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Health Literate Organizations: A Synoptic Overview and Experiences from Taiwan

Jyh-Gang Hsieh[1], Mi-Hsiu Wei[2], Mei-Chuan Chang[3]

Abstract

Introduction Health literate organizations have been regarded as important to supply individuals with all information corresponding to their health literacy in an easy-to-understand way. However, research related to institutional health literacy remains limited. Our article aimed to conduct a synoptic overview of the existing literature to better understand the evidence concerning the characteristics and influencing factors about health literate organizations.

Methods We searched the databases of MEDLINE (January 1966 - May 2019), Web of Science (1992 – 2019) and the Cochrane Library Database for information on health literate organizations. Materials were selected by two review authors independently. Quality and extracted data also assessed by the authors.

Results Although the experience of promoting health literate organizations was positive, the efficacy of the instructions has yet to be verified. Studies indicated that health literate organizations regarded as necessary for establishing strong social accountability at medical care institutions. Regardless, to increase the efficacy of clinical care, medical care institutions should create a health literacy-friendly environment able to cultivate good relationships with patients. In Taiwan, the Health Promotion Administration had built policies for the development of health literate organizations since 2015. More than 80% of medical care institutions already had health literacy plans. From the results of accreditation in 2017, hospitals containing 500 beds or more reported higher scores than smaller hospitals for standards regarding providing a supportive environment.

Discussion Health literate organizations can enhance the effectiveness and quality of health care and reduce health inequalities. Experience from Taiwan can be used as a reference by other countries to develop the policy to promote health literate organizations.

About the AUTHORS

[1] Department of Family Medicine, Hualien Tzu Chi Hospital, Hualien, Taiwan

[2] Department of Communication Studies, Tzu Chi University, Hualien, Taiwan

[3] Department of Nursing, Tzu Chi University of Science and Technology, Hualien, Taiwan

Contact:
Jyh-Gang Hsieh
jyhgang@gmail.com

Introduction

Insufficient health literacy can significantly affect an individual's degree of health-related understanding, method of treatment, and appropriate treatment propagation, thereby affecting their health status (1). Many studies have reported that insufficient health literacy affects individuals' health behaviors (2;3), which in turn increases medical care-associated expenses (4). Studies have also indicated that improving health literacy is essential for achieving health goals (5). However, although increases in personal health literacy can effectively decrease health inequalities, achieving precise and definite benefits in actual practice relies on a combination of different factors, including policy, education, and social class mobility; further, the costs and time required for medical care cannot be immediately determined.

The direction of health literacy-related promotion in the medical care field is beginning to shift. Health policies no longer place emphasis only on increasing personal health literacy, but on increasing the health literacy of healthcare providers and friendly service at care institutions. To achieve health goals, the US national health policy "Healthy People 2010" highlighted the need for medical institutions and personnel able to provide services conforming to health literacy (6). The "Healthy People 2010 Final Report," published in 2012, further emphasized the new goal for health literacy in medical care: for healthcare providers to supply individuals with all information corresponding to their health literacy in an easy-to-understand way (7).

In 2012, the round table on health literacy by the US Institute of Medicine first proposed the concept of "health literate

organizations," indicating organizations that allow individuals to more easily seek, understand, and utilize health information and services (8). However, research related to institutional health literacy environments and the ability of medical care providers to provide health literate communication remains limited (9). This study thus aimed to conduct a synoptic overview of the existing literature to better understand the evidence concerning the characteristics of medical institutions, health literate environments, health care providers' health literacy service abilities, and individuals' health literacy levels.

Method

We searched the databases of MEDLINE (January 1966 - May 2019), Web of Science (1992 – 2019) and the Cochrane Library Database for information on health literate organizations. The search strategy included the use of terms such as health literate organizations, organizational health literacy, health literate health services, and combined search terms with health literacy and organizations. Related articles and references were also hand searched. Our inclusion criteria were articles with a bright observational design, and any types of studies, interventions, and outcome measures in English included. Materials were selected by two review authors independently. Quality and extracted data also assessed by the authors.

