



ELSEVIER



CrossMark

Available online at www.sciencedirect.com

ScienceDirect

Procedia - Social and Behavioral Sciences 174 (2015) 2629 – 2633

Procedia
Social and Behavioral Sciences

INTE 2014

Health literacy

Gülnür İlgün*, İlkey Sevinç Turaç*, Sevilay Orak*

*Hacettepe Universtiy, Ankara, Turkey

Abstract

Health literacy has been defined as access to health services of individuals, understand and use health information systems, interpret health-related issue and make right decision. In recent years, the importance of health literacy has been rising from studies with positive results in worldwide. According to the research, rates of emergency visit, hospitalization, readmission in hospital and health care cost are decreased, patient-physician communication, mammography utilization rate, chronic disease screening rates are increased. In this study, the health literacy will be investigated and the importance of health literacy will be state.

© 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license

(<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the Sakarya University

Keywords: Health, Health literacy;

1. Introduction

Each diagnosis in health care, basic foundation of treatment attempt is doctor – patient relationship. Communication between doctor and patient is increases success of the treatment (Hardoff and Schonmann, 2001). To shorten length of treatment period and to increase nursing quality is directly proportional with adaptation level to recommendations given by doctor. Following doctor's advice is related to the communication quality of doctor and patient (Russo-Innamorato, 2011).

Doctor-patient relationship takes shape according to personalities of doctor and the patient. As well, doctor-patient relationship affect from many factors such as cultural, social, economic, psychological and ethics (Koch and Turgut, 2004).

In health care of patient, as the effect of doctor – patient relation, health literacy's impact is also important. Health literacy positively affects the health information, compliance to treatment and health results of patient

* Corresponding author. Tel.: +00 -000-0000-0000

E-mail address: gulnurharmanci@gmail.com

(Bohlman et al., 2004). Although health literacy is a new concept for health systems, a wide range of researches have been done about this issue. Especially in the last decade, due to high range of information asymmetry in health care, number of health literacy related researches have been increased seriously. The aim of researches on health literacy is, to minimize knowledge level inequality problems between doctor and the patient (Russo-Innamorato, 2011; Baker,2006; DeWalt, 2004; Nutbeam, 2000).

According to researches, lowness of health literacy can cause bad health results such as; weak doctor – patient relationship, increasing in hospitalization rate, decreasing in mammography usage rate, increasing in rate of consulting to emergency room, decreasing in vaccination rate, decreasing in proper drug usage rate, increasing in rate of applying to hospital again in 30 days, decreasing in cancer screening rate, increasing in disease and death rates (Berkman et al., 2011; Baker,2007; Mitchell et al., 2012; Kripalani et al.,2010; Berkman et al., 2004; Davis et al.: 2002; Rudd et al., 1999; Williams et al., 2002).

This study’s aim is to form a general frame for health literacy. In this content, by mentioning the concept, importance of health literacy and used scaling factors in evaluating of health literacy; suggestions are developed to increase health literacy level.

2. Health Literacy Concept And Importance

There are different opinions in relation to health literacy concept. Although politics increase about this subject, it is indicated that there is no accepted definition about health literacy concept. Health literacy should discuss component dimensions, this concept should functionalize in various scope, method and quality. Health literacy research results from different countries indicate that comparing findings is not that simple (Sorensen et al.,2012).

World Health Organization describe health literacy as; social and cognitive skills that provide personal talent and motivation in understanding and usage of the information for to provide and pursue keeping healthy. Health literacy is more than getting a successful appointment and reading given brochure. Along with developing access to medical knowledge and using this information effectively, health literacy will become stronger (WHO).

American Medical Association (AMA) describes health literacy as; necessary procedures for treatment and ability to understand and provide primary health care and information that required to make proper health decisions.

Sorensen et al. (2012) based upon health literacy descriptions made, defines health literacy as concept related to: health motivation and disease prevention for lifelong enhancing or sustaining the quality of life, making health care decision in daily routine and persons knowledge, motivation, talents and literacy in consulting medical knowledge, evaluating, understanding and gaining access in discussing the decisions.

