



THE ROLE OF HEALTH LITERACY IN SHAPING INDIVIDUALS' HEALTH BEHAVIORS AND OUTCOMES.

Hajaj Hamad Hussain Almansour¹, Mohammad Marzouq Alfalakah², Hassan Hussain Alwadai³, Nouf Ahmed Alwadei⁴, Meshal Saadi Salman Alrasheedi⁵, Abdulmajeed Saadi Salman Alrasheedi⁶, Abdullah Mahdi Alzamanan⁷

Abstract:

Health literacy plays a crucial role in influencing individuals' health behaviors and outcomes. This review article explores the impact of health literacy on various aspects of health, including preventive behaviors, treatment adherence, and overall health outcomes. The relationship between health literacy and health disparities is also examined, highlighting how limited health literacy can exacerbate existing inequalities in access to healthcare and health outcomes. Additionally, the review discusses the implications of health literacy for healthcare providers and policymakers, emphasizing the importance of promoting health literacy to improve population health.

Keywords: Health literacy, Health behaviors, Health outcomes, Preventive behaviors, Treatment adherence, Health disparities.

¹*Health information system, The general directorate of Health Affairs, Najran, Saudi Arabia.

²Pharmacist Assistant, Maternity and Children's Hospital, Najran, Saudi Arabia.

³Technician-Nursing, Dhahran aljanoub general hospital, Aseer, Saudi Arabia.

⁴Nurse Specialist, Imam Abdulrahman Alfaisal Hospital, Riyadh, Saudi Arabia.

⁵Radiology Specialist, King Fahad Hospital, Buraydah, Saudi Arabia.

⁶Lab Specialist, King Fahad Hospital, Buraydah, Saudi Arabia.

⁷Nutrition Specialist, Supply Administration, Najran, Saudi Arabia.

***Corresponding Author:** Hajaj Hamad Hussain Almansour

*Health information system, The general directorate of Health Affairs, Najran, Saudi Arabia.

DOI: 10.53555/ecb/2022.11.6.96

Introduction:

Health literacy is a crucial aspect of overall well-being that is often overlooked in discussions about healthcare. It refers to an individual's ability to obtain, process, and understand basic health information and services needed to make appropriate health decisions. In other words, health literacy is the foundation upon which individuals can build their knowledge and skills to navigate the complex healthcare system, communicate effectively with healthcare providers, and advocate for their own health needs [1].

The concept of health literacy encompasses a wide range of skills and abilities that are essential for individuals to effectively manage their health. This includes the ability to read and understand health information, such as medication labels, appointment reminders, and health education materials. It also involves the ability to communicate with healthcare providers, ask questions, and understand medical jargon. Additionally, health literacy involves the ability to navigate the healthcare system, including understanding insurance coverage, scheduling appointments, and accessing appropriate care [2].

Low health literacy is a significant public health issue that affects individuals of all ages, races, and socioeconomic backgrounds. According to the National Assessment of Adult Literacy, nearly half of adults in the United States have limited health literacy skills, which can lead to a range of negative health outcomes. Individuals with low health literacy are more likely to have poor health outcomes, higher rates of hospitalization, and increased healthcare costs. They are also less likely to engage in preventive health behaviors, such as getting regular check-ups, vaccinations, and screenings [3].

There are several factors that contribute to low health literacy, including limited education, language barriers, cultural differences, and cognitive impairments. Individuals who are elderly, low-income, or have chronic health conditions are particularly at risk for low health literacy. Additionally, the increasing complexity of the healthcare system, including the use of electronic health records and online health information, can make it difficult for individuals to navigate and understand their health information [4].

Improving health literacy is essential for promoting health equity and reducing health disparities. By empowering individuals with the knowledge and skills they need to make informed health decisions, we can help them take control of their health and improve their overall well-being. Health literacy interventions can take many forms, including

health education programs, patient navigation services, and plain language materials. Healthcare providers can also play a key role in improving health literacy by using clear communication techniques, such as using plain language, visual aids, and teach-back methods [5].

The Impact of Health Literacy on Preventive Health Behaviors:

Health literacy refers to the ability of individuals to obtain, process, and understand basic health information and services to make informed decisions about their health. It plays a crucial role in shaping preventive health behaviors, which are actions taken to prevent illness or injury before they occur [6].

