



**Abstract:** *Although health literacy is a concept new to many members of the health care community, it has quickly caught the attention of researchers, policy makers, and clinicians due to its widespread impact on health and well-being. This article is about the importance of health literacy context related to Pakistan. I intended to discuss the significance of health literacy and e-health how both domains are interlinked with each other. Along with that the focus is on digital divide, the gap between health care information and general public including patients. In literature review found some of the basic challenges exists in making E-Health a better source for health information. Challenges that exist in spreading health information is also discussed. At the end of the article along with cited articles there is a concluded suggestions about how it could be solve through digital devices and Internet, and what could be done possibly in this modern world.*

**Key Words:** Health Literacy, E-Health, Patient-Provider Relationship, Digital Divide, Digital Gap, Internet Navigation, Patient Empowerment

## Introduction

Today, the world has been dominated with the use of science and technology. Technology is mass spread over various areas of life. One of the major areas that has been affected by technology is health and the health care sector. The emergence of technology has lessened the burden of disease and saved millions of lives worldwide. According to a study conducted by Pew Research Centre, approximately 74% of the adults use internet today; and about 80% of the users seek health related information from the internet. The health related information that was most commonly searched included activities such as accessing blogs or newsgroups, watching online videos, reading drug or treatment reviews, and reading reviews on provider rating. Other health related uses of internet include tracking weight, diet and exercise, social networking with health related groups, and fund raising for medical causes. E-health literacy is defined as “the ability to seek, find, understand, and appraise health information from electronic sources and apply the knowledge gained to addressing or solving a health problem.” The e-health literacy has been proven as very significant in various decision making prospects related to health. All the knowledge at fingertips of individuals makes them feel more self-empowered and self-efficient. They feel empowered to manage the diseases themselves. E-health literacy also contributes towards health promotion and the effective use of health services.

While the world is progressing towards incorporating artificial intelligence and virtual reality as the means of e-health literacy in the health care realm, there is still a majority of the proportion of

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world that is lagging behind. There are still many countries and areas that are far behind such a huge kind of technological revolution in health. This has created a digital divide between the places that have been equipped with such technologies and the places that have been not. Digital divide is defined as ‘the gap between those who benefit from the digital age and those who do not.

### **Significance of E-Health & Health Literacy**

Technology has improved to work efficiently in the health care sector for making efficient health decisions. When we talk about health literacy, we mean that it will be covering several areas for working and execution of our project plans, for the promotion of health, preventive measures, awareness campaigns, all that to improve individuals knowledge about health and how he/she can use different communicative and technological tools to improve his/hers health. In Health literacy, Health is covered by effective use of health services, the aim is to promote health, a health literate person has the ability of disease self-management, in patient empowerment the individual who attains knowledge about certain health problems feel empowered as they can control and prevent themselves from certain health problems. It is important to note that health literacy is not just about reading or writing when it comes to filling health forms or documents, it is also related to how we use the information to execute certain health problems to prevent ourselves from certain diseases for the betterment of our health and well-being. Along with health literacy e-health is very significant. “It stands to reason that the most obvious approach to addressing low health literacy is related to making information more accessible. Without accessible information, there is no basis by which an individual, organization, or community can process messages to improve health outcomes. Because information accessibility is closely related to communication channels, i.e., the methods by which people receive messages, this section will overview how people obtain information through health care providers, print sources, and the Internet. Both obstacles and strategies for obtaining information through these channels will be presented”. Internet is the best source through which people attain knowledge by internet trafficking though different search engines people are able to access information regarding health and human well-being. They find research article about thousands of health domain topics and are able educate themselves while using digital devices. E-health is more or less a use of digital devices in promotion and prevention of health, to break the gap between true information for common man. In the advanced era when we are shifting from the modern age to the advanced age, the world has shifted from manual daily life processes to online digital processes including business trades, education, and for health care system. In Hospitals, doctors have their own digital devices that help to store data and give patient history before going for treatment. Online applications help people to consult doctors through video calls to reduce extra time and cost for daily checkups. In a community where health literacy is high and there are no hurdles in communication through technology then there are more chances of that community to live a healthy lifestyle with the economic boost to grow a prosperous nation in the future.