Effects of health literate organizations on health care

Health literacy interventions can effectively increase the efficacy of medical services if they are conducted at the level of the institutional health literate environment. Fumagalli et al. conducted an intervention to improve individuals' understanding of medical decisions, enhance their motivation to engage in decision-making, and endow them with the right to make medical decisions, resulting in easier decision-making regarding their medical options (10). In fact, changes in communication methods not only strengthen patients' understanding, but are also more likely to create the environment and conditions necessary for patients to make decisions, thereby allowing them to feel the potential for change via the empowerment model and to proceed in the correct direction. Ernstmann et al. also confirmed this concept through a study on cancer patients treated at medical facilities (11). Hung et al., in a study specific to patients with type 2 diabetes, conducted an intervention regarding hospital policies to strengthen the communication model of health literacy, utilizing graphics in communication to improve health education methods. As a result, all intervention participants demonstrated significant improvements in glycated hemoglobin, fasting blood sugar, and post-prandial blood sugar levels (12). Another study on patients hospitalized for heart disease, which applied integrated health literacy interventions at the hospital level by pharmacists verifying drugs, found that altering health education methods and observational feedback on health behavior during hospitalization effectively decreased patients' readmission rates (13).

Health literate organizations have been regarded as important for establishing strong social accountability at medical care institutions. First, they not only emphasize the biological determinants of disease but also pay more considerable attention to personal health needs, and they use the patient-centered care method to provide patients with more support, increasing their satisfaction. Second, they allow medical care providers to establish more comfortable, reliable communication with patients, in turn achieving better health results and even decreasing staff turnover owing to low work satisfaction. Overall, if medical institutions can improve health literacy service abilities, they can overcome health inequalities caused by social factors, as in a study by Tavakoly Sany et al. that attempted to enhance interactive communication methods with mothers of low socioeconomic status and showed that the health status of these mothers' children was indeed increased (14).

The current promotion of health literate organizations

The "Healthy People 2010 Final Report" emphasized that medical care providers must use easy-to-understand communication methods to provide individuals with medical information related to their health literacy. However, current research on health literacy remains focused on factors influencing patients' health literacy, with few mentions of the current status of health literacy services at medical care institutions. Since establishment of the "health literate organization" concept in 2012, the number of studies concerning institutional health literacy environments has increased; however, most of these have focused on the design and establishment of a structure for friendly service at medical care institutions. Discussion of the current status of promotion of health literate organizations and the efficacy of implementation remains limited (15;16).

Farmanova et al. conducted a study in Ontario, Canada, and reported that although 20% of the people

in the region spoke primarily French when seeking medical attention, only a few hospitals were able to guarantee accessible and comprehensive services in French. The 12 care institutions that participated in the investigation achieved a mean score of only 77 out of 100 points during evaluation (17). Another study conducted in the same province used a questionnaire to evaluate whether hospitals in the region could provide discharge preparation services conforming to health literacy; only 46% of the evaluated hospitals could (18).

Medical care institutions encounter several obstacles in providing health literate care services. A notable example is lack of vision for or understanding of health literacy services, along with corresponding determination from leadership; others include lack of transformation and innovative culture, and so forth (16). Regardless, to increase the efficacy of clinical care, medical care institutions should establish a health literacy-friendly environment able to cultivate good relationships with patients (19).

Brown et al. reported that approximately one-third of all medical care providers are unclear about the concepts related to health literacy and do not understand the potential effects of health literacy on patient care (20). Lukoschek et al. interviewed doctors and visiting patients to assess discrepancies in their understanding of the information communicated during the visiting process. The results revealed only 59% mutual understanding of the delivered content between doctor and patient. Even more prominent discrepancies in understanding were observed in as many as 23% of cases (21). Overall, doctors are likely to overestimate patients' health literacy, resulting in misunderstanding of the communicated content (22). Another study conducted on pediatric doctors found that approximately 50% were unable to recognize misunderstanding during medical communication with a patient (23).

In studies of medical care providers' health literacy knowledge and abilities, many existing problems that require urgent solutions were identified. Rajah et al. specifically investigated the health literacy of doctors, pharmacists, and nurses in hospitals through interviews and found that 34.2% had inadequate health literacy knowledge (24). In an investigation of pediatric doctors in the US, Turner et al. found that only 20% could achieve teaching responses and provide easy-to-read materials (23). This ratio was even lower for plastic surgeons, among whom only 8.1% used teaching response techniques during the health education process (22). Of particular note, approximately 50% of interviewed medical care providers held a negative opinion of health literacy (24); this result should be reflected in terms of promotional policies regarding health literacy care in hospitals as well as the availability of educative training and other resources to assist medical care providers.

