Persian Translation and Determining the Validity of 2020 Standards for Health-Promoting Hospitals and Health Services Affiliated with the World Health Organization

Abstract

Background: Since the establishment of the International Health Promotion Hospitals (HPH) in 2006, standards have been designed to evaluate this network. Based on the request of the General Assembly of HPH, the new standards have been revised in 2020 to be in harmony with the new global strategy of HPH for the years 2021–2025. The present study was conducted to translate the original version of the self-evaluation form of HPH and to determine its validity and reliability in Iranian society. **Methods:** The standard process of forward and backward translation was followed after that to determine the face validity of the Persian version of HPH standards, fifteen experts from ten hospitals in five major cities in Iran (Tehran, Mashhad, Isfahan, Shiraz and Hamadan) gave their opinions about 86 standard statements based on a five-point Likert scale, and the impact score was calculated. For determining content validity, both the content validity ratio (CVR) and content validity index (CVI) were used. **Results:** All 86 standard statements of the five main standards had an impact score higher than 1.5. Also, regarding CVR, all 86 standard statements had a score higher than 0.49 (the minimum plausible score based on Lawshe's table). Finally, after calculating the CVI, all the standard statements had a CVI higher than 0.8, which indicated a very good content validity index for all the items. **Conclusions:** According to the results of this study, the Persian form of the 2020 HPH standards is valid enough to be used in Iranian hospitals and health services.

Keywords: *Health-promoting hospitals, Iran, standards, validity*

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Introduction

Health-Promoting Hospitals (HPH) movement originated first from the Ottawa Charter (WHO, Ottawa Charter for Health Promotion, 1986) and rapidly changed from a concept and a project to an international network. Its main purpose is "reorienting health services," as health services mission has been focused on the treatment of diseases for so many years and therefore needed reform.[1] The strategy of this network is to make changes, review the management systems of hospitals, and improve the health conditions of patients, hospital employees, and population groups covered by hospitals.[2]

By 2020, more than 600 hospitals and health service centers from 33 different countries have joined the HPH network.[3] From the very beginning of the establishment of the international network of HPH, standards were designed and compiled to evaluate the prospects of this network in such a way that, in 2006, the first version of these standards was published in the form of a self-assessment guide for health-promoting hospitals.[4] These standards evaluate the basic responsibilities of health promotion at the managerial level, patient assessment and interventions, hospital personnel, and the relationship between the hospital and other institutions that provide health services.[5] The reflection of the presentation of these standards at the international level has been significant; so far, they have been translated into seven languages around the world and have been welcomed by health officials, researchers, and scientific experts in different countries.[3]

Since the publication of the first version of health promotion standards in hospitals, significant changes have been made, which justifies the need to update and revise these standards.[6] The most

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important of these reasons are as follows: First, the need for a complete set of standards that could encompass the vision of the HPH concept was increasingly reported by HPH members. Second, the new HPH standards should be able to evaluate a wider range of healthcare providers in addition to hospitals. Third, nowadays, the orientation of health service providers includes empowerment in sensitive and key issues such as supporting collaborative decision-making and self-management, which have been added in the updated version of HPH. Fourth, in line with the Shanghai Declaration on the health promotion agenda for sustainable development until 2030, in the new version of HPH, special emphasis has been placed on leadership models and the role of management in the direction of health systems, which requires a strong senior management component in addition to clinical leadership. Fifth, the shift of disease trends toward chronic and non-communicable diseases is another reason that justifies the development of health promotion and disease prevention programs not only in developed countries but also in developing countries. And finally, as the last reason, international discussions and activities regarding the goals of sustainable development emphasize the wider recognition of the impact of social issues on organizations providing health services.[3]

Therefore, based on the request of the General Assembly of Health Promotion Hospitals, the new series of HPH standards has been revised, which includes a wider range of standards that are in harmony with the new global strategy of HPH for the years 2021–2025 and in line with the principles of international health policies.[1]

Considering that this new version of HPH standards has not yet been translated and determined for its validity and reliability in Iran, the present study was conducted to translate the original version of the self-evaluation form of health promotion hospitals and determine its validity and reliability in Iranian society. After final approval by the International Secretariat of Health Promotion Hospitals, this Iranian version of the standards will be placed on the HPH website to be used nationwide in the country's hospitals as a standard self-assessment tool.

