

## Health Literacy: A Tool for Health Communication and Promotion

Elechi, Comfort Emma

Department of Human Kinetics, Health and Safety Education, Ignatius Ajuru University of Education  
Rumuolumeni, Port Harcourt  
Email: Elechimanuel@Yahoo.Com  
Phone Number: 08035106124

James, Bariaara Promise

Department of Human Kinetics, Health and Safety Education, Ignatius Ajuru University of Education Port  
Harcourt  
Email: Jamesbariaarapromise@Gmail.Com  
Phone Number: 07039249650

### Abstract

*This paper examined health literacy: a tool for health promotion and communication. The paper discussed the concept of health, health literacy, and goals of health literacy to health promotion and communication, typology of health literacy and dimensions of health literacy as a key outcome of health promotion and communication. This paper also identified the benefits of health literacy, challenges of health literacy, and way out of challenges of health literacy. It concluded that health literacy provides improvement and empowerment of people's access to health information and their capacity to use effectively. However, contain ambiguous words so that every individual can understand, use, process the information, also that public health messages and campaign should be carried out through information communication and technology, there should be health empowerment and motivation programme in order to sensitize and inspire the individual and community even the special needs of the people.*

**Key words:** Health, health literacy, health promotion, health communication

### Introduction

Health literacy is a way of improving health and the quality of health care through reducing low literacy level and improves communication of individuals. Health literacy refers to a person's ability to understand and act on health information (Institute of Medicine, 2004). Communication is one of the foundations of health care and every health care interaction depends on effective communication which is linked to improved individual or patient satisfaction, adherence to medical recommendation and health outcomes. Healthcare organisations and professional have a responsibility to present health information in a way that patients, can use and understand (Stableford & Mettger, 2007). Health communication strategies can inform and influence large numbers of people on ways to improve their health. It aimed at changing people's attitude, knowledge and /or behaviour which include increase risk perception, reinforce positive behaviours, influence social norms, increase availability of support and needed services and empower individuals to change or improve their health conditions.

The role of health literacy in the place of health promotion strategies cannot be overemphasised because it advocates improvement in the sophistication of contemporary health education and promotion strategies (World Health Organisation, 2007). As a tool for disease prevention and disease-related outcomes, its major aim is geared or focused on the social context of behavioural decisions and changes, and helping people to develop personal-social skills required to make positive health behaviour choices. In fact, it was assumed that individual that had higher level of education and literacy, personal skills and economic means have received and responded to health message communicated through traditional media. As a consequence, health promotion and communication programmes have evolved in their sophistication, reach and relevance to wide range of groups in population (Nutbeam, 2009). Health communication that is interpersonal and mass communication activities focused on improving the health of individuals and population, has emerged as one of the most important public health issues in the society (Kickbusch, & Maag, 2008). Health People Project United State (2010) suggests that health communication can contribute to all aspects of disease prevention and health promotion and it is relevant to a number of domains including:

Health professional-patient relations, Individuals' exposure to, search for, and use of health information, Individuals' adherence to clinical recommendations and regimens, Construction of public health messages and campaigns, Dissemination of individual and population health risk information, that is risk communication, Images

of health in the mass media, and the culture at large, Education of consumers about how to gain access to the public health and health care systems, Developments of tele-health applications

People in modern society are expected to actively engage in the management of their health and to make a wide range of health decisions. Sound health decisions require comprehensive health information that is accessible and appropriate to the needs and cultures and social backgrounds of individuals (kickbusch, & Maag, 2008). Although health care professionals have historically been the primary sources of health and medical information, the increase in media reports and the rapid expansion of the internet have rendered other sources more available to the general public (Hesse, Nelson, Kresps, Croyle, Arora, Rimar, & Viswamath, 2005). Thus, skills in understanding and applying information about health issues may have a substantial impact on health behaviours and health outcomes which have been conceptualised as health literacy. According to Health People Project United States (2010) it involves improving the health literacy of persons with inadequate or marginal literacy skills. There is a significant concern that people with limited health literacy may not be able to adequately understand health information, even in the presence of access to such information and related services has emerged. The need for improved health literacy has become apparent as the number of health information sources that are easily accessed by the general public has increased in the absence of established assurances of the quality of the information provided by such sources (Nutbeam, 2008).

