International Journal of Future Generation Communication and Networking
Vol. 13, No. 2, 2020 pp.775-786

Designing an Evaluation Model for Health Promoting Hospital in Iran Social Security Organization hospitals

Shaghayegh Vahdat[1*], Zahra Mansouri[2], Iravan Masoudi Asl[3], Somayeh Hessam[4], Soad Mahfoozpour[5]

[1] *Assistant Professor, Department of Health Service Administration, South Tehran Branch, Islamic Azad University, Tehran, Iran. Tel: +98-9126810851*

[2] *Department of Health Service Administrations, South Tehran Branch, Islamic Azad University, Tehran, Iran.*

[3] *Department of Health Service Administration, School of Health Management and information Sciences, Iran University of Medical Sciences, Tehran, Iran.*

[4] *Department of Health Service Administrations, South Tehran Branch, Islamic Azad University, Tehran, Iran.*

[5] *Safety Promotion & Injury Prevention Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran.*

Abstract

Health promotion is the new mission of hospitals and the mission of health promotion hospitals is to change treatment-centered attitude to health-based attitude. This study aimed to design an evaluation model for Iranian health promotion hospitals. ***Methods:*** *A descriptive correlational study was carried out using structural equation modeling in 2018-2019. The statistical population consisted of 272 elected officials of Iran Social Security Organization hospitals and a researcher-made questionnaire was used to collect data. Sampling adequacy (KMO) and Bartlett's sphericity tests, Pearson correlation coefficient, multivariate regression, factor analysis, and path analysis were used to model the equation using SPSS and LISREL software.* ***Results:*** *This study identified and modeled 68 evaluation criteria and 11 components in three structural, process and outcome dimensions for the evaluation model of Iranian Social Security Organization hospitals. The results of Structural Model test showed significant coefficients and parameters obtained in structural, process and outcome dimensions with 99% probability of significance. In verification of the main hypothesis of the research based on the results of t value, results in all equations were higher than 0.5 which can extend the final model of research to statistical population.* ***Conclusions:*** *The HPH evaluation model of this study can help to establish a health promoting hospital and their efficient evaluation system and as a valid tool in modifying audit mechanisms, evaluating service quality, promoting staff health and promoting community health interventions and helping Health policy makers should apply.*

Keywords: *Health Promotion, Evaluation model, Health Promoting Hospitals (HPHs), Social Security Organization, Iran.*

1. Introduction

Health promotion is the new mission of hospitals and the mission of health promotion hospitals is to change treatment-centered attitude to health-centered attitude.[1] The health promotion program has been used to improve the quality of hospitals, which broadens the scope of overall results and achievements, and has implications for hospital structures and processes.[2] The concept and idea of the Health Promoting Hospitals (HPH), first presented at the World Health Promotion Summit in 1986 by the World Health Organization, stemmed from a revision strategy in the provision of health services.[3]

ISSN: 2233-7857 IJFGCN

According to this idea, hospitals, in addition to treating patients, should play a significant role in promoting the health of the community in general and play an important role in promoting the health of their clients and staff.[4] The end result of health promotion hospitals is to reduce frequent hospitalizations, improve patients' quality of life, and reduce medical costs.[5,6] Currently, this international network of health promotion hospitals includes more than 1,000 member hospitals worldwide. In Iran, 9 hospitals are also members of the International Hospital Health Promotion Network.[7]

Interventions by health promotion hospitals into two parts of public health promotion services (including healthy lifestyle education and counseling, smoking cessation services, alcohol consumption reduction, increased physical activity and diet modification) and dedicated health promotion services (services to specific patient groups include: Prevention of complications of diabetes, education of asthma patients, rehabilitation of heart disease are divided into dedicated services. The basis of these services is empowering the individual to manage and address the specific conditions of their illness.[8, 9]

Evaluation in health promotion programs is the process of making decisions about the value of some measurable items in the plan. In fact, in the evaluation process, tools such as measurement, comparison with some criteria and standards are considered.[10]

Currently, the quality of health promotion activities in hospitals affiliated to the International Network of Health Promoting Hospitals is not systematically evaluated. The HPH Database has also been set up to record projects and activities, provide key hospital information and health promotion activities.[11] various assessments have been made at national and regional levels but according to international network reports, hospital health promotion has not been well developed.[9, 12]

Pelikan et al. After presenting a comprehensive model of health promotion activities evaluation at the global, regional and national levels of HPH, member hospitals and health care providers, a framework for evaluating health promotion activities at member hospitals level and communication they presented the HPH with the PRICES-HPH evaluation model

(Figure 1)[13].

