Healthcare providers’ knowledge, attitude, and practice respecting health literacy

Mahnoush Reisi1*, Elahe Tavassoli1†, Homamodin Javadzade1*, Fariba Fathollahi-Dehkordi1†

1Department of Health Education and Promotion, Faculty of Health, Bushehr University of Medical Sciences, Bushehr, Iran
2Assistant Professor, Department of Public Health, School of Health, Shahrekord University of Medical Sciences, Shahrekord, Iran
3Assistant Professor, Department of Community Medicine, School of Medicine, Social Determinants of Health Research Center, Shahrekord University of Medical Sciences, Shahrekord, Iran

Abstract

Background and aims: Health literacy (HL) is a factor with significant impact on the quality of communication between healthcare providers and clients and the outcomes of healthcare services. The aim of the study was to evaluate healthcare providers’ HL-related knowledge, attitude, and practice.

Methods: This cross-sectional descriptive study was conducted in 2019–2020. Participants were all eligible healthcare providers in all eleven urban healthcare centers in Shahrekord, Iran. A demographic questionnaire and a researcher-made HL-related knowledge, attitude, and practice questionnaire were used for data collection and the SPSS software (v. 18.0) was used for data analysis.

Results: The mean scores of participants’ HL-related knowledge, attitude, and practice were 39.62 ± 14.23, 37.54 ± 16.56, and 56.54 ± 19.19, respectively. There was a significant positive correlation between the mean scores of HL-related attitude and practice (r=0.001).

Conclusion: Healthcare providers may have poor HL-related knowledge and attitude and moderate HL-related practice. Therefore, in-service educational programs are recommended to improve their HL-related knowledge, attitude, and practice.

Keywords: Health literacy, Knowledge, Attitude, Practice

Introduction

Effective communication is the basis for quality patient-centered healthcare provision (1). A key prerequisite for effective communication is adequate health literacy (HL). By definition, HL is the ability to acquire, interpret, and understand health-related information for health-related decisions and actions and hence, is considered as a key component of effective communication between healthcare clients and providers (2). Nonetheless, studies showed that many people around the world have inadequate HL. For example, a study reported that 46% of individuals in the world had limited HL (3). Another study in Iran showed that 53.3% of adults had limited HL (4). A national survey also reported that the prevalence of inadequate HL was 56% (5). Limited HL is associated with different adverse consequences. For example, previous studies reported that limited HL can be associated with poor understanding of health information (6–8), failure to follow healthcare providers’ recommendations, limited engagement in preventive measures (9), late diagnosis of illnesses (10), inability to use self-care skills (11), and poor adherence to healthy lifestyle behaviors (12). Moreover, chronic illnesses (13), frequent medical visits, and frequent re-hospitalizations (14) are highly prevalent among individuals with limited HL. These individuals also impose heavy financial costs on healthcare systems (15). Therefore, HL is currently a top research priority in developed countries in order to improve the quality of healthcare services (16,17).

Besides healthcare clients, healthcare providers should have adequate HL and adequate HL-related knowledge. Healthcare providers with adequate knowledge about HL are able to provide their clients with quality education, enhance their knowledge level, and empower them to better use educational materials (17–19). Moreover, they can improve their clients’ HL, improve the quality of interpersonal communications with clients, improve the quality of patient education, and help their clients achieve optimum health status and more actively engage in self-care activities, and reduce inequalities in access to healthcare services (20).

Despite the significant effects of HL on health-related outcomes in healthcare settings, studies show that healthcare providers have problems in adherence to HL principles and effective communication during their daily practice (17). For example, a study reported that healthcare providers widely used technical jargons during their communication with patients, resulting in...
patients’ misunderstanding of health information and negative healthcare outcomes18. Two other studies also showed that healthcare providers had limited HL-related knowledge and poor HL-related performance (21,22). Therefore, healthcare providers with direct contact with patients, their families, and communities need to have the necessary HL-related skills17 and improve their HL in order to improve communication effectiveness and healthcare outcomes. Improvement of healthcare providers’ HL-related knowledge, attitude, and practice is an important component of practical healthcare programs in many countries (23).

A key step to the improvement of healthcare providers’ HL-related knowledge, attitude, and practice is to assess the status quo. Nonetheless, there is limited information in this area. The present study was conducted to bridge this gap. The aim of the study was to evaluate healthcare providers’ HL-related knowledge, attitude, and practice.

Methods

Design

This cross-sectional descriptive study was conducted in 2019–2020.

Participants and setting

Study population included all 110 healthcare providers in all eleven urban healthcare centers in Shahrekord, Iran. All eligible healthcare providers were recruited to the study through a census. The inclusion criterion was agreement for participation and the exclusion criterion was incomplete answering to the study instruments.