### **Concept of health literacy, communication and promotion**

In general terms, literacy is the ability to read, write, and speak a language in the service of understanding and solving problems with different proficiency to function at work and in society, achieve goals, and develop knowledge and individual potential (Baker, 2006). The notion of health literacy is based on this concept of literacy and generally refers to literacy in the context of health and healthcare. Health literacy is a term introduced in the 1970s and of the increasing importance in public health and healthcare (kickbusch, & Maag, 2008). It is concerned with the capacities of people to meet the complex demands of a modern society. Health literate means placing one's own health and that of one's family and community into context, understanding which factors are influencing it, and knowing how to address them. An individual with an adequate level of health literacy has the ability to take responsibility for one's own health as well as one's family health and community health (Mcqueen, Potvin, Pelikan, Balbo, & Abel, 2007). The concept of health literacy deals with understanding the simultaneous use of a more complex and interconnected abilities, such as reading and acting upon written health information, communicating needs to health professionals and understanding health instructions (Peerson & Saunders, 2009).

Another well-recognised definition, proposed by (WHO, 2009), defined health literacy more broadly as the cognitive and social skills which determine instruction and ability for an individual to gain access to, understand, and use information in ways which promote and maintain good health. This version also suggest that health literacy entails a level of knowledge, personal skills, and confidence that enable changes in personal lifestyles and living conditions to improve personal and community health. It goes beyond the cognitive elements of comprehending, analyzing, and applying health information to make decision about health, but also on the social skills involved in those interactions with other people and society (for example, communication, negotiation, and organisation) that are necessary on transforming decisions into practice (Nutbeam, 2006).

### **Goals of health literacy to health promotion**

The Centers for Disease Control and Prevention (2014) provides a framework as a guideline that serve as a health literacy goal of public health concern. They are;

1. To develop and disseminate health and safe information that is accessible, accurate, and actionable.
2. To integrate clear communication and health literacy in public health planning, funding, policy development, research and evaluation.
3. To incorporate accurate, standards – based and developmentally appropriate health and science information and curricula in educational setting from childcare through tertiary level. Therefore, health literacy is directed towards these goals and remains one of the fundamental tools in the health promotion strategies and prevention of disease in Nigerian society.

### **Types of health literacy**

Nutbeam, (2008) described three types of health literacy as follows:

1. **Functional health literacy:** This refers to the basic skills in reading and writing that are necessary to function effectively in everyday situations. It reflects the outcome of traditional health education basically on the communication of factual information on health risks and how to use the health system. Such activities will result in individual benefit and also population or community benefits.

2. **Interactive health literacy:** These refers to more advanced cognitive and literacy skills which, together with social skills, can be used to actively participate in everyday situations, extract information and derive meaning from different forms of communication, and apply this to changing circumstance. Interactive health literacy reflects the outcomes of the approach to health education and promotion which evolved during the past. This is focused on the development of personal skills in a supportive environment and directed towards improving personal capacity to act independently on knowledge, specifically to receive health information. An example is the school health education programme directed towards personal and social skills development and behavioural outcomes.

3. **Critical health literacy:** This refers to more advanced cognitive skills which together with social skills, can be applied to critically analyse information and use this to exert greater control over life event and situation. However, critical health literacy reflects the cognitive and skill development outcomes which are oriented towards supporting effective social and political action, as well as individual action. Within this paradigm, health education may involve the communication of information, and development of skills which investigate various forms of action to address social, economic, and environmental determinants of health. This type of health literacy can be more obviously linked to population benefits, alongside benefits to the individual. Health education in this case would be achieved towards improving individual and community capacity to act on those social and economic determinants of health (Shooujih, Leea, & Choc-Young, 2004)

### Dimensions of health literacy

The distinct between medical and public health literacy is reflected in the identification of different dimension. Within the definition of health literacy as individual capacities the Institute of Medicine (2004) consider cultural and conceptual knowledge, listening, speaking, arithmetical, writing, and reading skills are the main components of health literacy. Spero (2005), identified reading and numeracy skills as the defining attributes, including comprehension, and capacity to use health information in decision making, and successful functioning in the role of healthcare consumer as dimension. Baker (2006) also opined that health literacy is divided into health-related print literacy and health related oral literacy. Lee, Arozullah, and Choc (2004) identified four interrelated factors which includes: disease and self-care knowledge, health risk behaviour, preventive care and physician visits, compliance with medication

The contribution above is concern with the cognitive capacities, skills and behaviours which reflects an individuals' capacity to function in the role of a patient within the health care system. Freedman, Bess, Tucker, Tuchman, and Wallston (2009) identified three dimensions of public health literacy, each of which involves corresponding competences, they include;

1. **Conceptual foundation:** This includes the basic knowledge and information needed to understand and take action in public health concerns; individuals and groups should be able to discuss core public health concepts, public health constructs, and ecologic perspectives.