Methods

This study was performed to develop a Persian version of the 2020 Standards for Health-Promoting Hospitals and Health Services in the first place and then evaluate the face and content validity of this Persian version of HPH standards at the end. In this study, a total of 15 experts working in the hospitals of five cities in Iran (Tehran, Hamadan, Tabriz, Isfahan, and Mashhad) took part in the study. All of these hospitals were members of the international network of health-promoting hospitals. the approval from the ethics committee is: IR.UMSHA.REC.1400.948.

To conduct the study, the following steps were implemented:

1: The first stage; forward and backward translation:

At this stage, the 2020 Standards for Health-Promoting Hospitals and Health Services were downloaded from the relevant website (https://www.hphnet.org /standards/), and after obtaining permission to translate from the secretary of the international network of health-promoting hospitals, the main standards along with the sub-standards and the standard statements (a total of 5 main standards, 18 sub-standards, and 86 standard statements) were provided to two qualified English translators to translate into Persian. In the next step, the two mentioned translations were combined with the opinions of both translators to obtain a unified version. In the next step, this Persian translation was given to two other qualified English translators to re-translate it into English (reverse translation). These translators were not aware of the original version of the standards. After receiving the reverse retranslations, these versions were matched with the original version, and the necessary changes were applied to the reverse version. In the next step, the translation process report along with the English translation copy of the translators was submitted to the International Secretariat of Health-Promotion Hospitals and after receiving their feedback, the last necessary changes were made in the final version of the standards.

2: The second stage, determining face and content validity: In this stage, the updated Persian version of the standards was given to experts and experienced people to determine its face and content validity as follows:

2-1: Determining face validity: At this stage, the forms were given to 15 hospital officials from 10 national hospitals in five different cities (Tehran, Isfahan, Tabriz, Mashhad, and Hamadan), all working as members of the international HPH network, and they were asked to rate the importance of each question based on a five-point Likert scale (5: absolutely important, 4: important, 3: relatively important, 2: slightly important, and 1: not important). In the next step, the impact score was calculated as follows: Impact score = frequency*importance

It should be noted that to confirm the face validity of each item, its impact score should not be less than 1.5, and only questions with a score higher than 1.5 were accepted at this stage.

2-2: Determination of content validity: For this stage of validation, the content validity ratio (CVR) and content validity index (CVI) methods were used. In this way, for obtaining CVR, after explaining the purpose of the test, the opinions of the 15 experts were asked about the content of the questions. Then, the practical definition related to the content of the questions was presented to them, and they were asked to classify each question on a three-part Likert scale (the item is necessary, the item is useful but not necessary, and the item is unnecessary). Then, in the next

step, the content validity for each question was calculated based on the relevant formula and interpreted for validity according to the Lawshe table [Table 1] and based on the number of experts participating in the research (15 experts in our study).[7]

In the last step, to calculate CVI, experts were again asked to score each of the questions in the questionnaire based on three related features: clarity, simplicity, and relevancy, based on a four-point Likert scale. Finally, based on the three scales of impact score, CVR and CVI, the items that could be deleted, edited, or completely suitable from the questionnaire were determined.

