

Communication barriers to education to referrals from the perspective of referrals to health centers and health care providers attendants in Kerman

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Abstract

Introduction: One of the most important factors affecting the increase of clients' satisfaction is how health care providers (HCP) communicate with clients. On the other hand, different factors can hinder proper communication and thus education, which is one of the main tasks of HCP. Therefore, the purpose of this study was to investigate Communication barriers to education to referrals from the perspective of referrals to health centers (RHC) and HCP attendants in Kerman.

Method: This descriptive-analytical study was conducted on RHC and HCP in 2021. Using a multi-stage sampling method, 162 HCP and 414 RHC were included in the study. Data collection tool was 2 researcher-made questionnaires. Data were analyzed using SPSS 16.

findings: From the perspective of RHC and HCP, the most communication barriers were related to environmental and then socio-cultural factors. Among the demographic variables of HCP, level of education showed a significant relationship with the physical-psychological, verbal-non-verbal and informational domains. And in relation to RHC, a significant relationship was found between education and job in the socio-cultural field and environmental barriers($p < 0.05$).

Conclusion: HCP faces a variety of barriers in educating people, most of which are related to environmental factors. Given the cost-effectiveness of education to the public, it is essential that planners and policymakers use strategies to eliminate environmental factors as well as the placement of indigenous HCP in health facilities to reduce communication barriers.

Introduction

Health education is a process that bridges the gap between health information and performance, motivating people and empowering them to make lifestyle changes and avoid behaviors that are harmful to their health(1).

In health education, it should be known that education is primarily a communication process and proper communication plays an essential role in efficient education (2). In fact the quality of communication and messaging of health workers and educators plays a major role in the effectiveness of their training (3).

Successful health communication can have many positive effects on treatment outcomes, on patients' adherence to treatment, on treatment satisfaction, on patients' stress and anxiety levels, on the motivation to adopt or maintain more health-conscious behavior (4–6). On the other hand, a failed health communication can have many negative consequences, which are certainly great consequences and may pose a security risk to the recipients concerned (5).

Before a health care provider becomes familiar with training methods, it is best to learn the basics and skills of communication well (7).

Ratzan defines health communication as follows: 'the art and technique of informing, influencing, and motivating individuals, institutional, and public audiences about important health

issues' Also, The concepts of health motivation, health issues, disease prevention and health influencing were included in this definition (8).

Health communication is a key strategy for informing people about health concerns and putting important health issues on the agenda. Health communication is the process of creating and disseminating messages to specific audiences in order to influence knowledge, attitudes, and beliefs toward healthy behavioral choices(9, 10).

One of the most important factors affecting the increase of client satisfaction is the way health care providers communicate and the ability to communicate properly with clients. (11)

In this regard, various studies have shown that interpersonal communication between HCP is the most important factor affecting people's satisfaction with health care systems(12–15).

Research has shown that ineffective communication is still a powerful barrier to health education. On the other hand, not communicating effectively with clients and patients, will lead to hiding problems and needs, disrupting the acquisition of correct information, reducing their satisfaction and obedience (16).

Despite the great importance of health education, based on studies conducted in Iran, it seems that the situation of health education in our country is unfavorable(17–19). Heshmati et al. Mentioned inappropriate communication, lack of understanding of health education, poor work commitment and unrealistic expectations from community health workers as barriers in health education in the Iranian health system (18). Findings of Kianian et al. Showed that 64% of health workers in training courses did not follow the principles of the teaching process(20).

Since comprehensive health centers have several items including: healthy reproduction programs, youth, middle-aged, elderly, children, infants, pregnant mothers, accident prevention and nutrition, therefore it has the highest number of clients in the health network, so appropriate and effective education to the clients of these programs can guarantee family health and then community health. Identifying the factors that hinder effective communication between HCP and RHC, especially if these barriers are examined from the perspective of both (HCP and RHC), enables health planners and implementers to take appropriate measures to remove or modify communication barriers. On the other hand, studies conducted in Iran have mostly dealt with the issue of communication barriers between nurses and physicians and patients, and limited studies have examined the communication barriers of education between HCP and RHC. So the present study was conducted to communication barriers to education to referrals from the perspective of referrals to health centers and health care providers attendants.

Method

This descriptive- analytical study is cross-sectional in design and was conducted between February to May 2021. The study population included HCP and RHC of comprehensive centers and health centers.