2. **Critical skills:** This relates to the skills necessary to obtain process, evaluate, and act upon information that is needed to make public health decisions that benefits the community. An individual or group should be able to obtain, evaluate and utilize public health information, identify public health aspects of personal and community concerns, and find solutions to health problems

3. **Civil orientation:** According to them, this involves the skills and resources necessary to address health concerns through civic engagement, and individual or group should be able to articulate the uneven distribution of burdens and benefits of the society, evaluate who benefits and who is harmed by public health efforts, communicate current public health problems, and address public health problem through civic actions, leadership and dialogue.

Mancuso (2008) emphasises that health literacy is a process that evolves over a person's lifetime and identify the attributes of health literacy to be capacity, comprehension and communication.

1. The capacity skills related to health literacy include gathering, analysing, and evaluating health information or credibility and quality, working together, managing resources, seeking audience and support, developing and expressing a sense of self, creating and pursuing a vision and goals, and keeping pace with change. Oral language skills are also considered essential. Social skills and credentials such as reading, listening, analytical, decision-making and numerical abilities are important as well to advocate or oneself, to act on health information, and to negotiate and navigate within the health-care system.

2. Comprehension is a complex process based on the effective interaction of logic, language and experience and is crucial to the accurate interpretation of a myriad of information that is provided to the modern patient, such as discharge instructions, consent forms, patient education materials, and medication directions.

3. Communication is how thought, messages or information are exchanged through speech, signals, writing or behaviour. Communication involves inputs, decoding, encoding output, and feedback. Essential communication

skills are reading with understanding, conveying ideas in writing, speaking so others can understand, listening actively, and observing critically.

The dimensions of health literacy applied to the three health domains as stated include;

i. That the dimensions of health literacy in the domain of “health care”, that is, the ability to access information on mental or clinical issue, to understand medical information, to interpret and evaluate medical information, and to make informed decisions on medical issues and comply with medical advice.

ii. That the dimensional of health literacy in the domain of “disease prevention”, notably the ability to access information or risk factors for healthy, to understand information on risk factors and derive meaning, to interpret and evaluate information on risk factors, and to make informed decisions on risk factors for health.

iii. That the dimensions of health literacy in the domain of “health promotion”, notably the ability to regularly update oneself on determinants of health in the social and physical environments, to comprehend information in determinants of health in the social and physical environment and deriving meaning, to interpret and evaluate information on determinants, of health in the social and physical environment, and the ability to make informed decisions on health determinants in the social and physical environment. Health literacy is in the understanding of the asset for improving people’s empowerment within the domain of healthcare, disease prevention and health promotion (Mancuso, 2008).

### **Health literacy as an outcome of health promotion**

In the recent past, considerable attention has been given to analyzing the determinants of health and to the definition of outcomes associated with health promotion activity. This has led to the development hierarchies of outcomes from health interventions, which illustrate and explain linkages between health promotion actions, the determinant of health, and subsequent health outcomes.

Zarcadoolas, Pleasant and Greer (2005) assert the outcome of health literacy for health promotion which includes:

1. **Intermediate outcomes:** The intermediate outcome represents the determinants of those health and social outcomes. Personal behaviour, examples, smoking or physical activity may increase or decrease the risk of ill-health, and are summarised as healthy lifestyle. Healthy environments consist of the environmental, economic, and social conditions that can both impact directly on health, as well as support healthy life styles, examples by making it more or less easy for an individual to smoke or adopt a healthy diet. This outcome describes the accessibility to, appropriate provision, and uses of health services are acknowledged as important determinants of health status and are represented as effective health services.

2. **Health promotion outcomes:** This represents those personal, social and structural factors that can be modified in order to change the determinants of health (that is intermediate health outcomes). This outcome also represents the most immediate target of planned health promotions activities. Within this outcomes model, they define health literacy as the personal, cognitive and social skills which determine the ability of individuals to gain access to understand, and use information to promote and maintain good health. However, these outcomes include improved knowledge and understanding of health determinants, and changed attitudes and motivations in relations to health behaviourisms as well as self-efficiency in relation to defined tasks.