Data collection

A demographic questionnaire and a researcher-made HL-related knowledge, attitude, and practice questionnaire were used for data collection. The items of the demographic questionnaire were on age, gender, level of education, major of education, employment status, and work experience. The HL-related knowledge, attitude, and practice questionnaire had fourteen multiple-choice items on HL-related knowledge, five items on HL-related attitude, and ten items on HL-related practice. Correct answers to the knowledge items were scored 1 and incorrect answers were scored zero. Items on attitude were scored on a five-point scale as follows: 4: “Strongly agree”; 3: “Agree”; 2: “No idea”; 1: “Disagree”; and 0: “Strongly disagree”. Items on HL-related practice were scored on a four-point scale as follows: 0: “Never”; 1: “Rarely”; 2: “Often”; and 3: “Always”. The content validity of this questionnaire was confirmed with content validity ratio indices of 0.8–1 for all items. The reliability of the questionnaire was also confirmed through internal consistency assessment and with Cronbach’s alpha values of 0.78 for the knowledge subscale, 0.81 for the attitude subscale, and 0.81 for the practice subscale (24).

Data analysis

The SPSS software (v. 18.0) was used for data analysis. Statistical methods for data analysis were the Pearson’s correlation analysis, regression analysis, and one-way analysis of variance.

Results

Most participants aged 20–30 years (60%), were female (91.8%), and had bachelor’s degree (70%). Moreover, 37.3% of them secured official employment and 45.5% of them had a work experience of less than five years (45.5%) (Table 1).

The mean scores of participants’ HL-related knowledge, attitude, and practice were 39.62 ± 14.23, 37.54 ± 16.56, and 56.54 ± 19.19, respectively. There was a significant positive correlation between the mean scores of HL-related attitude and practice (P=0.001; Table 2). The results of the regression analysis also showed that knowledge, attitude, and practice significantly predicted 45.2% of the total variance of HL (Table 3).

Discussion

The aim of this study was to evaluate healthcare providers’ HL-related knowledge, attitude, and practice. Results showed that healthcare providers had limited knowledge and poor attitude towards HL and had inadequate HL-related skills to communicate with their clients. Participants’ HL-related knowledge was particularly low in the print media design item. In line with our findings, a previous study reported low level of HL-related knowledge among nurses (25). Another study on the staff of a university-affiliated healthcare center in the United Kingdom revealed that participants had acceptable

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knowledge about the impact of HL on patients but had limited knowledge about its impact on the healthcare provision system (26). Similarly, a study reported low level of HL-related knowledge among senior bachelor’s nursing students (27).

The results of the present study also indicated that the HL-related practice of healthcare providers was at moderate level which can be attributed to their limited knowledge and poor attitude about HL as well as the significant positive relationship of their HL-related attitude and practice. In line with our findings, a study reported that nurses had poor practice respecting the use of HL-related strategies (25). Another study on physicians, nurses, and pharmacists reported that they occasionally used HL-related techniques in their communications with their clients and hence, highlighted the importance of educational HL-related programs for healthcare providers (28). These results denote poor HL-related knowledge, attitude, and practice among different healthcare providers, probably due to the lack of quality HL-related education for healthcare providers (28-32).

However, two studies reported acceptable level of HL among healthcare providers in Iran (29) and among adults in a southeastern European country (30).

Our findings also indicated HL-related knowledge, attitude, and practice as the significant predictors of HL among healthcare providers. A previous study also reported a significant relationship between knowledge and use of HL strategies in patient education among nurses (25). HL education for healthcare providers is one of the most important educational priorities in the healthcare system (25,32). HL should be integrated into the official university curriculum of all healthcare fields to improve HL-related skills and competence of all healthcare providers.

The most important limitation of the present study was the reluctance of some participants to completely respond to the study instruments due to their fear over the probable negative effects of their responses on their evaluation scores. We attempted to reduce the effects of this limitation through providing participants with complete explanations about the study aim and the confidentiality of their data.

**Conclusion**

This study suggests that some healthcare providers may have poor HL-related knowledge and attitude and moderate HL-related practice which can negatively affect their communications with their clients and their ability to provide education to them. Therefore, in-service educational programs are recommended to improve their HL-related knowledge, attitude, and practice. Healthcare authorities can use the findings of this study to improve healthcare providers’ HL-related knowledge, attitude, and practice. Moreover, healthcare researchers can use our findings to design appropriate interventions in order to enhance HL among healthcare providers. Close interdisciplinary collaboration is also necessary to improve HL in the general public.

**Acknowledgement**

This study was approved by the Social Health Determinants Research Center of Shahrekord University of Medical Sciences, Shahrekord, Iran (code: 932). We would like to thank all healthcare providers who participated in the study.

**Conflict of Interests**

The authors declare no conflict of interest.

**Ethical Approval**

The Ethics Committee of Shahrekord University of Medical Sciences, Shahrekord, Iran, approved this study (code: IR.SKUMS.REC.1397.106). Necessary arrangements for sampling and data collection were made with the authorities of the study setting and clear information about the study aim was provided to participants. They were ensured that their data would be kept confidential and they would have access to the study results at will.

**What does this paper contribute to the wider global clinical community?**

- Healthcare providers may have limited HL-related knowledge, poor HL-related attitude, and moderate HL-related practice.
- Educational interventions are needed to improve healthcare providers’ HL-related knowledge, attitude, and practice.

**References**


