2011.03.014.
 28. Marks JR, Schectman JM, Groninger H, et al. The association of health literacy and socio-demographic factors with medication knowledge. *Patient Educ Couns.* 2010;78:372–376. Doi: 10.1016/j.pec.2009.06.017.
 29. Doğan, M., Çetinkaya, F. The Level of Health Literacy of Academicians and Factors Affecting It. *Hacettepe Sağlık İdaresi Dergisi.* 2019; 22(2): 389-400.
 30. Sequeira SS. Limited Health Literacy and Decline in Executive Function in Older Adults, *Journal of Health Communication.* 2013;18 (1):143-157. Doi: 10.1080/10810730.2013.825673.
 31. Benson JG, Forman WB. Comprehension of written health care information in an affluent geriatric retirement community: use of the test of functional health literacy. *Gerontology.* 2002;48:93–97. DOI: 10.1159/000048933.
 32. Downey LV, Zun LS. Assessing adult health literacy in urban healthcare settings. *J Natl Med Assoc.* 2008;100:1204–1208. Doi: 10.1016/s0027-9684(15)31509-1.
 33. Shea JA, Beers BB, McDonald VJ et al. Assessing health literacy in African American and Caucasian adults: disparities in rapid estimate of adult literacy in medicine (REALM) scores. *Fam Med.* 2004;36:575–81.
 34. Morrow D, Clark D, Tu W, et al. Correlates of health literacy in patients with chronic health failure. *Gerontologist.* 2006;46:669–76. Doi: 10.1093/geront/46.5.669.
 35. U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. (2010). National Action Plan to Improve Health Literacy. Washington.
 36. Davis TC, Long S, Jackson R, et al. Rapid estimate of adult literacy in medicine: shortened screening instrument. *Fam Med.* 1993;25 391–395.
 37. Yılmazel G, Cetinkaya F. Health literacy among schoolteachers in Çorum, Turkey. *EMHJ.* 2015; 21(8):598-605.
 38. Kickbusch I, Pelikan JM, Apfel F, Tsouros AD. (2013). Health literacy the solid facts. World Health Organization (WHO) Regional Office for Europe. Denmark. (Access Date: 05/08/2019, http://www.euro.who.int/__data/assets/pdf_file/0008/190655/e96854.pdf)
 39. U.S. Department of Health and Human Services (2007) Quick guide to health literacy and older adults. Washington, DC: Office of Disease Prevention and Health Promotion, (Access Date: 05/08/2019, <https://health.gov/communication/literacy/quickguide/Quickguide.pdf>)
 40. Sezgin D. Tibbileştirilen Yaşam Bireyselleştirilen Sağlık: Çelişkiler, Alternatifler ve Sağlık İletişimi. *Schola Ayrıntı Dizisi.* 2011;140-150.
 41. Baker DW, Gazmararian JA, Williams MV, et al. Functional health literacy and the risk of hospital admission among Medicare managed care enrollees. *Am J Public Health.* 2002;92(8):1278–1283. Doi: 10.2105/ajph.92.8.1278.
 42. Kutner M, Greenberg E, Jin Y, Boyle B, Hsu Y, Dunleavy E. (2007). Literacy in Everyday Life:

- Results from the 2003 National Assessment of Adult Literacy. DC: US Department of Education, National Center for Education Statistics, Washington. (Access Date: 06/08/2019: https://nces.ed.gov/Pubs2007/2007480_1.pdf)
43. Freedman DA, Bess KD, Tucker HA, et al. Public health literacy defined. *Am J Prev Med*. 2009;36(5):446–451. Doi: 10.1016/j.amepre.2009.02.001.
 44. Saaddine JB, Venkat Narayan KM, Vinicor F, et al. Vision loss: A public health problem? *Ophthalmology*. 2003;110:253–254. Doi: [https://doi.org/10.1016/S0161-6420\(02\)01839-0](https://doi.org/10.1016/S0161-6420(02)01839-0).