The health promotion strategies include education for health, efforts to mobilize people’s collective energy, resources, skills towards the improvement of health, and advocacy for health.

### **Benefits of health literacy as an outcome of health communication and promotion**

Health literacy is seen as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decision. Institute of Medicine (2004) posited the importance of health literacy as a basic outcome of health promotion strategies which include:

i. It affects an individual’s ability to manage personal health and provide longevity and quality of life by building the individual intellect to understand his/her physical, social, mental, environment and proper adaptation.

ii. To facilitate effective healthcare system through creating an insight and adequate knowledge and skills as related to health issues.

iii. To share healthy history with healthcare providers; the individual and community shares their past health condition with their health facilitator in order to gain more knowledge and idea about health situation.

iv. To engage in self-care and manage chronic diseases and understanding concepts. That is individual and community in full participation to control and prevent health related outcome in order to live a healthy lifestyle.

v. Health literacy also enables individual and community to understand health information and effectively utilised the information to maintain healthy living by developing positive attitude and habit towards their healthy lifestyle.

Health-related quality of life refers to how individual's subjectivity assesses their own well-being and their ability to perform. Physical, psychological, and social function

### **Challenges of health literacy to health communication and promotion**

As public health educators, the common challenges of health literacy include:

**1. The use of technical or medical terminology:** Such as pandemic, endemic, immunize, transmit, influenza etc are often misinterpreted. This medical terminology affects the accessibility, utilization, understanding of health information (Saha, 2006).

**2. Reliance of print communication:** As a single source of communication to reach an audience. Relying on one source disregards the preferences and learning styles of different individuals or audiences (Health People's Project United States, 2010)

**3. Focusing on information rather than actions:** Too often we focus on what we want the audience to know and not on what they should do. There is no practical demonstration of health information or ideas given to individual which militate the success of health literacy.

**4. Limited awareness of cultural and language differences:** Language barrier is a serious problem that hindered health literacy because differences in language and words meaning can lead to misinterpretation and poor understanding. Certain health information and healthcare practice to some culture may be seen as destroyers of their cultural values and norms. (Saha, 2006).

**5. Lack of trained health educators:** when the trained personnel are not there, the information given to the individual may be correct and helpful to the person. Therefore, health promotion and communication strategies cannot provided to the people of competence health educator personnel are not well trained to initiate literacy related to health (Spero, 2005).

**6. Lack of information and communication technology:** Misappropriation of ICT to the community level where health information is needed mostly to curb the menace of unsafe health behaviour affects health literacy. Also, individual or family, mass media, and communication gadget affects the dissemination of information to the society (Eichner & Dullah, 2007). However, health information websites are notorious for using overly complex and scientific impinge that make the content difficult to understand and use (Smith & Malone, 2008)

**7. Inadequate finance:** Finance is needed to carryout health information and communication strategies so that the information can reach the door post of every individual. Therefore, when adequate funds are not supplied to the programme the purpose of health promotion may not be achieved.

**8. People with disabilities:** Some people have certain disabilities or abnormally such poor learning system, low memory, lack of mental coordination and physical disorder may have problem with their intellectual ability thereby altered their understanding, utilisation and effective use of health information (Pleasant, 2005).

### **Way out of challenges of health literacy to health communication and promotion**

**1. Health literacy education programme:** This is a traditional strategy for addressing health literacy challenges by focusing on developing educational programme in order to increase the literacy levels of healthcare consumers, schools, colleges, hospitals, and libraries are just some of the institutions that can offer education programme to increase public health literacy level (Cegala, 2004) educational programme can be achieved through seminar, symposium, credit or non-credit courses, and distance education or e-learning (Norman, Cameron & skinner, 2006). Adult education programme hold opportunities for implementation to improve health literacy and provide promising models (Tappe, & Galer-Unit, 2001). The educational programme also helps to improve the consumers to develop the functional abilities to gather relevant health information, interpret health information and engage in meaningful deliberation with their health case educators. The strategies must be tailored to the needs of population and patients to learn how to negotiate and navigate the many complexities and bureaucracies of the modern health care system; to learn essentials skills for self-management of chronic conditions; and to learn how to communicate about their health needs for acute, chronic and preventive care. Therefore, educational programme solves the problem of language barrier (Power, Tinh, & Bosworth, 2010). This programme should be carried out by public health educators and health agencies.