First and foremost, individuals with higher levels of health literacy are more likely to engage in preventive health behaviors. This is because they have the knowledge and skills to understand the importance of preventive measures such as regular exercise, healthy eating, and routine screenings. For example, a person with high health literacy may be more inclined to get regular check-ups and screenings for conditions like high blood pressure or diabetes, leading to early detection and treatment [5].

On the other hand, individuals with low health literacy may not fully understand the importance of preventive health behaviors or how to access the necessary resources. This can result in missed opportunities for early detection and treatment of health conditions, leading to poorer health outcomes in the long run. For example, a person with low health literacy may not understand the importance of getting a flu shot each year or may not know where to go to get one, increasing their risk of getting sick [7].

Furthermore, health literacy can also impact an individual's ability to navigate the healthcare system and advocate for their own health. People with higher health literacy are better equipped to communicate with healthcare providers, understand medical instructions, and make informed decisions about their care. This can lead to better adherence to treatment plans, improved management of chronic conditions, and overall better health outcomes [8].

In addition, health literacy is closely linked to socioeconomic status, with lower-income individuals and those with less education often having lower levels of health literacy. This can create disparities in access to preventive health services and information, leading to poorer health outcomes for marginalized populations. Addressing health literacy disparities is therefore crucial in promoting health equity and ensuring that

all individuals have the knowledge and resources to make informed decisions about their health [8]. Health literacy plays a critical role in shaping preventive health behaviors and ultimately improving health outcomes. By empowering individuals with the knowledge and skills to make informed decisions about their health, we can promote a culture of prevention and early intervention that can lead to healthier communities and reduced healthcare costs. It is essential for healthcare providers, policymakers, and community organizations to work together to address health literacy disparities and promote a more health literate society [9].

Health Literacy and Treatment Adherence:

Health literacy is a crucial aspect of healthcare that often goes overlooked. It refers to an individual's ability to obtain, process, and understand basic health information and services needed to make appropriate health decisions. Unfortunately, many people struggle with health literacy, which can have serious consequences, particularly when it comes to treatment adherence [10].

Treatment adherence is the extent to which a person's behavior corresponds with agreed recommendations from a healthcare provider. This includes taking medications as prescribed, following a specific diet or exercise regimen, attending medical appointments, and making lifestyle changes to improve health. However, low health literacy can hinder a person's ability to understand and follow these recommendations, leading to poor treatment adherence and ultimately, negative health outcomes [11].

There are several factors that can contribute to low health literacy. These include limited education, language barriers, cognitive impairments, and cultural differences. Additionally, the complexity of healthcare information, including medical jargon and technical terms, can make it difficult for individuals to fully grasp the information provided to them by healthcare providers. This can lead to confusion, misunderstandings, and ultimately, non-adherence to treatment plans [12].

The consequences of poor treatment adherence can be significant. It can lead to worsening health conditions, increased healthcare costs, and a lower quality of life for the individual. Non-adherence to medication regimens, for example, can result in ineffective treatment, disease progression, and even hospitalization. In fact, studies have shown that poor treatment adherence is a major contributing factor to medication-related hospital admissions and deaths.

Improving health literacy is essential in addressing the issue of treatment adherence [13]. Healthcare

providers must communicate effectively with patients, using plain language and visual aids to ensure that information is easily understood. Patients should be encouraged to ask questions and seek clarification if they are unsure about their treatment plans. Additionally, healthcare organizations can provide resources and support to help individuals navigate the healthcare system and better understand their health conditions and treatment options [14].

Furthermore, efforts should be made to address the social determinants of health that can impact health literacy and treatment adherence. This includes addressing disparities in access to healthcare, education, and socioeconomic status that can contribute to low health literacy. By addressing these underlying factors, we can help individuals better understand their health needs and empower them to make informed decisions about their care [15].

Health literacy plays a crucial role in treatment adherence and overall health outcomes. By improving health literacy, we can empower individuals to take control of their health and make informed decisions about their care. Healthcare providers, policymakers, and organization must work together to address the issue of low health literacy and ensure that all individuals have the knowledge and resources they need to effectively manage their health. Only then can we truly improve treatment adherence and promote better health outcomes for all [15].