Results

In total, 5 main standards, 18 sub-standards, and 86 standard statements of the Persian version of 2020 HPH standards were sent to these experts to determine their face and content validity, and the results of the validation of these standards were according to Table 2. In short, standard one regarding demonstrating organizational commitment for HPH consists of three sub-standards: leadership (with seven standard statements), policy (with three standard statements), and monitoring, implementation, and evaluation (with three standard statements). Standard 2 is about ensuring access to the service with three sub-standards: entitlement and availability (with two standard statements), information and access (with five standard statements), and socio-cultural acceptability (with four standard statements). Standard 3 regarding enhancing people-centered health care and user involvement has six sub-standards: responsiveness to care needs (with five standard statements), responsive care practice (with eight standard statements), Patient and provider communication (with five standard statements), supporting patient behavioral change and patient empowerment (with

five standard statements), involving patients, families, caregivers, and the community (with four standard statements), and collaborating with care providers (with three standard statements). Standard 4 regarding creating a healthy workplace and healthy setting consists of two sub-standards: Staff health needs, involvement, and health promotion (with six standard statements) and healthy setting (with seven standard statements), and finally, standard 5 regarding promoting health in the wider society with four sub-standards: health needs of the population (with four standard statements), addressing community health (with three standard statements), environmental health (with seven standard statements), and sharing information, research, and capacity (with five standard statement), which includes a total of five main standards, 18 sub-standards, and 86 standard statements. As can be seen from Table 2, after calculating the impact score, all the items had an impact score higher than 1.5, which means that all 86 standard statements were important from the point of view of the experts participating in this research. Also, regarding CVR, according to the number of people participating in this research (15 people) and based on Lawshe's table [Table 1], the minimum plausible score for each item was 0.49, and according to Table 2, again, all the 86 standard statements had a score higher than 0.49. Finally, after calculating the CVI, all the standard statements examined had a CVI higher than 0.8, which indicated a very good content validity index for all the items.

Discussion

This study was conducted to produce a Persian version of the 2020 HPH standards and then determine the validity of this Persian version of the self-assessment tool for HPH standards (new version of 2020). This Persian version of health promotion standards, as the eighth translated version of these standards (after translation into seven other languages), is now placed on the website of health promotion hospitals after the validation process was completed.[3]

The need to validate the Iranian version of the HPH standards was felt since the publication of the first version of these standards in 2006. In 2018, Nikpajouh and colleagues[8] examined the validity of the Iranian version of the HPH standards. In that study, it was determined that all standards and standard statements have sufficient validity for use, and therefore it was suggested that the Iranian version of HPH be used to evaluate health promotion in Iranian hospitals. In line with Nikpajouh *et al*.'s study, all 86 standard statements examined in terms of face validity and content validity received an acceptable score from 15 expert reviewers.[8]

In the study of Nik Pajouh *et al*.,[8] 40 standard statements were examined by 10 experts and all the standard statements had an impact score greater than 1.5. The

Table 1: Lawshe's decision table for calculating the content validity ratio

No. of experts' panel members	Minimum validity
5	0.99
6	0.99
7	0.99
8	0.85
9	0.78
10	0.62
11	0.59
12	0.56
13	0.54
14	0.51
15	0.49
20	0.42
25	0.37
30	0.33
35	0.31
40	0.29

Table 2: CVI, CVR, and impact score of the Persian version of 2020 HPH standards				
Standard	**Standard statements**	**CVR**	**CVI**	**Impact Score**
Standard 1:	1-1-1	1	1	4.93
Management policy	1-1-2	1	0.86	4.80
	1-1-3	1	0.86	4.73
	1-1-4	1	1	4.66
	1-1-5	1	1	4.60
	1-1-6	1	1	4.73
	1-1-7	1	0.8	4.73
	1-2-1	1	1	4.73
	1-2-2	1	1	4.66
	1-2-3	1	1	4.73
	1-3-1	1	0.86	4.60
	2-3-1	1	1	5.00
	3-3-1	1	1	4.60
Standard 2:	1-1-2	1	1	4.60
patient assessment	2-1-2	1	1	4.60
	1-2-2	0.86	1	4.60
	2-2-2	1	1	4.53
	3-2-2	1	1	4.60
	4-2-2	1	0.86	4.20
	5-2-2	1	1	4.73
	1-3-2	0.86	0.86	4.66
	2-3-2	1	1	4.66
	3-3-2	1	0.86	4.66
	4-3-2	1	1	4.13
Standard 3: patient information and intervention	1-1-3	1	1	4.66
	2-1-3	1	1	4.73
	3-1-3	1	0.93	4.20
	4-1-3	0.86	0.86	4.26
	5-1-3	0.86	0.93	4.60
	1-2-3	1	0.93	4.86
	2-2-3	1	1	4.80
	3-2-3	1	1	4.80
	4-2-3	1	1	4.26
	5-2-3	0.86	0.93	4.66
	6-2-3	0.86	0.96	4.66
	7-2-3	1	1	4.40
	8-2-3	1	1	4.86
	1-3-3	1	0.86	4.53
	2-3-3	1	1	4.86
	3-3-3	1	0.93	4.26
	4-3-3	1	1	4.13
	5-3-3	1	1	4.66
	1-4-3	1	1	4.80
	2-4-3	1	1	4.73
	3-4-3	0.86	1	4.80
	4-4-3	0.86	0.93	4.66
	5-4-3	1	0.86	4.73
	1-5-3	1	0.93	4.33
	2-5-3	1	0.73	4.06
	3-5-3	0.6	0.86	3.20
	4-5-3	0.73	1	3.93