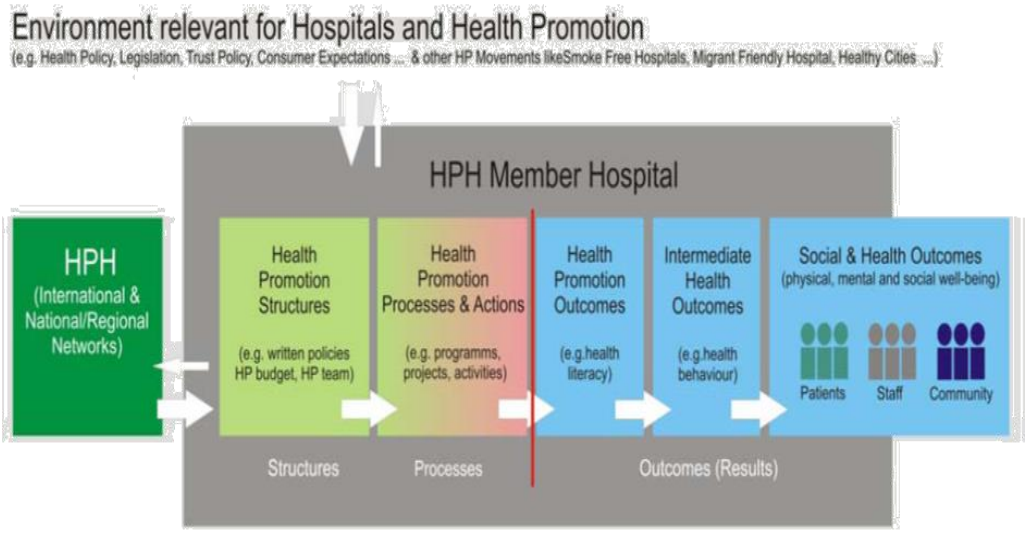


Figure 1. Hospital-level PRICES-HPH evaluation model [Erreur ! Signet non défini.**]**

Like other health promotion models, the PRICES-HPH evaluation model is based on differentiation of different levels of outcomes related to health promotion measures.[13] According to Donabedian, the quality of outcome measures in health care and activities is linked to the quality of processes and

ISSN: 2233-7857 IJFGCN

structures. The concept of health promotion is an important quality issue for improving health in all aspects, maintaining and promoting the quality of life.[14]

The HPH approach in Iran is not very recent and its implementation in hospital and medical centers of Iran is very early stage which requires proper tools and indicators for evaluating health promotion programs for its proper institutionalization and deployment. The purpose of this study was to design a conceptual model for evaluation of Iranian health promotion hospitals.

2. Methods

The purpose of this study is practical and in terms of variables control is a descriptive correlational research that has been carried out by structural equation modeling in 2018-2019. The statistical population of the study consisted of 272 elected officials of Iran Social Security Organization hospitals including: hospital chief, hospital manager, nursing services manager, educational supervisor, and head of quality improvement office in each hospital. The study process involved the following steps:

At first, by studying the library, evaluation dimensions and components of health promotion hospitals, and then using PRICES-HPH evaluation model which included 3 structural, process and outcome dimensions as guidelines for designing Iranian conceptual model (Figure 1). At the hospital level, the PRICES-HPH model is mainly aimed at collecting data on hospital health promotion activities in the structural, process and outcome dimensions of member hospitals and evaluating the underlying health promotion measures using a questionnaire tool.[13]

In the second step, a researcher-made questionnaire was designed and validated in 3 parts and 73 variables based on the conceptual framework of the study which was the evaluation criteria of the health promotion hospital.

Part I of the structural dimension variables consisting of 15 questions in three components: Communication and Cooperation (7 questions), Organizational Development (2 questions) and Infrastructure Development (6 questions), Part 2 of the Questionnaire including 31 Questions in Four Components of Policy and Management (5 Questions), resource planning (5 questions), patient evaluation and interventions (10 questions) and healthy human capital (11 questions) and The third part of the questionnaire consisted of 27 questions in four components of organizational leadership (3 questions), promotion of patients health (9 questions), promotion of staff health (11 questions) and promotion of community health (4 questions). It was staff health promotion (11 questions) and community health promotion (4 questions).