 45. Anton C, Schoolwerth AC, Engelgau MM, et al. Chronic Kidney Disease: A Public Health Problem that Needs a Public Health Action Plan. *Preventing chronic disease*. 2006;3(2):1-6.
 46. Kanj M, Mitic W. (2009). Health Literacy and Health Promotion Definitions, Concepts and Examples in the Eastern Mediterranean Region. World Health Organization, Consultants to the Eastern Mediterranean Region.
 47. Watkins K. United Nations Development Programme. (2007). Human Development Report 2007/2008. New York.
 48. Rudd RE, Anderson JE, Oppenheimer S, et al. Health Literacy: An Update of Medical and Public Literature. National Center for the Study Adult Learning and Literacy (NCSALL). 2007;7(6):175-199.
 49. Betz CL, Ruccione K, Meeske K, et al. Health Literacy: A Pediatric Nursing Concern, *Pediatric Nursing*. 2008;34(3):231-239.
 50. Gillis D, Quigley A. (2004). Taking Off the Blindfold: Seeing How Literacy Affects Health: A Report of the Health Literacy in Rural Nova Scotia Research Project 2004. St. Francis Xavier University, Antigonish, (Access Date: 05/08/2019, <http://en.copian.ca/library/research/takngoff/takngoff.pdf>)
 51. Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs. Health Literacy. Report of the Council on Scientific Affairs, *JAMA*. 1999;281(6):552-557. Doi: 10.1001/jama.281.6.552.
 52. Baker DW. The meaning and the measure of health literacy. *JGIM*. 2006;21:878-883. Doi: 10.1111/j.1525-1497.2006.00540.x.
 53. Nutbeam D. The evolving concept of health literacy. *Soc Sci Med*. 2008;67:2072-2078. Doi: 10.1016/j.socscimed.2008.09.050.
 54. Ishikawa H, Yano E. Patient health literacy and participation in the health-care process. *Health Expect*. 2008;11:113-122. Doi: 10.1111/j.1369-7625.2008.00497.x.
 55. Shone L, Conn MK, Sanders L, et al. The role of parent health literacy among urban children with persistent asthma. *Patient Educ Couns* 2009; 75(3): 368–375. Doi: 10.1016/j.pec.2009.01.004.
 56. Sorensen K, Van den Broucke S, Fullam J et al. Health literacy and public health: A systematic review and integration of definitions and models. *BMC Public Health* 2012;12(80):1-13. Doi:10.1186/1471-2458-12-80.
 57. Safeer RS, Keenan J. Health Literacy: The gap between physicians and patients. *Am Fam Physician*. 2005;72(3):463–468.
 58. Parker R. Health literacy: a challenge for American patients and their health care providers. *Health Promot Int*. 2000;15(4):277-283. Doi.org/10.1093/heapro/15.4.277.
 59. Bosworth HB. Challenges and strategies to improve patient health literacy and competencies. *Patient Intell*. 2010;2:19–25. Doi.org/10.2147/PLS9491.
 60. Parker RM, Baker DW, Williams MV, et al. The test of functional health literacy in adults: A new instrument for measuring patients' literacy skills. *JGIM*. 1995;10:537-541. Doi: 10.1007/bf02640361.
 61. Weiss BD, Mays MZ, Martz W, et al. Quick assessment of literacy in primary care: The Newest Vital Sign. *Ann Fam Med*. 2005; 3: 514-522. Doi: 10.1370/afm.405.
 62. Welch VL, VanGeest JB, Caskey R. Time, costs, and clinical utilization of screening for health literacy: A case study using the Newest Vital Sign (NVS) Instrument. *J Am Board Fam Med*. 2011; 24 (3): 281–289. Doi: 10.3122/jabfm.2011.03.100212.
 63. Kondilis BK, Soteriades ES, Falagas ME. Health Literacy Research in Europe: a Snapshot. Euro-

- pean Journal of Public Health. 2006;16(1):113. Doi: 10.1093/eurpub/cki204.