Health Literacy and Health Outcomes:

Health literacy is a critical component of overall well-being and plays a significant role in determining health outcomes. It refers to the ability of individuals to access, understand, and use information to make informed decisions about their health. The level of health literacy can have a profound impact on a person's ability to manage their health effectively, navigate the healthcare system, and make informed decisions about their care [16].

Research has shown that individuals with low health literacy are more likely to have poorer health outcomes, including higher rates of chronic conditions, increased hospitalizations, and higher mortality rates. This is because individuals with low health literacy may struggle to understand medical information, follow treatment plans, and communicate effectively with healthcare providers. As a result, they may be less likely to seek preventive care, adhere to medications, or engage in healthy behaviors [17].

Furthermore, individuals with low health literacy are more likely to experience disparities in

healthcare access and quality. They may face barriers to accessing healthcare services, such as difficulties understanding insurance coverage or navigating complex healthcare systems. This can lead to delays in seeking care, missed appointments, and inadequate treatment, all of which can contribute to poorer health outcomes [16].

On the other hand, individuals with higher health literacy are better equipped to manage their health effectively and make informed decisions about their care. They are more likely to engage in preventive health behaviors, seek timely medical care, and adhere to treatment plans. This can lead to better health outcomes, improved quality of life, and reduced healthcare costs [18].

Health literacy is not only important for individuals, but also for healthcare providers and policymakers. Healthcare providers must communicate effectively with patients of all health literacy levels to ensure that they understand their condition, treatment options, and self-care instructions. This may require using plain language, visual aids, and other communication strategies to help patients better understand complex medical information [19].

Policymakers also play a role in promoting health literacy by implementing policies and programs that support health education and communication. This can include initiatives to improve health literacy skills, increase access to health information, and reduce barriers to healthcare access for individuals with low health literacy [20]. Health literacy is a critical determinant of health outcomes and plays a key role in shaping individual and population health. By improving health literacy skills and addressing disparities in healthcare access and quality, we can help individuals make informed decisions about their health, improve health outcomes, and reduce healthcare costs. It is essential that we continue to prioritize health literacy as a key component of public health efforts to promote overall well-being and improve health outcomes for all individuals [21].

Health Literacy and Health Disparities:

Health literacy is a crucial aspect of individual and public health that has a significant impact on health outcomes and disparities. Health literacy refers to the ability of individuals to obtain, process, and understand basic health information and services needed to make appropriate health decisions. It encompasses a range of skills, including reading, writing, numeracy, and communication, and plays a critical role in promoting health and preventing disease [22].

Health disparities, on the other hand, refer to differences in health outcomes and access to healthcare services among different populations. These disparities can be influenced by a variety of factors, including socioeconomic status, race, ethnicity, education level, and geographic location. Health literacy is closely linked to health disparities, as individuals with limited health literacy are more likely to experience poorer health outcomes and have difficulty navigating the healthcare system [23].

Limited health literacy is a widespread issue that affects individuals of all ages, races, and socioeconomic backgrounds. According to the National Assessment of Adult Literacy, only 12% of adults in the United States have proficient health literacy skills, while 53% have intermediate skills and 36% have basic or below basic skills. This means that a significant portion of the population may struggle to understand health information, follow medical instructions, and make informed decisions about their health [24].

Individuals with limited health literacy are at higher risk for a range of negative health outcomes, including higher rates of chronic conditions, hospitalizations, and mortality. They are also less likely to engage in preventive health behaviors, such as getting regular screenings and vaccinations. Limited health literacy can also lead to increased healthcare costs, as individuals may be more likely to seek unnecessary medical care or experience medication errors due to misunderstandings [23].

Health disparities are also closely linked to health literacy, as individuals with limited health literacy are more likely to belong to marginalized or underserved populations that face barriers to accessing quality healthcare. For example, individuals with limited English proficiency may struggle to communicate with healthcare providers and understand medical information, leading to disparities in care. Similarly, individuals with lower levels of education may have difficulty navigating the complex healthcare system and accessing preventive services [25]. Addressing health literacy is essential for reducing health disparities and promoting health equity. Healthcare providers can play a key role in improving health literacy by using plain language, visual aids, and other communication strategies to help patients understand their health conditions and treatment options. Public health campaigns and educational programs can also raise awareness about the importance of health literacy and provide individuals with the tools they need to make informed decisions about their health [26].