The content validity of the questionnaire based on three criteria of simplicity, relevance and clarity was obtained using CVR and CVI formats from the viewpoints of 10 experts (0.86 and 0.92, respectively). The reliability of the questionnaires was assessed by Cronbach's alpha coefficient; and its value for all three parts of the questionnaire was higher than 0.7 in all components, meaning that the questionnaire has appropriate reliability. After confirming the validity and reliability, a questionnaire consisting of 73 questions on a 5-point Likert scale was used and health promotion hospital evaluation criteria were evaluated in three dimensions of the proposed model. To answer each question in the questionnaire, 5 options were chosen from the lowest value of 1 to the highest value of 5, so that I completely agree with score 5, agree with score 4, disagree with score 3, disagree with score 2 was strongly disagree with score 1.

Sample Size Required for Modeling Covariance Structural Equations According to Hair Theory, [15] for each question between 5 and 15 samples, with 10% loss, the sample size of 310 samples was selected. Then they were provided by stratified random sampling and finally 296 complete questionnaires (90%) were collected. After collecting and entering data into Spss software and performing six preprocessing, finally 24 indifferent samples were identified. And were excluded from the study. Finally, 272 refined samples were used for analysis by LISREL software.

ISSN: 2233-7857 IJFGCN

3. Results

The results showed that 185 experts (68%) and 87 men (32%) were the experts in the study, respectively. In terms of age distribution, 29% of the total 272 patients in the age group of 46 to 50 were active and experienced in hospital management. The highest work experience with frequency of 130 (47%) was between 20 and 11 years. The highest management experience was obtained by 100 (36%) and the highest responders were the Quality Improvement Officers (63%) (23.2%). In this study, confirmatory factor analysis was used in LISREL software to ensure construct validity. Table 1 shows the results of the KMO test to test the adequacy of the sample size of the study for factor analysis.

Table 1. KMO test for research variables

Bartlett test			KMO Test	Criteria examined
Significance level	Degrees of freedom	Chi-square		
0.001	105	2855.496	0.794	**Structural criteria**
0.001	465	4615.639	0.758	**Process criteria**
0.001	351	4405.745	0.897	**Outcome Criteria**

In Table 1, the KMO value should be higher than 0.7 and statistically lower than the P value of 0.05 indicating whether the research sample is sufficient and sufficient for the factor analysis.

The relationship between each of the components and dimensions was assessed separately. As can be seen in Table 2, most of the standard coefficients of the components in the research dimension, except for question 31 in the component of healthy human capital in the process dimension and question 12 in the component of promotion of patients' health, question 12 in the component of promotion of patient health and questions 13, 15, 21 in the health promotion component in outcome dimension greater than 0.5 and having t-value out of the range of +2.58 and -2.58.

Therefore, since the standardized factor estimate should be 0.5 (ideally 0.7 or higher) or higher and t-value out of the range of +1.198 and -1.98, we conclude that all components Dimensions of all dimensions optimally measure their final Variable. Therefore, 11 components of the research model are 99% significant.

ISSN: 2233-7857 IJFGCN

R^2	T.Value	Factor	Questions	Variables	R^2	T.Value	Factor	Questions		Variables	Dimensions

ISSN: 2233-7857 IJFGCN

0.0	20.73	0.95	a9	Infrastructure Development	0.0	16.58	0.84	a1		Communication and Cooperation	Structural dimension
0.0	10.88	0.61	a10		0.0	18.33	0.89	a2			
0.0	11.80	0.65	a11		0.0	14.17	0.75	a3			
0.0	15.00	0.77	a12		0.0	10.60	0.60	a4			
0.0	21.60	0.97	a13		0.0	13.85	0.74	a5			
0.0	6.56	0.54	a14		0.0	14.02	0.75	a6			
0.0	10.74	0.60	a15		0.0	3.42	0.82	a7		organizational development	
					0.0	3.37	0.69	a8			
0.0	15.79	0.71	e17		0.0	12.67	0.62	e1		Policy and Management	process dimension
0.0	12.18	0.68	e18		0.0	17.85	0.81	e2			
0.0	13.40	0.51	e19		0.0	16.62	0.63	e3			
0.0	15.74	0.72	e20		0.0	11.12	0.72	e4			
0.0	9.71	0.62	e21	Healthy human capital	0.0	14.56	0.77	e5			
0.0	7.94	0.69	e22		0.0	10.11	0.72	e6		Resource Planning	
0.0	5.84	0.59	e23		0.0	15.25	0.74	e7			
0.0	6.77	0.54	e24		0.0	10.42	0.80	e8			
0.0	10.36	0.58	e25		0.0	13.08	0.88	e9			
0.0	8.33	0.53	e26		0.0	14.10	0.86	e10			
0.0	13.41	0.73	e27		0.0	3.20	0.69	e11		Patient evaluation and interventions	
0.0	10.98	0.67	e28		0.0	16.07	0.72	e12			
0.0	3.38	0.70	e29		0.0	14.98	0.68	e13			
0.0	9.79	0.62	e30		0.0	14.34	0.66	e14			
0.0	6.89	0.07	e31		0.0	14.83	0.61	e15			
					0.0	14.32	0.67	e16			
0.0	7.06	0.43	C15	Improving staff health	0.0	11.79	0.68	c1		Organization leadership	Consequence dimension
0.0	8.47	0.50	c16		0.0	14.42	0.80	c2			
0.0	16.34	0.83	c17		0.0	15.93	0.86	c3			
0.0	14.53	0.76	c18		0.0	9.35	0.54	c4		Improving patients' health	
0.0	16.45	0.83	C19		0.0	11.26	0.63	c5			
0.0	14.45	0.76	C20		0.0	15.252	0.80	c6			
0.0	5.52	0.34	C21		0.0	14.84	0.78	c7			
0.0	15.29	0.79	C22		0.0	15.36	0.79	c8			
0.0	9.36	0.54	C23		0.0	13.33	0.72	c9			
0.0	12.32	0.70	C24	Promoting community and enviromental health	0.0	14.54	0.77	c10			
0.0	12.14	0.71	C25		0.0	15.92	0.81	c11			
0.0	13.48	0.76	C26		0.0	6.71	0.41	c12			
0.0	11.13	0.66	C27		0.0	7.84	0.47	c13			
					0.0	8.65	0.51	c14			