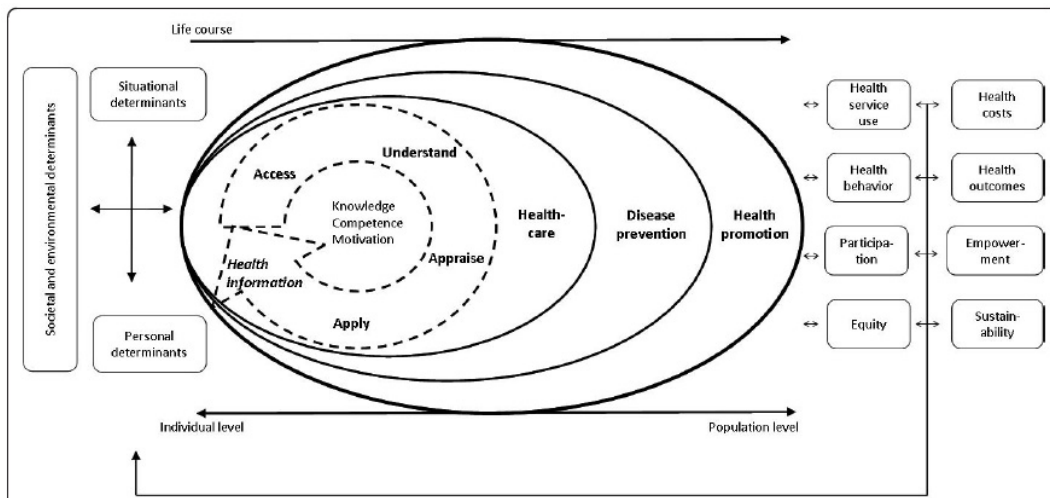


Figure 1 Integrated model of health literacy–see separate file.

As can be seen in figure 1, there is interference between health literacy and social and environmental factors such as; socio-economic condition, occupation, job, income, social support, culture, language, peripheral and political environment, media consumption, fellows and family. Individual's age, gender, cultural level, disease experiences, provide sense organs functions or not such as vision and hearing, reading, comprehension with social and physical talent and cognitive level towards operations are also interference with situational determiners (Sorensen et al.,2012).

The importance of health literacy within positive results of studies is gradually increased in recent years. When examining the individual's healthy life form development tendency, it is observed that individuals, whom health literacy is high, are expressing that they have better health and their health literacy is increased. This situation decrease the hospitalization period and healthcare frequency of occurrence, in turn healthcare cost are decreased (MCCray,2004).

Until recently, the interest of health literacy concept as intense in America and Canada, in past decade became more international. Although researches about health literacy were very few in The European Union between 1991 and 2005 years, due to subject importance is gradually increase, health literacy took its place in Europe health policy (Kondilis et al.,2006). In Europe Commission's 2008-2013 primary action plan clearly dwell on the development of health literacy (EU,2007).

When we look up other studies that analyze the effects of health literacy; it has seen that stimulant health messages on cigarette boxes decreased the smoking behavior and left a positive impression on people who stop smoking in Thailand as in Turkey (Reddy et al.2004). In Turkey, as the results of applied campaign of smoke-free air zone range, 38,6% smoking people mentioned that, campaigns are effective in thinking of quit smoking. And it is seen that, smoking ban in indoor except public access and house, reacted positively and supported by 93.5% of participants (Tengilimoglu et al. 2013). In many research in Turkey, when children's fever go up, mothers still follow the wrong traditional methods to reduce fever of her child, but it is seen that as health literacy level increases, misapplications is decrease (Celasin ant the oth.2008).

In results of research work on the purpose of specify health literacy level and related factors of adults who are living chosen family health unit area in Manisa; only the half of the adults who participate in research, found enough in health literacy. In urban region, while health literacy sufficiency rate found higher, social class, education and following media are found as significant factors in health literacy (Dündar and Dede,2012).

Health literacy; facilitating access to health literacy, increasing relation quality between patient and health care presenters, provides better clinical education as regards personal need and opportunities. As a consequence, improvement that seen in clinical care results, health literacy have gradually increased importance due to leading development of health outputs (Nutbeam,2008).

3. Used Scales In Health Literacy

To measure the health literacy level, numerous test is existing as; Newest Vital Sign (NVS), the Rapid Estimate of Adult Literacy in Medicine (REALM), and the Test of Functional Health Literacy in Adults (TOFHLA),Wide Range Achievement Test (WRAT), The Short Assessment of Health Literacy for Spanish Adults (SAHLSA-50). Among these, the commonly used tests are the Rapid Estimate of Adult Literacy in Medicine (REALM), and the Test of Functional Health Literacy in Adults (TOFHLA). But there a lot of criticism such as, the measurement methods are not totally comprise health literacy theory, measures single dimension in general, falls short of currency and solidity analyses and has no cultural sensitivity (Pleasant et al.2011).