Contd...

Table 2: Contd...				
Standard	**Standard statements**	**CVR**	**CVI**	**Impact Score**
	3-6-1	1	1	4.73
	3-6-2	1	1	4.53
	3-6-3	1	1	4.53
Standard 4:	4-1-1	1	1	4.8
Promoting a healthy workplace	4-1-2	1	1	4.73
	4-1-3	1	1	4.8
	4-1-4	1	0.93	4.8
	4-1-5	1	1	4.46
	4-1-6	1	1	4.8
	4-2-1	1	1	4.86
	4-2-2	1	1	4.8
	4-2-3	1	1	4.86
	4-2-4	1	1	4.93
	4-2-5	1	1	4.66
	4-2-6	1	1	4.73
	4-2-7	1	1	4.8
Standard 5:	5-1-1	1	0.93	4.6
Continuity and cooperation	5-1-2	1	1	4.46
	5-1-3	1	1	4.6
	5-1-4	1	1	4.4
	5-2-1	1	1	4.4
	5-2-2	1	0.93	4.53
	5-2-3	0.73	0.93	4.53
	5-3-1	1	0.93	4.86
	5-3-2	1	1	4.86
	5-3-3	1	1	4.86
	5-3-4	1	1	4.66
	5-3-5	1	1	4.6
	5-3-6	1	1	4.8
	5-3-7	1	1	4.8
	5-4-1	1	1	4.73
	5-4-2	1	1	4.6
	5-4-3	0.86	1	4.33
	5-4-4	0.86	1	4.4
	5-4-5	1	0.8	4.4

minimum CVR and CVI were reported to be 0.64 and 0.79, respectively. In the recent study, the number of standard statements had increased by more than twice (86), but in line with the previous study, all the items had high degrees of validity, so all standard statements had an impact score greater than 1.5, and the minimum CVR and CVI were 0.6 and 0.73, respectively. which was very close to the study of Nik Pajouh *et al.*[8] Regarding the face validity index, which was measured by the impact score, the highest score (5 from 5) was related to the standard statement 21, followed by 1 and 64 (4.93 from 5 each), and the lowest score was related to the standard statements 50 (3.2 from 5) and 51 (3.93 from 5). Regarding the determination of content validity, which was measured with CVR and CVI, 73 standard statements got the maximum CVR score (1 of 1), and only one (79) had the lowest score (0.6). Considering CVI, 60 standard

statements had the maximum score (1 of 1), and only one (49) had the lowest score (0.73).