Also, the model has good fit in all dimensions because the root mean square error of their estimation is less than 0.08 and the chi-square ratio to the degree of freedom is less than 3 and the values of goodness of fit and goodness of fit are more than. The value is 0.8 (Table 3).

Table 3. Results of Fitting the Equation Model to Measuring Research Variables

NO	Indicators	Limit	The value obtained	
			Staff effectiveness variable	Crisis response variable
1	Chi-Square/df	3>	1142/578=1.975	137.6/59=2.332

ISSN: 2233-7857 IJFGCN

2	RMSEA	0.08>	0.045	0.053
3	PNFI	0.5<	0.90	0.75
4	GFI	0.8<	0.88	0.96
5	AGFI	0.5<	0.86	0.93
6	NFI	0.9<	0.98	0.99
7	NNFI	0.9<	0.99	0.99
8	CFI	0.9<	0.99	0.99
9	IFI	0.9<	0.99	0.99
10	RFI	0.9<	0.98	0.98

The results of the research hypothesis using the structural equations modeling and output of LISREL software are shown in Figures 2 and 3. To investigate the main hypothesis of the research and the generalizability of the structural model of the research or, in other words, the research model in significance (t-value) and the path coefficient are shown in standard mode. Based on the results, t values in all equations are higher than 0.5. Since these values are outside the range of -2.58 and +2.58, the final model of the research can be extended to the statistical population. The research hypothesis is therefore confirmed.

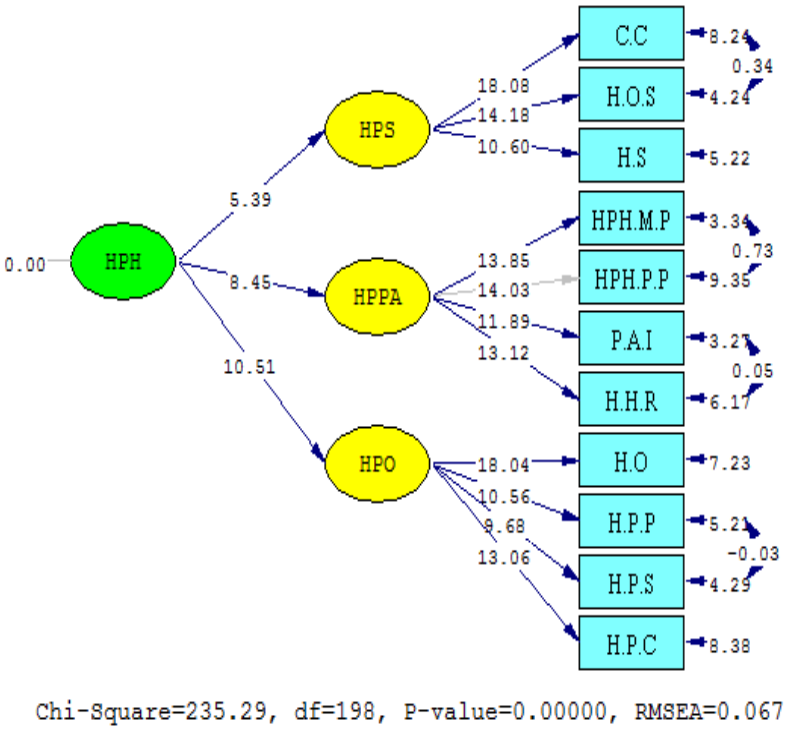
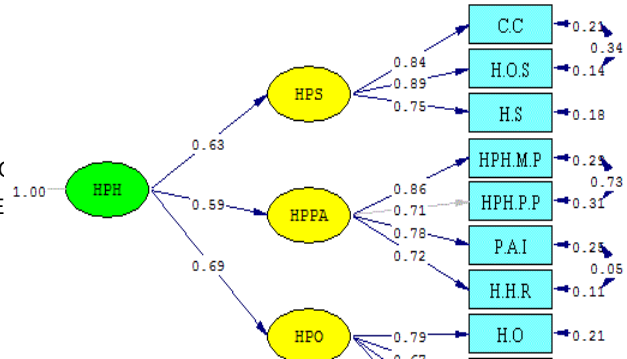