According to the study of Rostami et al. (19), the maximum sample size is calculated by considering the prevalence of 40% in communication barriers and with an error of 0.1 and an α of 0.05, 140 people in each group. Therefore a total of 576 people, 162 employees and 414 clients were included in the study. Sampling was multi-stage. In the first stage, using cluster sampling, 24 health centers were selected from 49 health centers in Kerman, and 24 people from each center participated in the study. In the second stage, of these 24 people (there were a maximum of 7 HCP (all of whom completed the researcher-made questionnaire in an accessible and voluntary manner. The questionnaire was completed voluntarily by experts trained in health centers in Kerman. In the case of illiterate people, the questioner asked the questionnaire and marked the desired option according to the person's answer. Individuals' information was collected confidentially by giving a code.

Data collection tool was 2 researcher-made questionnaires. First, the researcher interviewed HCP and RHC about communication barriers related to employees, clients and the environment until the information reached saturation level, and then by studying similar research and summarizing the information obtained from HCP and RHC, questionnaires were prepared. Content validity method was used to assess the validity of the questionnaires. First, the questionnaires were given to ten experts in the fields of health education and health promotion (7 people) and sociology (3 people) to determine the quality validity of the content.

After receiving the correction suggestions, the questions that were defective were corrected and the inappropriate questions were removed and replaced with other questions. In order to determine the quantitative validity of the content, they were first asked to examine the questionnaire item in terms of these issues: which questions need to be included in the questionnaire, which questions are useful but unnecessary, and which questions are not necessary and should be removed. The simplicity, clarity and cultural relevance of each question were also assessed. Given that the number of specialists was ten, the minimum value set for the content validity ratio (CVR) according to the criteria in the Lawshe table was considered 0.62 .

CVR in the RHC questionnaire was more than 0.62 for 26 items and in the range of 0.7 to 1, which were confirmed, and for 4 items was less than 0.62, which were deleted. Also, CVR in the HCP questionnaire was more than 0.62 for 28 items and in the range of 0.7 to 1, which were confirmed, and for 3 items, it was less than 0.62, which were deleted.

To determine the content validity index (CVI) of each item, the opinions of the expert group in the form of three criteria of simplicity, relevance and clarity were received as a 4-point Likert scale.

The results of CVI calculation for the RHC questionnaire was 0.89 and for the HCP questionnaire was 0.93, so they were deemed appropriate. The questionnaires consisted of 2 parts. The first part was demographic information and the second part was questions related to 5 areas. The first domain was

socio-cultural, the second domain was psychological-physical, the third domain was verbal-non-verbal, the fourth domain was environmental factors and the fifth domain was informational questions. The HCP questionnaire consisted of 28 questions, of which the questions in each area were 9, 6, 4, 5, and 4, respectively. RHC questionnaire consisted of 26 questions, the questions related to each area were 5, 8, 4, 5, and 4, respectively. The questions were scored according to the 4-point Likert scale, very high (1), high (2), low (3) and very low (4). In order to study and compare more accurately the different domains of communication barriers in the participants in the study, all domains were taken to the scale of 0-100.

Data analysis was performed using SPSS 16 software and using central indicators and dispersion including mean and standard deviation and Tukey, T-test, and one-way tests.

Findings

The mean age of the HCP was 36.16 ± 7.9 and the RHC were 34.48 ± 9.8 . Among the 162 employees participating in the present study, 87.5% were female and 47.2% were formal, of which 77.8% had a university degree. Demographic information of HCP is given in Table 1.

Table 1
Demographic information of RCH

Variables	Group	N	%
Gender	Male	94	22.6
	Female	320	76.9
Education level	Under diploma*	60	14.4
	Diploma	178	42.8
	University	176	42.3
Employment status	jobless	52	12.5
	employee	104	25
	Self-employed	52	12.5
	Housewife	200	48.1
Total		414	100.0
* (Illiterate, Elementary school, Middle school, High school)			

Based on the analysis of the results, among the demographic variables of HCP, only the level of education showed a significant relationship with the physical-psychological, verbal-non-verbal and informational domains. In the mentioned areas, there was a significant difference between the level of diploma and university education (significance level 0.05) Table 2.

Table 2
Results of comparing HCP scores in different areas of communication barriers related to education

domain	Educational level	Mean \pm SD	P-value
Socio-cultural	Diploma	8.85 \pm 1.7	0.32
	University	9.33 \pm 1.59	
Physical-psychological	Diploma	7.35 \pm 1.4	0.01
	University	9.03 \pm 2.5	
Verbal-non-verbal	Diploma	5.21 \pm 1.25	0.04
	University	6.3 \pm 1.8	
Environmental factors	Diploma	25.57 \pm 4.12	0.63
	University	24.83 \pm 5.3	
Information barriers	Diploma	9.21 \pm 2.25	0.01
	University	2.03 \pm 10.82	
Communication barriers	Diploma	6 \pm 56.21	0.11
	University	9.01 \pm 60.33	

Regarding the study of the relationship between different areas of communication barriers from the perspective of RCH with demographic variables in the socio-cultural domain and environmental barriers, a significant relationship was found with education and job (Tables 3 and 4).

