

Developing a Conceptual Model of Youth Health Literacy in Malaysia

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Introduction

Health literacy is important because it affects an individual's ability to manage personal health, navigate the healthcare system, share health history with healthcare providers, engage in self-care and manage chronic disease, and understand concepts such as probability and risk. Researchers have shown that patients with inadequate health literacy have a poorer health status, less knowledge about their disease and the treatments, less health self-management skills, increased hospitalizations, increase health costs and have poorer adherence rates (Kickbusch, 2001; Baker, Parker, Williams, Clark. 1997).

Malaysia faces many challenges in the sustainment of a responsive health system where there are ever increasing expectations from its citizens, changing trends in disease patterns and socio-demography, a need for greater integration, accessibility and affordability and a requirement for increasing efficiencies (Malaysian Health Data Warehouse (MyHDW), 2013). Studies on health literacy in Malaysia are still very limited, often focused on specific illness, and demographic groups. The word 'health literacy' is vaguely utilized in research, not defined in standard measurement. Yet, studies on health literacy at the national level are still non-existent. There is a huge potential and benefit for this study to be conducted nationwide in Malaysia.

Demographic and lifestyle shifts have steadily made Malaysia's population older and less healthy. The proportion of people under 15 years of age fell from 32% in 2002 to 26.7% in 2012, while the percentage of those aged over 60 climbed from 6.5% to more than 8% during this period. Statistics published by the Malaysian Ministry of Health show an increase in non-communicable diseases, with cases of hypertension up by 43%, diabetes up by 88% and obesity 250% in 2012 compared with 2002. Such changing health patterns require expensive, long-term treatment that public spending is not prepared to match in an era of subsidy reform (The Economist Intelligence Unit).

Although previous research has put forward some general propositions about health literacy, such research pertaining to measurement of health literacy instrument among adolescents in Malaysia from a functional perspective is still lacking. At the time of writing, there is scant research on measurement of Malaysian health literacy with regard to factors influencing the impact of adolescents' health literacy in Malaysia. Hence, this study will be undertaken in order to bridge the information gap in this area of research. Yet, by development of health literacy instrument, factors that underpin adolescents' health literacy in Malaysia will be investigated.

Literature Review

Therefore, a short background on the origins of the term and a review of the existing health literacy debate is necessary to grasp where this study fits into the context of other academic literature, and more importantly to point out the gap in the ongoing debate.

There are various definitions of health literacy. The WHO's definition is "Health literacy represents the cognitive and social skills that determine the motivation and ability of individuals to gain access to, understand, and use information in ways that promote and maintain good health. Health literacy means more than transmitting information, developing skills to be able to read pamphlets, and successfully make appointments. By improving people's access to health information and their capacity to use it effectively, health literacy can be improved and this literacy is critical to empowerment."

Health literacy is the capacity of individuals to obtain and understand health information needed to make health decisions, and it is recognized by the Institute of Medicine and the federal government as fundamental to quality health care (Nielsen-Bohlman, Panzer, & Kindig, 2004; U.S. Department of Health and Human Services, Healthy People 2020, 2011; U.S. Department of Health and Human Services, National Action Plan to Improve Health Literacy, 2010).

Nutbeam (2000; 2008) has highlighted how definitions of health literacy fail to capture the broader meaning of this concept. Drawing on ideas from the adult literacy field about how literacy is conceptualised, Nutbeam proposed a model of health literacy comprising of three different types of literacy:

- i. **Functional health literacy:** the ability to apply basic literacy and numeracy skills to access and act upon health materials, traditionally aimed at increasing patient knowledge and compliance.
- ii. **Interactive health literacy:** refers to the application of more elaborate literacy, cognitive and social skills to confidently engage in everyday health related activities such as interacting with health professionals and implementing self care plans to manage chronic disease.
- iii. **Critical health literacy:** considers the role that literacy plays in the process of community action and social change. From this perspective, health literacy is focus on the acquisition of skills or competencies, which allow individuals and communities to engage in public discourse on health issues, with a view to modifying health care policies and practices. This in turn may lead to a better public understanding of social, economic, and environmental factors, which impact on individual health.