REALM, which designed to use in public health center and community health center, is one of the health literacy evaluation instrument that can be used only in 3 minutes and only in English (DeWalt et al.2004). Inside test, there is a list include 66 medical words. Patients are seeking to read and pronounce loudly the words towards easy words (oil, flu, and pill) to difficult ones (osteoporosis, impetigo). (Davis et al. 2006). Test results evaluating by specific scoring according to pronunciation of the words. Because of it easy to apply, test's prefer ability is superior (DeWalt et al. 2004).

TOFHLA; is more complicated health literacy evaluation instrument when more detailed evaluation is needed, preferred to REALM (Parker et al..1995). TOFHLA is using to measure functional health literacy such as arithmetic

(diabetes level, blood pressure rate etc.) and reading-comprehension by using health materials. Can use both in English and Spanish. It is designed to apply approximately 20-25 minutes but it has short form that can be apply in 5-10 minutes (DeWalt et al.2004).

According to Gazmarariana et al.' study results, in general, 24% of patients' health literacy is insufficient, 12% of patients' health literacy is on marginal level. Participants who have insufficient health literacy are less informed about their illnesses in comparison with participants who have sufficient health literacy. In analyses, it is come up that health literacy is independently related to disease information (Gazmararian et al.2003).

4. Conclusion

Along with increasing the health literacy in society, being healthy/ living healthy will become a life style. People will start to paying attention to live healthy, keeping in training, breaking the bad habit like tobacco, cigarette and alcohol and avoiding from poor diet. Countries aiming to increase health literacy level by making public service ads over Media Company like internet, radio, television, and by informing and educating people over family doctors. To increase health literacy level, policy making and applying, and community oriented projects generalizing are required.

Because of TOFHLA which is used in measuring health literacy, applying in both English and Spanish, as to REALM applying only in English, a scale factor should be developed to specify health literacy in Turkey.

References

- Baker D. W., Parker R. M., Williams M. V., Clark W. S., (1998). Health Literacy And The Risk of Hospital Admission. *Health Literacy and Hospitalization JGIM Volume 13, December*
- Baker, D. W. (2006). The Meaning And The Measure of Health Literacy. *Journal of General Internal Medicine, 21*(8), 878-883.
1. Baker D. W., Williams M. V., Parker R. M. Gazmararian J. A. Nurss J. (1999).
- Baker, D. W., Wolf, M. S., Feinglass, J., Thompson, J. A., Gazmararian, J. A., & Huang, J. (2007). Health Literacy and Mortality Among Elderly Persons. *Archives of Internal Medicine, 167*(14), 1503-1509.
- Berkman, N. D., DeWalt, D. A., Pignone, M. P., Sheridan, S. L., Lohr, K. N., Lux, L., ... & Bonito, A. J. (2004). Literacy and Health Outcomes: Summary. AHRQ Publication.
- Berkman, N. D., Sheridan, S. L., Donahue, K. E., Halpern, D. J., Viera, A., Crotty, K., ... & Viswanathan, M. (2011). Health Literacy Interventions and Outcomes: an Updated Systematic Review.
- Bohlman, L.N., Panzer, A.M., Hamlin B. And Kindig, D.A. (2004). Health Literacy: A Prescription to End Confusion. Committee on Health Literacy. Institute of Medicine of The National Academies. (IOM). Washington, D.C.
- Celasin N, Ergin D, Atman Ü. Yüksek Ateş Şikayeti İle Hastaneye Yatırılan 0-6 Yaş Grubu Çocukları Olan Annelerin Yüksek Ateşe İlişkin Bilgi Ve Tutumları. *Fırat Üniversitesi Sağlık Bilimleri Dergisi*, 2008; 22 (6): 315 – 322
- Davis, T. C., Williams, M. V., Marin, E., Parker, R. M., & Glass, J. (2002). Health Literacy and Cancer Communication. *CA: A Cancer Journal For Clinicians, 52*(3), 134-149.
- Davis TC, Wolf MS, Arnold CL, Et Al. Development And Validation of The Rapid Estimate of Adolescent Literacy in Medicine (REALM-Teen): A Tool to Screen Adolescents for Below-Grade Reading in Health Care Settings. *Pediatrics*. 2006;118:E1707-1714
- Dewalt, D. A., Berkman, N. D., Sheridan, S., Lohr, K. N., & Pignone, M. P. (2004). Literacy and Health Outcomes. *Journal of General Internal Medicine, 19*(12), 1228-1239.
- Development of a Brief Test to Measure Functional Health Literacy. *Patient Education and Counseling 38. 33–42*
- Dündar P. E., & Dede B. (2012). Manisa'da Seçilen Kentsel Ve Gecekondu Bölgelerinde Yetişkinlerde Sağlık Okur-Yazarlığı Ve Etkili Faktörler. *15. Ulusal Halk Sağlığı Kongresi 2-6 Ekim 2012 Bursa*
- European Commission: Together for Health: A Strategic Approach for The EU 2008-2013. Com (2007) 630
- Gazmararian J. A., Williams M. V., Peel J., Baker D. W. (2003). Health Literacy and Knowledge of Chronic Disease. *Patient Education and Counseling 51. 267–275*
- Hardoff D, Schonmann S. (2001). Training Physicians in Communication Skills With Adolescents Using Teenage Actors as Simulated Patients. *Med Educ; 35*(3): 206-10.
- Koch E, Turgut T. (2004) Hasta-Hekim İlişkinin Güncel Sorunları Ve Kültürelarası Yönleri: Bir Bakış. *Türk Psikiyatri Dergisi; 15* (1): 64-9.