Factors influencing institutional development of health literacy-friendly environments

Health literacy is traditionally regarded as a personal-level characteristic involving patients' capacity to obtain, process, and understand health information so as to improve their personal health status. Therefore, focus on health literate environments at the organizational or institutional level is low, and may explain the scarcity of studies exploring how medical care institutions can effectively satisfy the health requirements of people with different levels of health literacy. Discussion of the factors influencing institutional health literate environments is similarly limited. In 2016, Palumbo conducted a systematic literature review of 69 studies on health literate care institutions and reported that the majority discussed only the medical care institutions' use of different tools to satisfy the "communication needs" of patients with low health literacy (9). In a 2018 retrospective study involving 48 studies on institutional health literacy, Farmanova et al. reported that only 15 studies mentioned an institutional health literacy theory and practice structure; 20 proposed specifications to act as guidelines for implementation of institutional health literacy, and 13 utilized the guidelines' content for interventions to promote institutional health literacy. However, although the experience of their use was positive, the efficacy of the instructions has yet to be verified; further, no evidence of clinical effectiveness has been reported.

The information provided by these retrospective studies indicates that most interventions implemented by institutions to promote health literacy directly apply the theoretical framework or use methods that are considered empirically adequate, and thus the effectiveness of the interventions has not been verified. Naturally, studies related to influencing factors cannot be conducted; in other words, how to further advance the development of institutional health literacy and establish a secure empirical connection between vision and actual implementation remains a topic for future study.

Existing studies on the health literacy service abilities of medical care providers indicate that age, profession, and health literacy educational training are important influencing factors. A study published by Rajah et al. in 2017, which explored health literacy service abilities in doctors, nurses, and pharmacists, reported that age and years of professional experience were both essential contributing factors; professional medical care providers who were over 40 years old and had more than 10 years of professional experience were reported to have significantly better health literacy service abilities than those under 40 years old and having less than 10 years of experience (24). Coleman et al. reported similar results with doctors as their study subjects; those with more than 3.5 years of experience reportedly had better health literacy service abilities than those with less (25).

Health literacy educational training is also an important influencing factor. Even if a medical provider's professional education involved communication skills, the benefits of health literacy training could directly reflect on health literacy techniques used during communication with patients (26). Other characteristics of medical care providers, such as sex or race, were not shown to significantly influence their health literacy service abilities (24;25).

Developing health literate organizations in Taiwan

Starting in 2015, Taiwan's Health Promotion Administration conducted a four-year health literate organization project that included an investigation of health literacy among both patients and health care providers (27); this project marked the beginning of Taiwan's health literate organization development. The study investigated 100 institutions, including 12 medical centers, 52 regional hospitals, 30 local hospitals, and 6 health centers and other institutions, 50% of which were public and the other 50% private. The results indicated that over 75.9% of the institutions possessed health literacy promotion teams, and 80.5%-89.7% had health literacy plans. Significant differences between the various levels of medical institutions were investigated with respect to the following indices: "Human resources and information equipment," "Clear guidelines and mobile convenience in guiding personnel," and "Friendly behavior and effective communicative skills." In 2017, 90 hospitals that participated in the Health Promoting Hospital accreditation program were recruited to participate in a self-assessment exercise. Overall, 68 hospitals completed the self-assessment questionnaire. Among all hospital characteristics, number of beds was the only item to be significantly associated with the Vienna Health Literate Organizations Instrument (V-HLO-I) self-assessment score. Bigger hospitals, such as those containing 500 beds, reported higher scores than smaller hospitals for standards regarding providing a supportive environment.

Conclusion

Previous studies have revealed that health literate organizations can enhance the effectiveness and quality of health care and reduce health inequalities. Promotion of health literate organizations in Taiwan has been implemented from the government level, and accreditation criteria have been developed for health literate organizations. This experience can be used as a reference by other countries to develop health literate organizations.

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