Data analysis showed that from the perspective of HCP (Fig. 1) and RHC (Fig. 2), the most communication barriers were related to the field of environmental factors and the least barriers were in the field of verbal-non-verbal.

Discussion

The present study was conducted to communication barriers to education to referrals from the perspective of referrals to health centers and health care providers attendants.

Among the demographic variables related to HCP, education had a significant relationship with the domains of informational, physical-psychological, verbal-non-verbal barriers, so that in all domains, people with university education had a greater understanding of communication barriers than the group had a diploma.

Livne et al during their research, Also considered insufficient professional knowledge and skills as one of the communication barriers to patient education (21). In the research of Ghorbani and colleagues, the

heavy workload was one of the barriers to educating patients, which was examined in our study in the form of psycho-physical domain (22).

Among the demographic variables related to RHC, education had a significant relationship with socio-cultural and environmental barriers. People with a high school education increasingly perceived socio-cultural factors as a barrier to health education. Also, people with university education considered environmental factors as a barrier to education more than others. The job variable was also significantly related to socio-cultural and environmental barriers. People who were employees perceive socio-cultural and environmental domains as barriers to effective communication for health education.

Regarding the communication barriers of education from the perspective of HCP and RHC, the most educational barriers were related to environmental and then the socio-cultural factors and the least barriers were related to the verbal-non-verbal domain.

In the present study, environmental barriers were factors such as congestion of health centers, lack of physical space, environmental noise, light and temperature of centers.

Many studies have pointed to the role of environmental factors as barriers to effective communication (23, 24). One prevalent barrier to communication is environmental noise. Environmental noise, further defined as equipment- and staff-related noise, usually refers to any extraneous sounds within the operational environment, such as conversation, tools, alarms, and ambient sounds from machinery (25). Perhaps one of the reasons that why environmental barriers are higher than other barriers is that the present study was conducted during the Covid 19 epidemic, so at this time environmental factors such as masks, shields, and personal protective equipment all affect the line of vision and reduce the nonverbal components of communication. Because Viewing the speaker's face is very effective in recognizing speech intelligibility.

One of the things that plays an important role in communication is culture (26). The HCP should be aware of the cultural differences of clients, one of the cultural influences is how people perceive illness, health and health education issues. If there is not enough knowledge about these cases, communication will be impaired. Overall, the HCP should be in line with the clients culture (23). The results of Schinkel et al.'s research also showed that from the perspective of immigrant patients, it is very important to pay attention to cultural barriers. raising awareness about cultural values differences, tackling the language barrier, increasing doctors' cultural competencies to competencies to communicate adequately could raise participation levels of patients with doctors, and improve health outcomes (27). In the present study, socio-cultural barriers were in the second category of barriers that were perceived by RHC and HCP as communication barriers to education. In different studies, different factors have been considered in the field of cultural and social barriers. In the present study, the difference between the language of health care providers and clients was questioned as one of the items of socio-cultural barriers. In line with the present study, various studies have examined the language differences between HCP and RHC. For example, a study by Blackwell et al. examined language barriers to health care from a students' perspective, which found that language barriers create challenges between service providers and service

recipients. And negatively affects various aspects of the health care process and effective communication (28). In a study conducted in Saudi, Linguistic and cultural differences between nurses and patients were considered as effective barriers to communication (29). Many studies have considered language barriers as effective communication barriers (30–34). Perhaps one of the reasons that cultural and social barriers are perceived as communication barriers is that although in Iran the number of immigrants may be less than other countries, but there are different ethnicities who speak different dialects, including dialect Turkish, Kurdish, Arabic. It seems that these linguistic differences affect effective educational communication. Also people in different parts of Iran have different customs, traditions and beliefs about health and disease so if RHC and HCP do not have the same culture and language all of this can affect an effective health communication.

One of the strengths of the present study was that for the first time, communication barriers were examined from the perspective of HCP and RHC. We also used two researcher-made questionnaires to examine the perspectives of HCP and RHC. We also tried to increase the sample size as much as possible to get more accurate information.

One of the limitations of the present study was to conduct the study only in Kerman, and therefore we have limitations in generalizing the results to other communities. Another limitation of data collection was self-report, which may affect participants' honest responses. One of the problems of the research was that the study was conducted during the epidemic of Covid disease, which made it difficult to collect information.