Figure 2. Structural model of research in significant coefficients.



ISSN: 2233-7857 IJFC

Figure 3. Structural model of research in standard coefficients estimation.

The structural model fitting results in Table 4 show that the research model has a good fit.

Table 4. Structural Equation Modeling Results of Research

NO	Indicators	Standard value	The value obtained
1	Chi-Square/df	3>	235.29/198=1.18
2	RMSEA	0.08<	0.053
3	PNFI	0.5<	0.75
4	GFI	0.8<	0.96
5	AGFI	0.5<	0.93
6	NFI	0.9<	0.99
7	NNFI	0.9<	0.99
8	CFI	0.9<	0.99
9	IFI	0.9<	0.99
10	RFI	0.9<	0.99

Finally, according to the findings of Table 5 that the AVE values in both variables of MSV and ASV were higher; the structural validity of the structural model of the research was also confirmed.

Table 5. Structural Validity Factors of Research Variables

NO	Variables	CR	AVE	ASV	MSV
1	Structural dimension	0.923	0.83	0.771	0.81
2	Structural process	0.910	0.86	0.719	0.81
3	Structural Consequence	0.901	0.84	0.73	0.82

Finally, the structural validity of the structural model of the research was confirmed with three dimensions and 68 criteria (5 proposed criteria were omitted).

4. Discussions

This study sought to evaluate and evaluate evaluation criteria of Health Promoting Hospital and to propose a model in Social Security Organization based on the three-branch model (three structural, process and outcome dimensions). Determining the dimensions and components of a health promoting hospital is an important necessity for promoting and improving activities and evaluating health promotion performance in patient, staff, community, and environmental domains for health managers and decision makers. The steps of this study were conducted within the framework of validated

ISSN: 2233-7857 IJFGCN

models in various studies and processes of establishing WHO standards that require validity and reliability. The results of this research in the form of a confirmation model for the Social Security Organization show that it is necessary to establish a hospital evaluation mechanism and its relationship with the international and national HPH network.

Pelikan et al. After presenting a comprehensive model of health promotion activities evaluation at the global, regional and national levels of HPH, member hospitals and health care providers, a framework for evaluating health promotion hospitals' activities at member hospitals and their relationship with The HPH network was presented as a PRICES-HPH evaluation model.[13]

At the hospital level, the PRICES-HPH model is mainly aimed at collecting data on hospital health promotion activities in the structural, process and outcome dimensions of member hospitals and evaluating the subject areas of health promotion measures using a questionnaire tool.[13] The results of this study also designed and validated an evaluation model in 3 dimensions, 11 components and 68 criteria. The following points to the results of the importance of evaluation criteria and comparison with the results of similar studies.

The Structural Dimension deals with the structural factors and infrastructure necessary for the optimal operation of a health promotion hospital without which it is not possible to design and implement HPH programs. Results of Measurement Equations of Structural Dimension Variables All of the criteria were able to explain the percentage of variance in the HPH evaluation model.

Membership in the global and national HPH network is one of the criteria for evaluating a health promotion hospital that has been approved by experts in this study. Within the PRICES-HPH model, environmental inputs and national / regional HPH networks are of particular importance.[14]

Decisions about aspects of health evaluation are based on the resources allocated, the needs of the stakeholders, the primary goals of the health plan evaluation, and the extent of participation. Contributors may include suppliers, end users, service providers, employees or the general public.[15] In the component of communication and collaboration and the criteria of the proposed model the study was approved.

