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# Effective factors in implementation and development of health promoting hospitals: a systematic review

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## Summary

One of the requirements for the implementation of Health Promoting Hospitals (HPHs) is comprehensive integration of health promotion (HP) activities and programs in hospital quality management system. Therefore, this systematic review was conducted utilizing a comprehensive European Foundation for Quality Management (EFQM) model to determine appropriate criteria for the implementation and development of HPH. This systematic review considered the published literature on factors affecting the implementation and development of HPH during 1997–2016. Twenty-three articles were finalized for further investigation. EFQM was used as guidance for the investigation and analysis of studies conducted in relation to HPH. Regarding our results, real need analysis and accurate assessment of needs, attention to infrastructure factors, HPH standardization, promotion of self-care, knowledge enhancement and patient and staff skills training, improvement of quality indicators, continuous participation of HPH committee, designing HP interventions, paying attention to clinical outcome, equity in health, promoting a healthy work environment, continuity and cooperation etc. are among the factors contributing to HPH implementation and development. In case of having high capacity for successful HPH implementation, comprehensive HPH capacity building and resource development are not possible unless they are performed based on one of the framework emphasized by World Health Organization (WHO) such as EFQM.

**Key words:** health promotion, health promoting hospitals, implementation, development, systematic review

## INTRODUCTION

Today, due to constant changes in the internal and external environment of the hospital, the need for change and revision of hospital organizational processes, and consideration of health promotion (HP) along with therapeutic services, the new concept of Health Promoting Hospital (HPH) has emerged and developed (Heydarnia *et al.*, 2009). This approach toward changing hospitals

and providing HP services was identified for the first time in five action areas in Ottawa Charter. One of these five action areas was re-orienting health care services toward prevention of illness and promotion of health (World Health Organization, 1986). There after, other statements such as ‘the Ljubljana Charter on Reforming Health Care’, ‘the Budapest Declaration on Health Promotion Hospitals’ and ‘the Standards for Health

Promotion in Hospitals' stressed the importance of HPH and made its concept and framework more comprehensive (World Health Organization, 1991, 1996, 2004). In short, HPH aims to improve the quality of health care and hospital setting and increase patients, relatives and employees' satisfaction (Aujoulat *et al.*, 2001). Health improvement goal in HPH has been defined in four dimensions, including patients, staff, the organization and environment and communities (Yaghoubi *et al.*, 2013; Yaghoubi and Bahadori, 2014).

To reach this goal, the World Health Organization initiated International Network of HPHs and Health Services (HPH-Network) in 1990 with the aim of reorienting hospitals as HP organizations (World Health Organization, 2007). Nowadays, there are around 40 such networks, and globally around 1000 organizations (Dietscher, 2013).

According to the WHO, the most important task of this network is to implement these values, standards, health care concept and HPH in organizational structure and culture of hospital (Groene and Jorgensen, 2005). However, research has shown that the concepts of implementation and development do not cover the entire structure and culture of hospital (Johnson and Baum, 2001; Johansson *et al.*, 2010). Most programs are limited to education, behavior change in people and disease screening and do not cover the four dimensions of HPH (Yaghoubi and Bahadori 2014). To understand and develop the concept of HPH throughout the hospital, patients, their family members and health care providers need to be involved in the decision making and delivery process (Yaghoubi and Bahadori, 2014; Yaghoubi, *et al.*, 2016)

A research in Taiwan on 52 hospitals showed that implementing organizational changes and developing HPH programs can result in positive effects on hospitals (Lee *et al.*, 2014a) The other HP implementation capacity in hospital is systematic integration of HP in the present quality management system of hospital. This issue has been focused in HPH-Network's own quality self-assessment tool (Groene, 2006). Considering the prominence of this issue, what are the problems against non-implementation of HPH and which interventions should be proceeded to overcome these problems? One of the reasons for non-implementation of HPH is lack of a comprehensive organizational structure. A structure that can be integrated with quality management and can implement quality in the health services (World Health Organization, 2001). To implement HPH, a specialized and established organizational structure is needed. A structure that includes funding and resources, trained staff and formulated policies and top-down as well as