Conclusion

HCP faces a variety of barriers in educating people, most of which are related to environmental factors. Given the cost-effectiveness of education to the public, it is essential that planners and policymakers use strategies to eliminate environmental factors as well as the placement of indigenous HCP in health facilities to reduce communication barriers.

Abbreviations

HCP: health care providers; RHC: referrals to health centers; CVR: Content Validity Ratio; CVI: Content Validity Index

Declarations

Ethical considerations

Ethics Committee of the Faculty of Medical Sciences of Kerman provided the approval with the ethics code of IR.KMU.REC.1392.465 and Informed consent were obtained from all the participants. All methods were performed in accordance with the relevant guidelines and regulations.

Consent for publication

Not applicable.

Availability of data and materials

The datasets used and/or analyzed during the current study are in Persian and are available from the corresponding author with permission of the study group on reasonable request.

Competing interests

The authors declare that there is no conflict of interests.

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Authors' contributions

Abedin Iranpour contributed to study design, analysis and interpretation of data, provided feedback on the article, conceived and designed the study. Sedigheh Mirafzali accessed the dataset, contributed to data analysis, interpretation conceived and designed the study. Somayeh Alizadeh performed the data analysis and interpretation, wrote the first draft of the article, and subsequent revisions, and approved the submitted version. The corresponding author attests that all listed authors meet authorship criteria and that no others meeting the criteria have been omitted. The authors read and approved the final manuscript.

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The authors confirm that all methods were carried out in accordance with relevant guidelines and regulations.