In examining the concept of HPH development, many studies have emphasized organizational change and have identified it as the key to moving towards HPH deployment.[16,17] Research in Taiwan on 52 hospitals showed that HPH programs will have a positive impact on hospitals if organizational changes in hospital capacity building are addressed to promote health.[18,19] Therefore, structural dimension evaluation criteria in this study include two aspects of organizational development: staffing, HPH structures, and hospital infrastructure development with physical and equipment infrastructure training and patient upgrading of staff amenities and training infrastructure, empowerment. And the promotion of staff and community health was determined.

One of the reasons for the lack of implementation and implementation of HPH is the lack of a comprehensive organizational structure. A structure that can integrate with quality management and implement quality in health services.[7] A separate and appropriate organizational structure is needed to implement HPH. A structure that includes defined budgets and resources, trained staff, policies and communications.[20]

The process criteria and indicators that have been taken into consideration in the proposed model of this study are: management policy; resource planning; patient evaluation and interventions and healthy human capital.

Based on the results of the studies, the two main strategies proposed for the deployment of HPH include: formulating financial management and budgeting policies and strategies on how to allocate resources to local communities and NGOs to address budget shortages and the hospital should allocate funds for training and promotion programs. Health.[17, 21]

Lee et al. (2014) results of a survey of 52 hospitals in Taiwan, on the support of leaders, the support from leaders, expression of health promotion goals and missions, government budget support,

ISSN: 2233-7857 IJFGCN

establishment of a specialized health promotion committee, health promotion policy and resources, Lack of health promotion health coverage, inconsistent government policies on health promotion and resistance emphasized change in hospitals.[18] The results of the study by Lin et al. (2010) show that a lack of understanding of the concept of HPH, inadequate funding, lack of time and manpower in health promotion are very effective in the HPH program and are obstacles to implementing health promotion programs.[16]

Engaging the community and hospital external environment is an important factor in HPH's success, and in a study in Taiwan (2014) it also identified insufficient support for hospital external environment and inadequate leadership as barriers to HPH implementation.[7] In order to implement and institutionalize HPH programs for patients, their families, staff, and the community as a day-to-day activity of the hospital, the collaborative and supportive role of hospital leaders in implementing HPH processes is essential.[22]

The importance of the role of patients, staff, community and stakeholders in the research of Yaghoubi et al., [23] Yaghoubi et al., [22] Lee et al., [18] and Johnson et al., [21] has also been emphasized Confirming this, we can point to the Rudolfstiftung Hospital, which has been successful in HPH programs and has received the support of managers and staff.[24]

The results of the review studies by Yaghoubi et al., [23] Afshari et al., [25] Azarnoush et al., [26] Lee et al., [18] indicate that the issue of Tran's boundary health promotion and its institutionalization and development in a complex hospital organization need to be addressed. Collaboration, coordination, and interaction with all stakeholders (internal and external) have been addressed by most studies.

Other research suggests that for the implementation of health promotion programs, hospitals need to apply optimal management, sharing, and utilization of resources, and collaborate with social organizations supporting hospital management as a key to improving hospital health.[22,27] The results in the proposed model of our study also focus on patient evaluation and patient interventions, criteria for treatment protocols, proper nutrition of patients, psychiatric counseling services, patient health education and promotion program, access to patient records, and patient safety promotion programs. Health promotion hospital evaluation was approved by service providers in hospitals covered by the Social Security Organization.

According to the results of Naderi et al. intervention study, the impact of establishing standards of health promoting hospitals on hospital indices has led to the improvement of a number of indicators such as the success of positive cardiopulmonary resuscitation.[28]

Various studies have demonstrated the link between education and health promotion. This underlying factor has been emphasized in empowering patients, staff, and the community to deploy and develop HPH in the form of assessing patients' needs for diagnostic groups, providing clear and appropriate information to patients, monitoring post-discharge care and rehabilitation.[8, 23, 27, 29]

One of the important aspects of the process evaluation dimension in the proposed model of the present study is healthy human capital in the hospital. Skills training for all staff based on needs assessment, staff participation through the feedback system, staff encouragement and support system, attention to welfare, promoting a healthier lifestyle, occupational disease management, community empowerment and community health professionals in the HP field are also among the factors. It is effective in deploying and developing HPHs, which were later validated by process experts in the Social Security Organization health system.[12]

Access to services for patients, staff and the community is one of the factors highlighted in various HPH studies. Access to the concept of removing economic, systemic, social, cultural and behavioral barriers to access to health services. Desirable access to health services means the provision of "the right services at the right time and in the right place." Access to health resources has also been highlighted as one of the indicators of public health and HP. To provide these services, a structure such as a prevention clinic or a health promotion room in the clinical departments is needed. In this study the necessary criteria were proposed and validated.[30]

ISSN: 2233-7857 IJFGCN

The results of the health promotion hospital evaluation criteria have been consistent with the outcome of the HPH standards in terms of patients, organization / management and community.[9] The results of the process dimensions of this study were also confirmed in the four axes of promoting patient health, staff, community and organizational leadership in the proposed model.