bottom-up communications (Röthlin *et al.*, 2015) Other researchers believed that this structure should fulfill the values of HPH which comprises the rights of patient, staff, health equity and accountability (Naderi *et al.*, 2015). The question that arises here is what kind of structure can integrate HP with quality in hospitals and provide the organizational capacities that are required for establishment and development of HPH? Recent studies have focused on the role and importance of appropriate organizational structures to reorient hospital services toward HP (Maleki *et al.*, 2012a,b; Yaghoubi *et al.*, 2016) .WHO has responded to this question and proposed two models; namely, the addition model and the integration model (Groene and Garcia-Barbero, 2005). One of the suggested models is European Foundation Quality Management (EFQM) Model (Pelikan *et al.*, 2001; Gené-Badia *et al.*, 2001; Yousefinezhadi *et al.*, 2015). This model helps organizations identify the quality management gap and develop the organization (Gené-Badia *et al.*, 2001).This model has nine criteria, of which five criteria are related to Enablers (leadership, policy and strategy, people, partnership and resources and processes) and four criteria are related to Results (people results, customer results, society results and key performance results (Yousefinezhadi *et al.*, 2015). Enabler criteria comprise activities that the organization must do and Result criteria are goals that the organization must achieve (Rahati *et al.*, 2016).Considering the introduction of EFQM model by the WHO and the importance of proper structure for improving the quality of hospitals toward HP, this systematic review aimed to determine the key criteria for the establishment and development of HPH based on EFQM model's nine criteria.

## METHODS

This systematic review was conducted considering the published papers on factors affecting the implementation and development of HPH. In order to meet the required standards in the methodology of this review, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses protocol was used. Based on this standard protocol, the authors examined 27 items.

### Data sources/search strategy

Initially after referring to documents and library resources along with resorting to the WHO database, the literature was investigated. The process of searching for papers was proceeded in Persian databases, including Scientific Information Database (SID), Medical Sciences

**Table 1:** Finding of papers search process

Keywords	Database		Frequency(n)	Initial Selected papers	Finalized papers
HP	International databases	Scopus	69	40	16
HPH		Pub Med	16		
Facilitators of HPH		Science Direct	4		
Effectiveness of HPH		Web of Science	25		
HPH development		Google Scholar	34		
Implementation of HPH	Persian databases	SID	15	12	7
		Iran Medex	3		
		Magiran	2		

database (IranMedex), Iranian Research Institute for Information Science and Technology, Information Bank of Country (Magiran) along with databases of PubMed, Ovid, Science Direct, Cochrane Library, Scopus and Web of Science using Google Scholar.

The main key words used for searching published articles were as follows: HP, HPH, Facilitators of HPH, Effectiveness of HPH, HPH development and Implementation of HPH. Searching was limited to papers published from January 1997 up to February 2017. Table 1 shows the process of articles searching.

### Inclusion and exclusion criteria

Because of the variety in HPH implementation methods in hospitals worldwide, Excellence Model (EFQM-WHO) (Groene and Garcia-Barbero, 2005), was used as a guide for evaluating the studies on HPH (Figure 1).

#### Inclusion criteria

Published articles in journals in Persian or English, original or review articles and abstracts of articles indexed in Persian or English in international citation databases were included.

#### Exclusion criteria

Letters to editor or articles published in invalid magazines; studies on HP conducted out of hospitals, studies on the impact of HP on a disease or a particular group (patients, staff etc.) and theoretical papers that only concluded or recommended the implementation and development of HPH were excluded.

#### Study selection

Searching of studies was carried out using keywords and search strategies and 168 papers were obtained which were published up to 19 February 2017 (Table 1). Considering inclusion criteria, 52 papers (12 papers in Persian and 40 papers in English) were selected.

The title and abstract of all papers in the indexes were systematically studied considering their relation to the issue and observing inclusion and exclusion criteria.

Two expert reviewers (HP and Healthcare Services Management) reviewed the abstracts and full text of all selected articles and finally 20 papers were chosen. Using the references of selected papers, 3 related papers were also considered for further investigation. In total, 23 papers were considered. Figure 2 illustrates the steps for selecting the articles.

### Data extraction, variables and data analysis

For studying the selected papers, 'data extraction form' was designed by the researchers. In this step, two experts selected the content and extracted the data. The main characteristics of the papers and their results were evaluated according to the following variables.

#### Type of criterion/indicator

This classification was carried out based on EFQM conceptual model that contains nine criteria in both dimension of Enablers and Results (Figure 1).

#### Study design type

The classification of the studies was as follows: case-control studies, case studies, descriptive studies, analytical studies, qualitative studies, descriptive-analytical, review and mixed methods.

#### The targeted population

The type of information resources and participants, including patients, staff, policy makers, society people, HPH experts hospitals under study and text documents were evaluated.