64. Okyay P, Abacigil F. (2016). Sağlık Bakanlığı, “Türkiye Sağlık Okuryazarlığı Ölçekleri Güvenirlik ve Geçerlilik Çalışması.” Ankara:
 65. Dewalt DA, Berkman ND, Sheridan S, et al. Literacy and health outcomes. *JGIM*. 2004;19:1228–1239. Doi: 10.1111/j.1525-1497.2004.40153.x.
 66. Berkman ND, Dewalt DA, Pignone MP, et al. Literacy and health outcomes. *Evid Rep Technol Assess*. 2004;(87):1-8.
 67. Talbot L, Verrinder G. (2010). *Promoting Health: The primary health care approach* (4 th ed), Churchill Livingstone, Reed International Books Avustralia Pty Ltd.
 68. Chinn D. Critical health literacy: A review and critical analysis. *Soc Sci Med*. 2011;73:60-67. Doi: 10.1016/j.socscimed.2011.04.004.
 69. World Health Organization. (2008). *Closing the gap in a generation. Health equity through action on the social determinants of health. Commission on Social Determinants of Health Final Report*. Geneva: WHO Press.
 70. Scott TL, Gazmararian JA, Williams MV et al. Health literacy and preventive health care use among Medicare enrollees in a managed care organization. *Med Care*. 2002;40(5):395-404.
 71. Bennett CL, Ferreira MR, Davis TC, et al. Relation between literacy, race, and stage of presentation among low income patients with prostate cancer. *J Clin Oncol*. 1998;16:3101-3104. Doi: 10.1200/JCO.1998.16.9.3101.
 72. Gazmararian JA, Williams MV, Peel J, et al. Health literacy and knowledge of chronic disease. *Patient Educ Couns*. 2003;51(3):267-75. Doi.org/10.1016/S0738-3991(02)00239-2.
 73. Kalichman SC, Ramachandran B, Catz S. Adherence to combination antiretroviral therapies in HIV patients of low health literacy. *J Gen Intern Med*. 1999;14:267-73. Doi: 10.1046/j.1525-1497.1999.00334.x.
 74. Weiss BD, Palmer R. Relationship between health care costs and very low literacy skills in a medically needy and indigent Medicaid population. *J Am Board Fam Pract*. 2004;17:44-7. Doi: 10.3122/jabfm.17.1.44.
 75. Schillinger D, Grumbach K, Piette J et al. Association of health literacy with diabetes outcomes. *JAMA*. 2002;288(4):475-482. Doi:10.1001/jama.288.4.475.
 76. Sudore RL, Yaffe K, Satterfield S, et al. Limited literacy and mortality in the elderly: The Health, Aging, and Body Composition Study. *JGIM*. 2006;21:806-812. Doi: 10.1111/j.1525-1497.2006.00539.x.
 77. Baker DW, Wolf MS, Feinglass J, et al. Health literacy and mortality among elderly persons. *Arch Intern Med*. 2007;167(14):1503-1509. Doi: 10.1001/archinte.167.14.1503.
 78. Fortenberry JD, McFarlane MM, Hennessy M, et al. Relation of health literacy to gonorrhoea related care. *Sex Transm Infect*. 2001;77:206-11. Doi: 10.1136/sti.77.3.206.
 79. Lindau ST, Tomori C, Lyons T, et al. The association of health literacy with cervical cancer prevention knowledge and health behaviors in a multiethnic cohort of women. *Am J Obstet Gynecol*. 2002; 186(5): 938-943. Doi: 10.1067/mob.2002.122091.
 80. Von Wagner C, Knight K, Steptoe A, et al. Functional health literacy and health promoting behaviour in a national sample of British adults. *J Epidemiol Community Health*. 2007;61:1086-1090. Doi: 10.1136/jech.2006.053967.
 81. Rootman I, Ronson B. Literacy and health research in Canada: Where have we been and where should we go? *Can J Public Health*. 2005; 96(2): 62-77.