The results of the health promotion hospital evaluation criteria have been consistent with the outcome of HPH standards in terms of patients, organization / management and community.[9] In general, the goal is to establish standards of health promoting hospitals to improve the quality of health care, increase patient satisfaction and their affiliates, improve the working space of medical centers and increase hospital staff satisfaction and strive to improve hospital staff performance and hospital performance.[6] The results of the process dimensions of the study were also confirmed in the four axes of promoting patient health, staffing, community and organizational leadership in the proposed model.

The concept of health promotion is an important quality issue for improving health in all aspects, maintaining and promoting quality of life.[31, 32] The results of this study also included patient quality of life, staff and community health-related quality of life improvement measures in the Health Promotion Hospital model.

Patient satisfaction is one of the important indicators of quality and effectiveness of hospital services. Receiving feedback from patients as clients of health care organizations provides useful data for health care managers to refine their work structures and processes to achieve better results. Satisfied customers are loyal to the organization and have an effective role in introducing the organization to others; therefore, patient satisfaction was suggested as one of the evaluation criteria of this study's model.[33] Evaluation of health promotion activities is a complex and multidimensional concept with many determinants that have a significant degree of impact on the cultural, economic and social conditions of the target community that constitutes one's lifestyle. The results of this study can contribute to the establishment of a health promotion hospital and an efficient evaluation system of hospital centers in the social security organization and as a valid tool in the modification of audit, evaluation, monitoring, policy making, quality of service evaluation, health promotion of hospital staff and Health promotion interventions should be used in the community.

5. Conclusions

Evaluation is recognized as an integral part of all health promotion programs. Health promotion is the new mission of hospitals and the mission of health promotion hospitals is to change treatment-centered attitude to health-based attitude. The proposed model of health promotion hospital evaluation in this study, which operates within the framework of health promotion hospitals network, includes the structural, process and personal, social and social dimensions of health for patients, staff and society. HPH Evaluation Model This study can help establish a health promotion hospital and their efficient evaluation system. This model is a valid tool in modifying audit, evaluation, monitoring, policy making, quality of service evaluation, staff health promotion and community health interventions, and assisting health system policymakers.

References

1. Ziglio E, Simpson S, Tsouros A. Health promotion and health systems: some unfinished business. Health Promote Int 2011; 26(2):216-25.
2. Groene O, Garcia-Barbero M, Health promotion in hospitals: evidence and quality management. Copenhagen: WHO Regional Office for Europe; 2005.
3. Potvin L, Jones CM. Twenty-five years after the Ottawa Charter: the critical role of health promotion for public health. Canadian Public Health 2011; 102(4):244-248.
4. Lee CB, Chen MS, Powell MJ, Chu CM. Organizational change to health promoting hospitals: a review of the literature. Springer Sci Rev 2013; 1(1-2):13-23.
5. Link BG, Phelan JC. McKeown and the idea that social conditions are fundamental causes of disease. American Public Health 2002; 92(5):730-2.