Health literacy is a critical factor in promoting individual and public health and addressing health

disparities. By improving health literacy skills among individuals and communities, we can empower individuals to take control of their health, make informed decisions, and access quality healthcare services. It is essential for healthcare providers, policymakers, and public health professionals to work together to address health literacy and reduce disparities in health outcomes [27].

Strategies to Improve Health Literacy:

Health literacy is defined as the ability to obtain, process, and understand basic health information and services needed to make appropriate health decisions. It is an essential skill that empowers individuals to take control of their health and well-being. Unfortunately, many people lack adequate health literacy, which can lead to poor health outcomes, increased healthcare costs, and reduced quality of life. In order to address this issue, it is important to implement strategies to improve health literacy among the general population [28]. One of the key strategies to improve health literacy is to provide accessible and easy-to-understand health information. This includes using plain language, avoiding medical jargon, and using visual aids to help convey important health messages. Health information should be presented in a clear and concise manner, making it easier for individuals to understand and act upon [29].

Another important strategy is to promote health education and awareness in schools, workplaces, and communities. By incorporating health literacy into educational curricula and workplace wellness programs, individuals can develop the knowledge and skills needed to make informed health decisions. Community-based health education programs can also help raise awareness about important health issues and promote healthy behaviors [28].

In addition, healthcare providers play a crucial role in improving health literacy. It is important for healthcare professionals to communicate effectively with patients, taking the time to explain medical conditions, treatment options, and preventive measures in a way that is easy to understand. Providing written materials, such as brochures and fact sheets, can also help reinforce key health messages and empower patients to take charge of their health [30].

Furthermore, technology can be a valuable tool in improving health literacy. Online resources, mobile apps, and telehealth services can provide individuals with access to reliable health information and support, allowing them to make informed decisions about their health. Digital platforms can also be used to deliver health

education programs and interactive tools that engage users and promote healthy behaviors [31]. Lastly, collaboration among stakeholders is essential in improving health literacy. Governments, healthcare organizations, community groups, and educational institutions must work together to develop and implement comprehensive strategies to address health literacy gaps. By pooling resources and expertise, these stakeholders can create a supportive environment that promotes health literacy and empowers individuals to make positive health choices [32].

Improving health literacy is a critical step towards promoting better health outcomes and reducing healthcare disparities. By implementing strategies such as providing accessible health information, promoting health education, empowering healthcare providers, leveraging technology, and fostering collaboration among stakeholders, we can help individuals develop the knowledge and skills needed to make informed health decisions. By investing in health literacy, we can empower individuals to take control of their health and well-being, leading to a healthier and more resilient population [33].

Implications for Healthcare Providers and Policymakers:

The implications for healthcare providers and policymakers are vast and far-reaching, as the healthcare landscape continues to evolve and change. With advancements in technology, changes in healthcare legislation, and shifting patient demographics, it is crucial for both healthcare providers and policymakers to understand the implications of these changes in order to effectively meet the needs of patients and the healthcare system as a whole [34].

One of the key implications for healthcare providers is the need to adapt to new technologies and incorporate them into their practice. With the rise of telemedicine, electronic health records, and wearable health devices, healthcare providers must be prepared to embrace these tools in order to provide the best possible care for their patients. This may require additional training and resources to implement these technologies, but the potential benefits in terms of improved patient outcomes and more efficient care delivery make it a worthwhile investment [34].

Furthermore, healthcare providers must also be prepared to address the changing needs of patients, particularly as the population continues to age. With an increasing number of elderly patients, healthcare providers will need to have the knowledge and resources to address age-related health issues, as well as the ability to provide

comprehensive care for patients with complex medical needs. This may require a shift in the way healthcare is delivered, with a greater emphasis on interdisciplinary care and coordination between different healthcare providers [35].