- Kondilis BK, Soteriades ES, Falagas ME: Health Literacy Research In Europe: A Snapshot. *Eur J Public Health* 2006, 16(1):113-113.
- Kripalani, S., Jacobson, T. A., Mugalla, I. C., Cawthon, C. R., Niesner, K. J., & Vaccarino, V. (2010). Health Literacy and The Quality of Physician-Patient Communication During Hospitalization. *Journal of Hospital Medicine*, 5(5), 269-275.
- Mccray A. Promoting Health Literacy. *J Am Med Inform Assoc*. 2004;12(29):152-163.
- Mitchell, S. E., Sadikova, E., Jack, B. W., & Paasche-Orlow, M. K. (2012). Health Literacy and 30-Day Postdischarge Hospital Utilization. *Journal of Health Communication*, 17(Sup3), 325-338.
- Nutbeam, D. (2000). Health Literacy as A Public Health Goal: A Challenge for Contemporary Health Education And Communication Strategies Into The 21st Century. *Health Promotion International*, 15(3), 259-267.
- Nutbeam D. The Evolving Concept of Health Literacy. *Social Science and Medicine*. 2008. V.67. 2072–2078
- Reddy S, Gupta P. Report on Tobacco Control in India. Ministry of Health & Family Welfare, 2004, Government of India.
- Rudd, R. E., Moeykens, B. A., & Colton, T. C. (1999). Health and Literacy: A Review of Medical and Public Health Literature. *Office of Educational Research and Improvement*.
- Russo-Innamorato, L. (2011). Does The Quality of The Patient-Physician Relationship Moderate Predictors of Poor Adherence in Urban, Underserved and Vulnerable Patients With Chronic Illness? *PCOM Psychology Dissertations*.
- Parker R, Baker D, Williams M, Nurss J. The Test of Functional Health Literacy in Adults (TOFHLA): A New Instrument for Measuring Patients' Literacy Skills. *J Gen Intern Med*. 1995;10:537-545.
- Pleasant A, Mckinney J. Coming To Consensus on Health Literacy Measurement: An Online Discussion and Consensus-Gauging Process. *Nursing Outlook*.2011; 59(2):95-106.
- Sorensen, K., Broucke S.V., Fullam, J., Doyle, G., Pelikan J., Slonska, A., Brand, H., HLS-EU Consortium Health Literacy Project European. (2012). Health Literacy and Public Health: A Systematic Review and Integration of Definitions and Models. *BMC Public Health*, 12:80.
- Tengilimoğlu, D., Güzel, A., & Günaydın, E. (2014). Sosyal Pazarlama Kapsamında Dumansız Hava Sahası: Örnek Bir Uygulama. *İktisadi Ve İdari Bilimler Fakültesi Dergisi*, 15(2), 1-26.
- Williams, M. V., Davis, T., Parker, R. M., & Weiss, B. D. (2002). The Role of Health Literacy in Patient-Physician Communication. *Family Medicine-Kansas City-*, 34(5), 383-389.