ISSN: 2233-7857 IJFGCN

6. Groene O, Jorgensen SJ, Fugleholm AM, Muller L, Garcia-Barbero M. Standards for health promotion in hospitals: development and pilot test in nine European countries. Int J Health Care Qual Assur. 2005; 18(4):300-7.
7. Dietscher C. How can the functioning and effectiveness of networks in the settings approach of health promotion be understood, achieved and researched? Health Promote Int 2013; 32(1):139-148.
8. Yaghoubi MJ, Bahadori MK. Designing a health promoting hospital: case study Isfahan University of medical sciences. Health INF Manage 2014; 10(7):1022.
9. World Health Organization. Standards for health promotion in hospitals (No. EUR/03/5038045-S). Copenhagen: WHO Regional Office for Europe; 2004.
10. Downie RS, Tannahill C &Tannahill A. Health promotion. Models and values. Oxford, Oxford University Press; 1996.
11. Maleki MR, Delgoshaie B, Nasiripour AA, Yaghoubi M. A comparative study on the European pilot hospitals in the health promoting hospitals project. Director General 2012; 9(2):245-254.
12. Zarei F, Taghdisi MH, Keshavarz Mohamadi N, Tehrani H. Health promoting hospital: a pilot study in Bo-Ali hospital, Qazvin, Iran. J Fasa Univ Med Sci 2013; 3(3):215-223.
13. Pelikan JM, Dietscher C, Schmied H, Röthlin F. A model and selected results from an evaluation study on the International HPH Network (PRICES-HPH). Clin Health Promote 2011; 1(1):9-15.
14. Dietscher C, Schmied H, Röthlin F, Pelikan JM. Project on a retrospective, internationally comparative evaluation study of HPH (PRICES–HPH): Characteristics of national/regional networks of the International Network of Health Promoting Hospitals (HPH). The PRICES–HPH Network Survey. Report 2011.
15. Hoyle RH, editor. Handbook of structural equation modeling. Guilford press; 2012.
16. Kozica SL, Lombard CB, Hider K, Harrison CL, Teede HJ. Developing comprehensive health promotion evaluations: a methodological review. MOJ Public Health 2015; 2(1):00007.
17. Guo XH, Tian XY, Pan YS, Yang XH, Wu SY, Wang W, Lin V. Managerial attitudes on the development of health promoting hospitals in Beijing. Health Promote In 2007; 22(3):182-190.
18. Lee CB, Chen MS, Chien SH, Pelikan JM, Wang YW, Chu CM. Strengthening health promotion in hospitals with capacity building: a Taiwanese case study. Health Promote Int 2014; 30(3):625-636.
19. Lee CB, Chen MS, Wang YW. Barriers to and facilitators of the implementation of health promoting hospitals in Taiwan: a top-down movement in need of ground support. Int J Health Plan Manage 2014; 29(2):197-213.
20. Röthlin F, Schmied H, Dietscher C. Organizational capacities for health promotion implementation: results from an international hospital study. Health Promote Int 2013; 30(2):369-379.
21. Johnson A, Nolan J. Health promoting hospitals: gaining an understanding about collaboration. Aust J Prim Health 2004; 10(2):51-60.
22. Yaghoubi M, Javadi M, Bahadori M, Ravangard R. Health promoting hospitals model in Iran. Iran J Public Health 2016; 45(3):362-369.
23. Yaghoubi M, Karamali M, Bahadori M. Effective factors in implementation and development of health promoting hospitals: a systematic review. Health Promote Int 2019; 34(4):811-823.
24. Johansson H, Weinehall L, Emmelin M. "if we only got a chance." Barriers to and possibilities for a more health-promoting health service. J Multidiscip Health. 2009; 22(3):1-9.
25. Afshari A, Mostafavi F, Keshavarz M, Ahmadi-Ghahnaviye L, Piruzi M, Moazam E, Hejab K, Eslami AA. Health promoting hospitals: a study on educational hospitals of Isfahan, Iran. Health Promote Perspect 2016; 6(1):23-30.
26. Azarnoosh M, Amiri M, Riahi L, Khosravi A, Naderi S. Health promoting hospitals: A case study in Iran. J Res Med Sci 2016; 3(3):37-44.
27. Manurunga S, Suriah M, Ngatiminc R. Implementation of Health Promotion Program in General Hospital of Labuang Baji Makassar, 2015. Int J Sci: Basic Appl Res 2015; 23(1):80-87.
28. Naderi S, Amiri M, Riahi L. Effect of Health Promoting Hospitals' standards on hospital performance a case study in Fatemieh Hospital in Shahrod. Hospital 2015; 14:101–109.

ISSN: 2233-7857 IJFGCN

29. Bahadori M, Sanaeinasab H, Ghanei M, Tavana AM, Ravangard R, Karamali M. The social determinants of health (SDH) in Iran: a systematic review article. Iran J Public Health 2015; 44(6):728-41.
30. Yaghoubi, M., Maleki, M. R. and Javadi, M. Factors Affecting the Establishment of Health Promoting Hospital (HPH) program in medical universities hospitals in, Daneshvar. Medicine 2013; 21:107–113.
31. Dudeja P, Singh A. A longitudinal study to assess the role of sanitary inspections in improving the hygiene and food safety of eating establishments in a tertiary care hospital of North India. Indian J Community Med 2017; 42(4):230-233.
32. Kurnat-Thoma E, El-Banna M, Oakcrum M, Tyroler J. Nurses' health promoting lifestyle behaviors in a community hospital. Appl Nurse Res 2017; 35:77-81.
33. Mosadeghrad AM, Akbari-sari A, Yousefinezhadi T. Evaluation of hospital accreditation standards. RJMS

ISSN: 2233-7857 IJFGCN