 82. Dewalt DA, Pignone MP. Reading is fundamental. The relationship between literacy and health. *Arch Intern Med*. 2005;165:1943-1944. Doi: 10.1001/archinte.165.17.1943.
 83. Kaufman H, Skipper B, Small L, et al. Effect of literacy on breastfeeding outcomes. *South Med J*. 2001;94:293-296.
 84. Wolf MS, Gazmararian JA, Baker DW. Health literacy and functional health status among older adults. *Arch Intern Med*. 2005;165:1946-1952. Doi: 10.1001/archinte.165.17.1946.
 85. Baker DW, Parker RM, Williams MV, et al. The Relationship of Patient Reading Ability to Self-Reported Health and Use of Health Services. *American Journal of Public Health*. 1997;87(6):

- 1027-1030. Doi: 10.2105/ajph.87.6.1027.
86. Kalichman SC, Rompa D. Functional health literacy is associated with status and health related knowledge in people living with HIV/AIDS. *J Acq Immun Def Synd*. 2000;25:337-344. Doi: 10.1097/00126334-200012010-00007.
 87. Kim SH. Health literacy and functional health status in Korean older adults. *J Clin Nurs*. 2009;18(16):2337-2343. Doi: 10.1111/j.1365-2702.2008.02739.x.
 88. Gazmararian JA, Baker DW, Williams MV, et al. Health Literacy among Medicare Enrollees in a Managed Care Organization. *JAMA*. 1999;281(6):545-551. Doi: 10.1001/jama.281.6.545.
 89. Kripalani S, Henderson LE, Chiu EY, et al. Predictors of Medication Self-management Skill in a Low-literacy Population. *J Gen Intern Med*. 2006;21:852-856. Doi: 10.1111/j.1525-1497.2006.00536.x.
 90. Bilir N. Sağlık okur-yazarlığı. *Türkiye Halk Sağlığı Dergisi* 2014;12(1):61-68. Doi.org/10.20518/thsd.46492.
 91. Williams MV, Baker DW, Parker RM, et al. Relationship of functional health literacy to patients' knowledge of their chronic disease: A study of patients with hypertension and diabetes. *Arch Intern Med*. 1998;158(2):166-172. Doi:10.1001/archinte.158.2.166.
 92. Powell CK, Hill EG, Clancy DE. The relationship between health literacy and diabetes knowledge and readiness to take health actions. *The Diabetes Educator*. 2007;33(1):144-151. Doi: 10.1177/0145721706297452.
 93. Mbaezue N, Mayberry R, Gazmararian J, et al. The impact of health literacy on self-monitoring of blood glucose in patients with diabetes receiving care in an inner-city hospital. *Journal of the National Medical Association*. 2010;102(1):5-9. Doi: 10.1016/s0027-9684(15)30469-7.
 94. Cho YI, Lee SYD, Arozullah MA, et al. Effects of health literacy on health status and health care utilization amongst elderly. *Soc Sci Med*. 2008;66:1809-1816. Doi: 10.1016/j.socsci-med.2008.01.003.
 95. Baker DW, Gazmararian JA, Williams MV, et al. Health literacy and use of outpatient physician services by medicare managed care enrollees. *JGIM*. 2004;19:215-220. Doi: 10.1111/j.1525-1497.2004.21130.x.
 96. Mccray AT. Promoting health literacy. *J Am Med Inform Assoc*. 2005;12:152-163. Doi.org/10.1197/jamia.M1687.
 97. Vernon John A, Trujillo A, Rosenbaum S, DeBuono B. (2007). Report on The Low Health Literacy: Implications for National Health Policy. University of Connecticut.
 98. Berkman ND, Davis TC, McCormack L. Health literacy: what is it? *J Health Commun*. 2010;15:9-19. Doi.org/10.1080/10810730.2010.499985.
 99. Longo DR. Understanding Health Information, Communication, and Information Seeking of Patients and Consumers: A Comprehensive and Integrated Model. *Health Expectations*. 2005;8(3):189-194. Doi: 10.1111/j.1369-7625.2005.00339.x.