### **Digital Divide in Health and Pakistan**

Digital divide has not only affected the countries and nations at large, but also the various sectors of populations that exist within. The most vulnerable groups of population in Pakistan are the elderly people, women, minorities, illiterate, and the people with low socio economic status. According to the recent UNDP Pakistan National Human Development Report 2020 on Inequality, although the access to digital services is improving in Pakistan, but only 45% of the population own mobile phones, out of which only 17% use the internet. Other than that people living in remote areas in the country (Including Northern Areas) has also face problems in connecting and communicating with the rest of the word as they have no advance technology with them and there is no infrastructure in those areas.

Of the 185 million cellular subscribers only 46 percent of Pakistan's population has access to 3G/4G services. Even fewer have the knowledge and skills needed to utilize technology to gain knowledge and use it for their uplift. In a world where technology dictates every aspect of our lives, whether it is education, careers, business opportunities or personal and professional growth, a digital divide indicates economic stagnation. It also contributes to inequality. Given that the use of smart phones in Pakistan is increasing by the day and more people now have access to basic technology some argue that the digital divide is shrinking. However, this is an illusion. Access is certainly a large part of reducing this divide, but without an understanding of how to use information and communication technologies (ICT) for personal, professional, and societal development it actually only widens the gap, with benefits limited to a select segment of society.

### **Challenge in Obtaining Health Information**

As discussed earlier the most least health literate people are those vulnerable groups either they belong to low socioeconomic class or they might be located in that geographical location where the proper facilities and infrastructure is not present and there might be some other hurdles that increase the gap between true health information and the sources of health care system. When we discuss about health provider-patient relationship in history the only source to obtain health information was health care providers when patient interacted with them that ultimately increases the information of a patient about his/hers disease. In present times there are many other sources through which patients are able to obtain health information that ultimately increases the literacy rate of a patient it could be through internet while using digital devices as smart phones, computers, laptops, radio, TV etc. If individuals do not have possible internet availability or any other devices or sources then there is a chance of increasing the gap and the interaction will be low between health-care providers and the patients. One of the most difficult challenges health care providers may need to overcome when speaking with persons having low health literacy is gaining their trust. When the provider is different from the patient in terms of age, ethnic background, education, and socioeconomic status, it may be difficult for the patient to feel comfortable asking questions or disclosing personal health information. In fact, many patients work hard to hide the fact that they have trouble understanding something they are told or given to read because they are embarrassed and/or do not want to appear to challenge the health care provider in any way. There are also challenges related to obtaining information via the Internet. As mentioned above, patients with access to the Internet are more likely to be White, have higher income levels and more education, be under 65 years of age, and have higher health literacy. In contrast, marginalized populations, such as ethnic groups that speak English as a second language, the poor, and the elderly have less access to online health information. Even when patients do have access to the Internet, because there is no regulatory agent guarding the quality of health information on the Internet, the information is often inaccurate and out-of-date.

### **Conclusion**

Looking forward to resolve the problems what can be done in micro and macro level to reduce the gap between information provider and information receiver. With regard to producing Internet content, there are several strategies for increasing the accessibility of health information to populations with low health literacy. Although lack of computer availability can be an obstacle, patients may be able to use computers with Internet connectivity in public facilities, such as libraries, hospitals, schools, and senior centers. For those individuals with low health literacy who choose the Internet for health information, the guidelines suggested below help to make online information more accessible:

1. Make Web pages simple, with the number of links, graphics, and text items minimized as much as possible. When links and graphics are used, they should be labeled with clear instructions (Zarcadoolas, Blanco, Boyer, & Pleasant, 2002).
2. Choose HTML over nonstandard formats such as PDF and Flash that require more advanced computer skills and additional software to open (Eichner & Dullabh, 2007).
3. Avoid requiring the user to scroll or click too many times to get to the information (Zarcadoolas et al., 2002).
4. Provide a table of contents and links back to the main page (Zarcadoolas et al.).

Other than that focusing on macro level the gender gap can be solved through internet as all the information is available for everyone equally. YouTube Influencers can educate and cover their targeted population, There is an opportunity through internet you can run online awareness campaign with cultural competency. Media teams can work credibly on different projects regarding awareness or educating people living in those remote areas. There is a possibility if a proper infrastructure is provided in remote areas then more number of people are able to access health information. Government can run different training programs through which people could be train to use digital devices for their betterment and wellbeing.

The most advanced way to break the gap is Tailor-Made Digital Health Solutions in which you consider internet as a mediator, making appointments and consultations by different applications and websites you focus on more use of smart phones instead to computers and information is passes through one way text messaging or via PDF forms to JPG images.

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