Similarly, Zarcadoolas, Pleasant and Greer (2005) proposed that health literacy relates to an individual's awareness of public health issues, scientific processes and cultural differences, which in turn influence how they interpret, question and respond to information. In this paper, a model by Nutbeam (2000; 2008) will be applied to support and strengthen the health literacy framework.

Even though a number of frameworks for health literacy exist, there is no widely agreed upon framework for health literacy (Nielsen-Bohlman et al., 2004). Theoretical frameworks that advance our understanding of health literacy and how it relates to health-service use and health outcomes are clearly needed (Pleasant et al., 2011). Theoretical frameworks provide the necessary basis for reliable measurement and the development of interventions to improve health literacy.

Focus on adolescence health literacy is the main purpose in this study. It is now quite widely accepted that adolescence is a time of transition involving multi-dimensional changes: biological, psychological (including cognitive) and social. Biologically, adolescents are experiencing pubertal changes, changes in brain structure and sexual interest, as a start. Psychologically, adolescents' cognitive capacities are maturing. And finally, adolescents are experiencing social changes through school and other transitions and roles they are assumed to play in family, community and school

(National Research Council [NRC], 2002). These changes occur simultaneously and at different paces for each adolescent within each gender, with structural and environmental factors often impacting adolescents' development.

Methodology

This study applies qualitative research approach and interview with expert panel in public health. Researcher used a purposive sampling, drawing from professional people in public health representing view of expert in health education area in this study. However, there is scant research on health literacy with regard to behavioral change factors at the time of writing in line with functional approach. Hence, this study has been undertaken to reveals the factors contributing to health literacy as a behavioral change. The subjects were informed that participation in the study was on a voluntary basis. Specifically the subjects were selected expert panel in the area of health doctor, public health, and practitioner in Malaysia. Verbal consent was obtained from the participants and they were assured that the information given would be confidential. A small token was offered to participants in order to encourage better co-operation. Data collection was conducted during weekdays. All interviews were digitally recorded having obtained the permission of the participants. After completing each interview, it was listened to carefully several times and transcribed word for word.

Discussion

This study was the first attempt to design and psychometrically evaluate an instrument to measure health literacy among adolescents in Malaysia. Data obtained from a qualitative study on expert opinions, and extensive reviews of existing literature on health literacy.

Measuring health literacy among adolescents, not only in Malaysia but also elsewhere, is a relatively new issue. Although there are growing concerns about this, applying conventional health literacy measurements (such as TOFHLA, REALM, NVS) to this population has its limitations. Few studies have investigated adolescent health literacy and fewer research projects have addressed this concept from adolescents' perspectives.

As stated previously, this was the first attempt to measure the health literacy of Malaysian

adolescents. Future studies should be carrying out among different age groups of adolescents and in different environments. Perhaps the evaluation of such studies may lead to a stronger confirmation of the psychometric properties of the health literacy measurement. For instance, we feel that the variance observed in the exploratory factor analysis was relatively low and this might increase in different settings.

Conclusion and Recommendations

Conclusions from the study demonstrate that individuals must go through a process of obtaining, understanding, and evaluating the knowledge related to health information before implementing recommendations. However, the socio-economic, and cultural circumstances in which a person lives can inhibit this process. Furthermore, regulative, normative, and cultural cognitive underpinnings have proven to both resist and influence changes in their health behaviour especially young generation.

Moreover, by understanding the factors influencing an individual's decision-making process with regards to health practices, it is then possible to find more successful ways to improve health. Without looking into the reasons behind this phenomenon it is not possible to make the necessary changes to intervention strategies, and health information that is distributed will continue to go unused. If this phenomenon persists, then health problems will continue to be a barrier to improving lives, and inhibit future development

Studies suggest that health literacy is a social feature that should be considered as a latent structure with multiple dimensions. The complex nature of the health literacy notion confirms the necessity to use a multi-dimensional tool.

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