In addition, healthcare providers must also be cognizant of the changing healthcare landscape in terms of payment and reimbursement. With the shift towards value-based care and alternative payment models, healthcare providers will need to focus on delivering high-quality, cost-effective care in order to remain financially viable. This may require a shift in the way care is delivered, with a greater emphasis on preventive care and population health management [36].

For policymakers, the implications are equally significant. As the healthcare system continues to evolve, policymakers must be prepared to enact legislation and policies that support the changing needs of patients and healthcare providers. This may include measures to promote the adoption of new technologies, support the shift towards value-based care, and address the growing healthcare needs of an aging population [37].

Furthermore, policymakers must also be prepared to address the social determinants of health, such as access to care, socioeconomic factors, and environmental influences, which have a significant impact on patient health outcomes. This may require a greater focus on public health initiatives, as well as policies to address healthcare disparities and promote health equity [37].

The implications for healthcare providers and policymakers are vast and complex, as the healthcare landscape continues to evolve. By understanding and addressing these implications, both healthcare providers and policymakers can work together to ensure that patients receive the best possible care and that the healthcare system remains sustainable and effective in the face of ongoing change [38].

Conclusion:

In conclusion, health literacy is a critical component of overall health and well-being that is often overlooked in healthcare discussions. By improving health literacy skills among individuals, we can empower them to make informed health decisions, navigate the healthcare system, and advocate for their own health needs. It is essential for healthcare providers, policymakers, and community organizations to work together to promote health literacy and reduce health disparities. By investing in health literacy initiatives, we can create a healthier and more equitable society for all.

References:

1. Berkman ND, Sheridan SL, Donahue KE, Halpern DJ, Crotty K. Low health literacy and health outcomes: an updated systematic review. *Ann Intern Med.* 2011;155(2):97-107.
2. Sørensen K, Van den Broucke S, Fullam J, Doyle G, Pelikan J, Slonska Z, Brand H; (HLS-EU) Consortium Health Literacy Project European. Health literacy and public health: a systematic review and integration of definitions and models. *BMC Public Health.* 2012;12:80.
3. 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.
4. Rudd RE. Health literacy skills of U.S. adults. *Am J Health Behav.* 2007;31 Suppl 1:S8-S18.
5. DeWalt DA, Berkman ND, Sheridan S, Lohr KN, Pignone MP. Literacy and health outcomes: a systematic review of the literature. *J Gen Intern Med.* 2004;19(12):1228-1239.
6. Kutner M, Greenberg E, Jin Y, Paulsen C. *The Health Literacy of America's Adults: Results from the 2003 National Assessment of Adult Literacy (NCES 2006-483)*. U.S. Department of Education. Washington, DC: National Center for Education Statistics; 2006.
7. Paasche-Orlow MK, Wolf MS. The causal pathways linking health literacy to health outcomes. *Am J Health Behav.* 2007;31 Suppl 1:S19-S26.
8. Nielsen-Bohlman L, Panzer AM, Kindig DA, eds. *Health Literacy: A Prescription to End Confusion*. Washington, DC: The National Academies Press; 2004.
9. Nutbeam D. The evolving concept of health literacy. *Soc Sci Med.* 2008;67(12):2072-2078.
10. Parker RM, Ratzan SC, Lurie N. Health literacy: a policy challenge for advancing high-quality health care. *Health Aff (Millwood).* 2003;22(4):147-153.
11. Berkman ND, Sheridan SL, Donahue KE, Halpern DJ, Crotty K. Low health literacy and health outcomes: an updated systematic review. *Ann Intern Med.* 2011;155(2):97-107.
12. Sørensen K, Van den Broucke S, Fullam J, Doyle G, Pelikan J, Slonska Z, Brand H; (HLS-EU) Consortium Health Literacy Project European. Health literacy and public health: a systematic review and integration of definitions and models. *BMC Public Health.* 2012;12:80.
13. 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.