**2. Health literacy, cultural and linguistic competence:** Strategies to improve communication for low literate individuals have often been develops along parallel but district tracts from strategies for culturally diverse individuals (Saha, 2006). Individuals from diverse cultures, however may not comprehends easy-to-read materials, similar problems exist if language barriers are often overcome through the translation of materials into non-languages. Failure to communicate dearly can result in unnecessary return for treatment or leads to pains or adverse condition. However, health literacy, cultural and linguistic approaches to clear communication are distinct and at time inconsistent. Health literacy movement stresses several tenets of clear communication. Cultural competence

communication on the other hands, emphasize that individual concepts of health literacy may differ, affecting the way individuals receives, process, and accepts information (Health Research and Educational Trust, 2006).

In the linguistic competence as way of overcoming challenging in health literacy, it serves as a remedy to offer individual with language barriers, bilingual clinician or interpreter with an inclusion of family and friends (HPPUS, 2010)

**3. Health literacy through information technology and communication:** The great variability is preferred way of receiving message has given rise to a range of technology based-communication strategies. The use of individual aid such as videotapes, DVD, computer kiosk, interactive multimedia (mass-media) programme can explore information about health to the population. The evidence of their effectiveness as a strategy for limited literacy population however is mixed (Saha, 2006). Effective use of communication and technology by health care and public health professionals can bring about an age of patient and public-centred health information and services (Patel, Baker & Siminero, 2015). As a strategy in curbing the issues in health literacy, it combines health information and technology as a tool and effective health promotion and communication processes with the increase complexity of health information and health care setting most individuals and community need additional information, skill, and supportive relationship to meet their health needs. It can be access through online or internet based (Deering & Baur, 2015).

**4. E-health literacy:** This is a term that describes the relatively modern concept of an individual's ability to search for successfully access, comprehend, and appraise desired health information from electronic sources and to them use such information to attempt to address a particular health problem (Norman, Cameron & Skinner, 2006). Due to the increasing influence of the internet for information seeking and health information distribution purpose, e-health literacy can reduce the health illiteracy in the society as a result of accessibility and availability to health information on the internet (Kin, Henna, & Xie, 2017). As technological innovations are more and more belonging a part of the health care environment, it is important for information technology to be proper utilised to promote health and deliver health care effectively (Powers, Tinh & Bosworth, 2010).

**5. Libraries:** Libraries have increasingly recognised that they can play a role in expanding health literacy. Since the year 2000, the influenced by the Medical Library Association, library programmes, fostering partnership with health organisations and using outreach effort (Barr-walker & Jill, 2016).

## Conclusion

Health literacy simply refers to the ability of an individual to obtain process, evaluate and utilise information related to health in order to promote and maintain good and positive health decision. Improved health literacy could enhance the ability and motivations of individuals to solve personal and public health problems by enabling them to apply skills in response to various health problems arising throughout life. This work will not only produce comprehensive measure of health literacy, reflecting the state of the art of the field and applicable for social research and in public health practice, but also serve to validate the strategies and contribute to the improvement and empowerment of health communication and promotion in public health education.

## Recommendations

Based on this paper, the following recommendations were made:

1. Public health educators should avoid using any form of ambiguous words so that the individual and community can understand, obtain, use, and process health information to improve healthy living.
2. Health educators should deliver health information to every individual and communities irrespective of their ethnic, race, culture, belief, background, so that the goal of public health can be achieved.
3. Public health educators should update their knowledge concerning health issues and related problems so that adequate information can be delivered to the public.
4. Health educators should construct public health messages and campaign through the use of information, communication and technology to every individual and community.
5. Public health educators should develop tele-health information application to provide accessibility and usability of health information to all.
6. Government and health agencies should make health information available to individual and community so they can be able to gain access to the public health and health care systems, and facility.

## References

- Baker, D. W. (2006). The meaning and the measure of health literacy; *Journal of general internal medicine*; 2(1): 878-883.
- Cegala, D.J., (2003). *Patient and consumers communication skill training; A review with Implication for Cancer patient*. 50 (1) 91-94.
- Centers for Disease Control and Prevention (2014). National action plan to improve health literacy.