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Figures

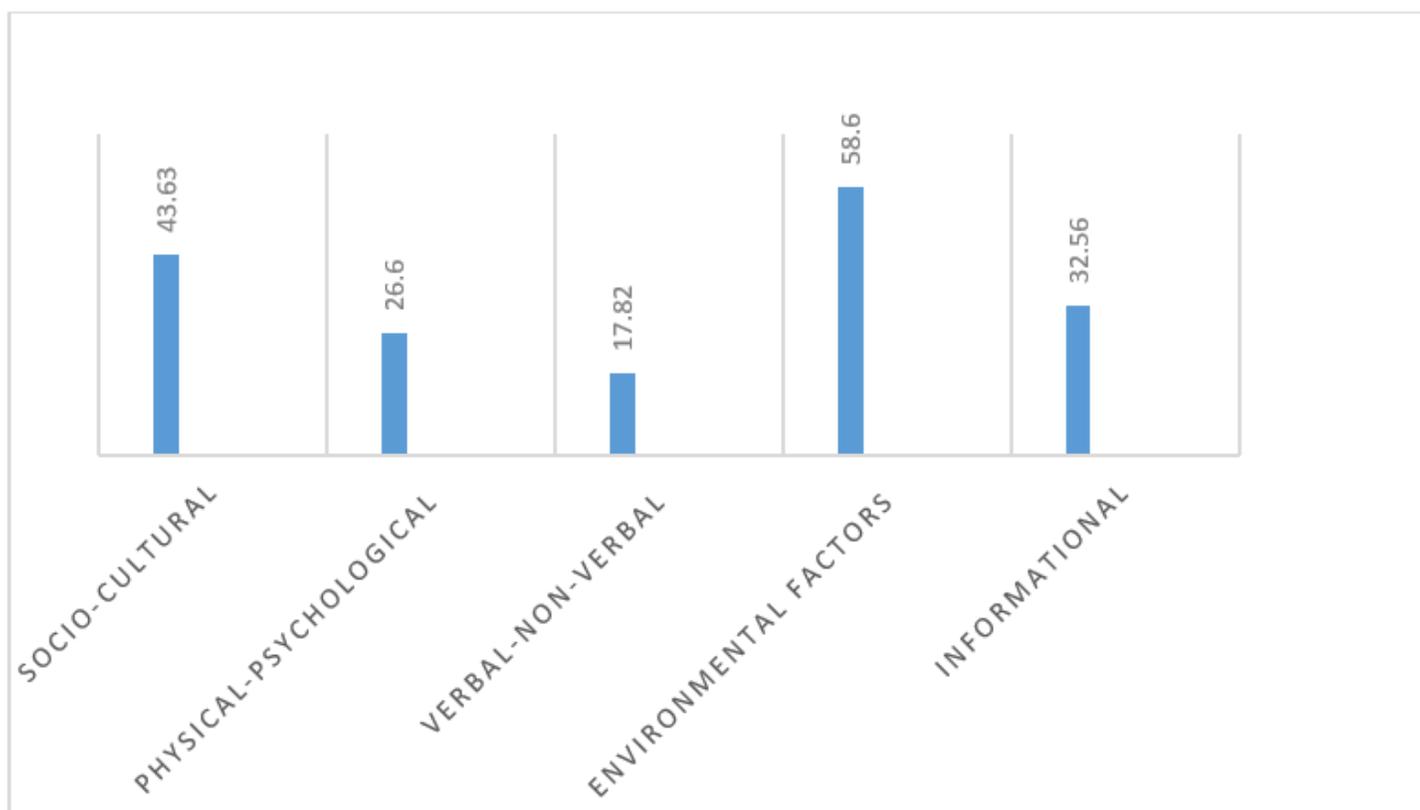


Figure 1

Results of co-scaled of communication barriers from the perspective of HCP

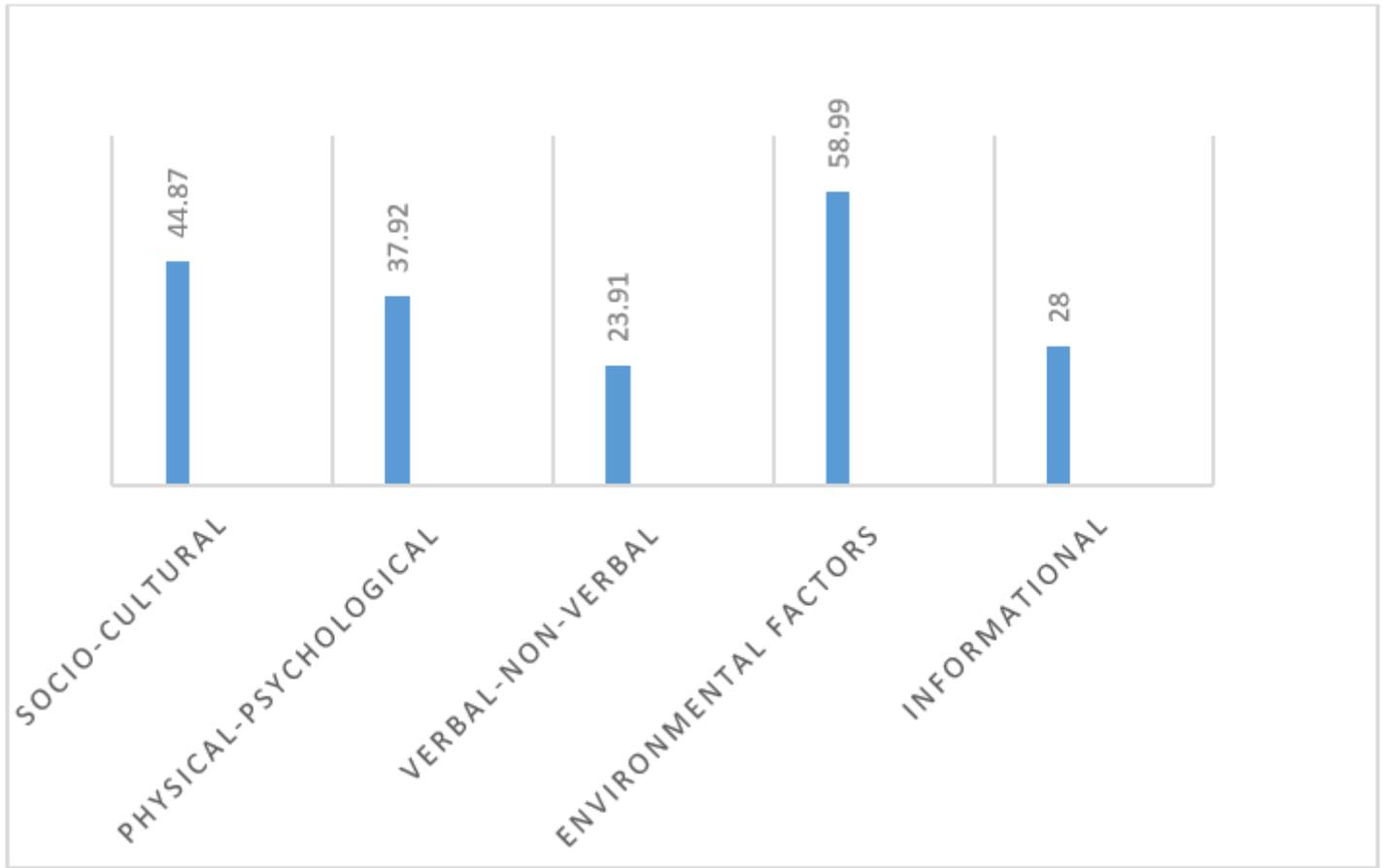


Figure 2

Results of co-scaled domains of communication barriers from the perspective RHC