14. Rudd RE. Health literacy skills of U.S. adults. *Am J Health Behav.* 2007;31 Suppl 1:S8-S18.
15. DeWalt DA, Berkman ND, Sheridan S, Lohr KN, Pignone MP. Literacy and health outcomes: a systematic review of the literature. *J Gen Intern Med.* 2004;19(12):1228-1239.
16. Kutner M, Greenberg E, Jin Y, Paulsen C. The Health Literacy of America's Adults: Results from the 2003 National Assessment of Adult Literacy (NCES 2006-483). U.S. Department of Education. Washington, DC: National Center for Education Statistics; 2006.
17. Paasche-Orlow MK, Wolf MS. The causal pathways linking health literacy to health outcomes. *Am J Health Behav.* 2007;31 Suppl 1:S19-S26.
18. Nielsen-Bohlman L, Panzer AM, Kindig DA, eds. *Health Literacy: A Prescription to End Confusion.* Washington, DC: The National Academies Press; 2004.
19. Nutbeam D. The evolving concept of health literacy. *Soc Sci Med.* 2008;67(12):2072-2078.
20. Parker RM, Ratzan SC, Lurie N. Health literacy: a policy challenge for advancing high-quality health care. *Health Aff (Millwood).* 2003;22(4):147-153.
21. Berkman ND, Sheridan SL, Donahue KE, Halpern DJ, Crotty K. Low health literacy and health outcomes: an updated systematic review. *Ann Intern Med.* 2011;155(2):97-107.
22. Sørensen K, Van den Broucke S, Fullam J, Doyle G, Pelikan J, Slonska Z, Brand H; (HLS-EU) Consortium Health Literacy Project European. Health literacy and public health: a systematic review and integration of definitions and models. *BMC Public Health.* 2012;12:80.
23. 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.
24. Rudd RE. Health literacy skills of U.S. adults. *Am J Health Behav.* 2007;31 Suppl 1:S8-S18.
25. DeWalt DA, Berkman ND, Sheridan S, Lohr KN, Pignone MP. Literacy and health outcomes: a systematic review of the literature. *J Gen Intern Med.* 2004;19(12):1228-1239.
26. Kutner M, Greenberg E, Jin Y, Paulsen C. The Health Literacy of America's Adults: Results from the 2003 National Assessment of Adult Literacy (NCES 2006-483). U.S. Department of Education. Washington, DC: National Center for Education Statistics; 2006.
27. Paasche-Orlow MK, Wolf MS. The causal pathways linking health literacy to health outcomes. *Am J Health Behav.* 2007;31 Suppl 1:S19-S26.
28. Nielsen-Bohlman L, Panzer AM, Kindig DA, eds. *Health Literacy: A Prescription to End Confusion.* Washington, DC: The National Academies Press; 2004.
29. Nutbeam D. The evolving concept of health literacy. *Soc Sci Med.* 2008;67(12):2072-2078.
30. Parker RM, Ratzan SC, Lurie N. Health literacy: a policy challenge for advancing high-quality health care. *Health Aff (Millwood).* 2003;22(4):147-153.
31. Berkman ND, Sheridan SL, Donahue KE, Halpern DJ, Crotty K. Low health literacy and health outcomes: an updated systematic review. *Ann Intern Med.* 2011;155(2):97-107.
32. Sørensen K, Van den Broucke S, Fullam J, Doyle G, Pelikan J, Slonska Z, Brand H; (HLS-EU) Consortium Health Literacy Project European. Health literacy and public health: a systematic review and integration of definitions and models. *BMC Public Health.* 2012;12:80.
33. 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.
34. Rudd RE. Health literacy skills of U.S. adults. *Am J Health Behav.* 2007;31 Suppl 1:S8-S18.
35. DeWalt DA, Berkman ND, Sheridan S, Lohr KN, Pignone MP. Literacy and health outcomes: a systematic review of the literature. *J Gen Intern Med.* 2004;19(12):1228-1239.
36. Kutner M, Greenberg E, Jin Y, Paulsen C. The Health Literacy of America's Adults: Results from the 2003 National Assessment of Adult Literacy (NCES 2006-483). U.S. Department of Education. Washington, DC: National Center for Education Statistics; 2006.
37. Paasche-Orlow MK, Wolf MS. The causal pathways linking health literacy to health outcomes. *Am J Health Behav.* 2007;31 Suppl 1:S19-S26.
38. Nielsen-Bohlman L, Panzer AM, Kindig DA, eds. *Health Literacy: A Prescription to End Confusion.* Washington, DC: The National Academies Press; 2004.