- Deering, M. J. & Baur, C. (2015). *Patients Portals can be enable provider-patient empowerment in Healthcare*. Berlin, Boston.
- Eichner, J., & Dullah, P. (2007). Accessible health information technology for population with limited literacy. *Journal of health education*; 8 (1): 24-29.
- Freedman, D.A., Bess, K.D., Tucker, H.A., Tuchman A. M., & Wallston, K.A. (2009). Public health literacy defined. *American Journal of Preventive medicine*; 39 (5): 446-4-51.
- Health People Project United State, (2010). *Understanding and Improving health*. United State Department of Health and Human Service.
- Health people project U. S. (2010). *Understanding and improving Health*. U. S. Department and Human service: Government Printing Office; Washington DC
- Health Research and Educational Trust, (2006). *A tool, it for collecting race, ethnicity and primary language information for patient*.
- Hesse, B.W., Nelson, D.E., Kreps, G.L., Croyle, R.T., Arora, N.K., Rimer, B.K., & Viswamath, K. (2005). Trust and sources of health information: The impact of the internet and its implications for health care providers: findings from the first health information national trends survey. *Journal of internal medicine*: 165 (22): 2615-2624.
- Institute of Medicine (2004). *Health Literacy: A Prescription to End Confusion*. National Academic Press: Washington DC.
- Kickbusch, I. & Maag, D. (2008). Health literacy: *International Encyclopedia of public health*. 3(1): 204-2011
- Kim, J., Henna, K., & Xie, B., (2017). Health Literacy in the Health era: A systematic review of the literature. *Journal of Patient education and counselling*: 10(2); 25-29
- Lee, S.D., Arozullah, A. M., & Choc Y.I., (2004). Health Literacy, social Support, and health: A research Agenda, *Journal of Social Science Medicine*: 58 (10): 1309-1321
- Mancuso, J.M., (2008). Health Literacy: A concept/dimensional analysis. *Journal of Nursing Health sciences*, 10 (1): 248-255.
- MCqueen, D.V., Potvin, L., Pelikan, J., Balboh, & Abel, J. (2002). *Health and Modernity: The role of theory in Health Promotion*. New York. Mcgraw- hill
- Norman, Cameron, D., & Skinner, H., (2006). *E-health literacy*. Essential skills for consumer health in a networked world.
- Nutbeam, D., (2006). Health Literacy as a public Health goal: a challenge for contemporary health education and communication strategies into the 21<sup>st</sup> century; *Journal of health promotion*; 15 (3): 259-267.
- Nutbeam, D., (2008). The Evolving Concept of Health Literacy. *Journal of Social Sciences Medicine*; 60: 2072-2078.
- Nutbeam, D., (2009). Defining and measuring Health Literacy: What can we learn from Literacy Studies? *International Journal of Public Health*; 54 (2): 303-305.
- Patel, V., Barker, W., & Siminero, E., (2015). *Trends in consumer Access and use of Electronic health (internet)*: department of health and human services; office of the National coordinator for health information.
- Peerson, A., & Sanders, M., (2009). Health literacy revisited: What do we mean and why does it matter? *International journal of health promotion*: 24(3): 285-296.
- Pleasant, A., (2008). *Proposed Definition*. International Health conference.
- Powers, B.J., Tinh, J.V., & Bosworth, H., (2010). "Can this patient read and understand written health information". *Journal of American Medical Association*; 304 (1): 76-84.
- Saha, S. (2006). Improving Literacy as a means for reducing health disparities. *Journal of general internal medicine*; 28 (8): 893-895.
- Shou-Jih, D., Leea, A.M.S, & Choc-Young. (2004). Health literacy, social support, and health: a research agenda. *Journal of Social Science Medicine*: 59 (10); 1310-1318.
- Smith, E. A. & Malone, E. E. (2005). Health Information website appears responsible but undermines public health: *Journal of Public Health Nursing*: 25 (12): 554-564.
- Spero, C., (2005). Health Literacy: concepts Analysis. *Journal of Advance Nursing*; 50 (10): 633-640.
- Staldeford, S., & Mettger, W., (2007). Plain Language a strategic response to the health literacy challenge. *Journal of Public Health Policy*: 28 (1): 71-93.
- World Health Organisation (2009). *Health Promotion Glossary*. Health Promotion international: 13(4):349-364.
- World Health Organisation (2007). *Ohawa charter for health promotion*. World Health Organisation, General.
- Zarcadoolas, G., Pleasant, A. Coreer, D.S, (2005). Understanding Health Literacy: an expanded Model. *Health Promotion Journal*: 20(2): 195-203.