In Iran, despite the limited expansion of formal health promotion hospitals and the lack of an HPH network, much attention is paid to the topic of health promotion hospitals. Among the extensive studies in this regard, the following can be mentioned: Seif Rabiei *et al.*[9] (2020) evaluated HPH standards in a heart center in Hamadan and concluded that HPH policies are not well recognized among patients, hospital employees, and management staff. Also, Pezeshki *et al.*[10], in a similar study in Tabriz in 2019, evaluated HPH standards in the hospitals of East Azerbaijan and reported moderate compliance with the HPH program and the need for improvement in these standards. Yaghoubi *et al.*[11] (2019), in their study, investigated the effective factors in the implementation and development of health-promoting hospitals in Iran and concluded that for successful HPH implementation, one of the frameworks emphasized by the World Health Organization, such as European Foundation for Quality Management, is required. Also, Yazdi Feyzabadi and Naghavi[12], in a study, have investigated the challenges of Establishing Health-Promoting Hospitals in Kerman, Iran, and concluded that the challenges of establishing the HPH approach are in various areas related to the organization and policies, staff, and society, so it is necessary to focus on the empowerment and participation of all people involved in health-promoting policies and activities, such as managers and officials, employees, and members of the community. Taghdisi *et al.*[13] in their study entitled "Self-assessment of health-promoting hospital's activities in the largest heart hospital of Northwest Iran" have investigated the HPH standards in the largest heart hospital of Northwestern Iran and concluded that the studied hospital should enforce the standards, especially in the management policy, and also should promote different levels of prevention with the collaboration of patients and hospital staff. In the present study, the weakest scores belonged to one of the standard statements of standard 3 (Enhancing people-centered health care and user involvement), so the lowest CVR (0.6) and impact score (3.2) correspond to the standard statement 50, which is: "In our organization, all documents and services relevant for patients are developed and tested together with patient advocates and representatives of patient groups," and the lowest CVI (0.73) belongs to the standard statement 49: "Our organization identifies users at risk of being excluded from participatory processes and promotes the participation of those at risk of exclusion and discrimination." The role of patient advocacy in Iran has been paid less attention to, which may be one of the reasons why this standard statement (50) received the lowest validity score. To verify this, we can refer to Motamed-Jahormi's study (2015), Negarandeh's study (2012), and Davoodvand's study (2016), in which the challenges of patient advocacy in Iran are mentioned.[14-16]

Regarding standard statement 49, which also had the lowest CVI, the impact of discrimination in providing health care has also been discussed a lot. For example, in Cattacin's study in 2020, it is mentioned that there is a need for a standard regarding how equally services are provided to people.[17] In Mehri *et al.*'s[18] study in 2020, the role of discrimination in health care for the elderly in Iran is also mentioned. Sadati AK and colleagues[19] (2019) also pointed out serious discrimination in the care of AIDS patients in Iran. The reason for the low score of this standard statement may be because this issue is not felt as a serious risk for Iran's health system by the experts participating in this research. After all, there are various guidelines from the Ministry of Health and Medical Education of Iran regarding patients and special groups (elderly, diabetic patients, AIDS patients, etc.) that the country's health system is obliged to implement for these special groups, which are offered for free in many cases.[20,21]

Conclusions

According to the results of this study, the Persian form of the 2020 HPH standards is valid enough to be used in Iranian hospitals and health services.

Data accessibility

The SPSS version of the analysis along with the Persian version of the HPH standards is kept with the authors. To access the Persian version of the HPH standards , please refer to the link below: http://prof.rhc.ac.ir/nikpajouh/fa/page/45/appendix.

Ethical consideration

this study was approved by the ehichal committee of Hamadan University of Medical Scienses. The ethical code was: IR.UMSHA.REC. 1400.948

Authors contribution

All of the authors contributed in writing, reviewing and preparation of manuscript as following: MA. SR, A. N: Substantial contributions to the conception or design of the work MA. SR, Z. S: Substantial contributions to the literature search MA. S, A. N: Substantial contributions to the data acquisition MA. SR: Substantial contributions to the data analysis and statistical analysis MA. S, Z. S: Substantial contributions to the drafting the work or revising it critically for important intellectual content MA. SR, Z. S, MA. S, A. N: Substantial contributions to the final approval of the version to be published.

Conflicts of interest

There are no conflicts of interest.

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