#### The study approach

This variable related to the approach of conducted studies in order to identify and explain the factors affecting

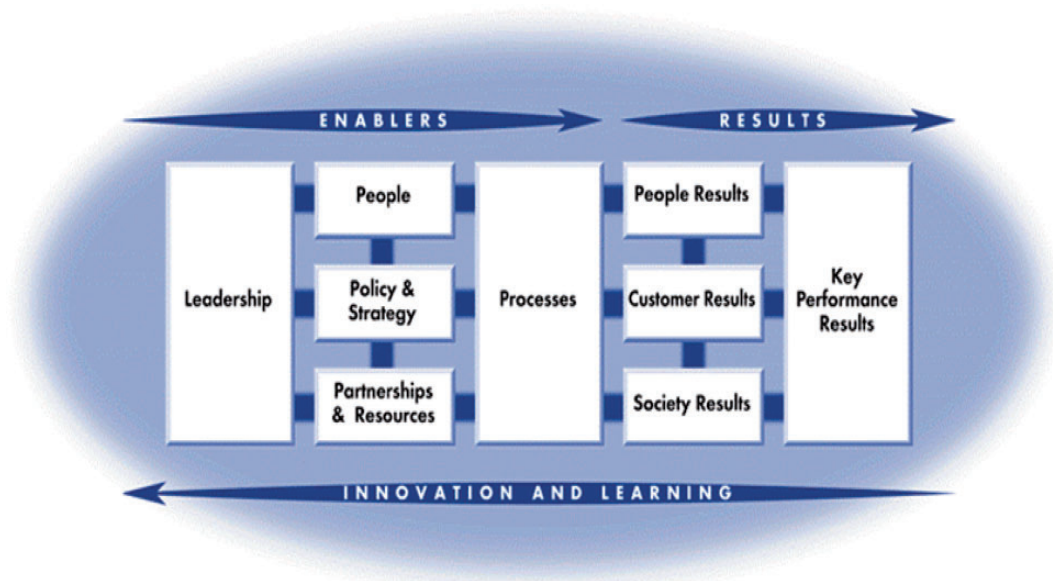


Fig. 1: EFQM Model (Pelikan, 2007).

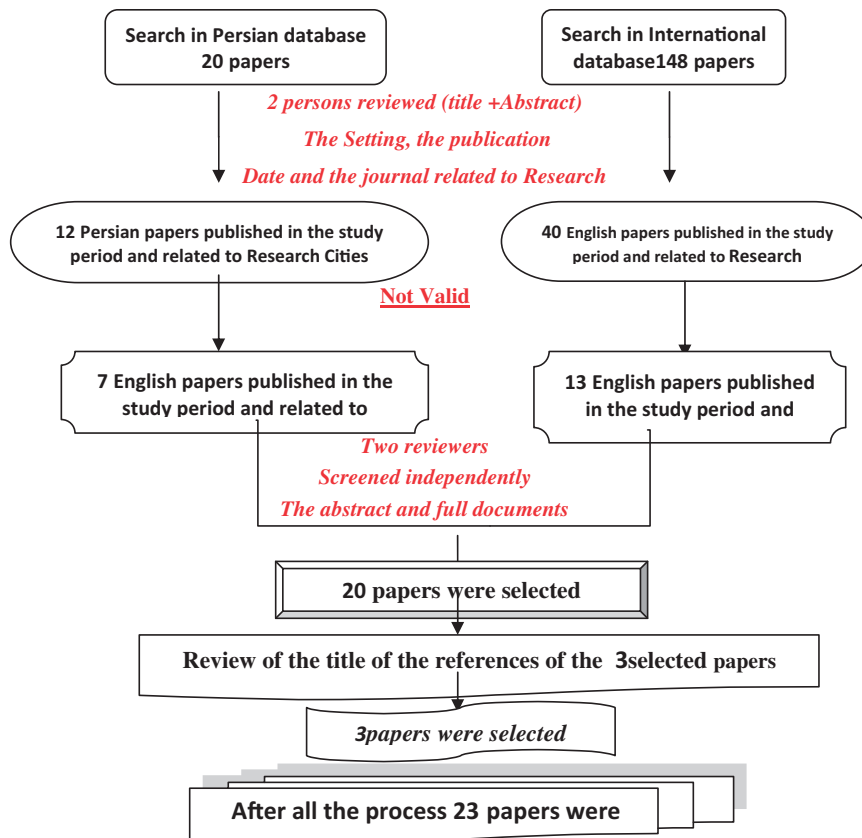


Fig. 2: Literature review and papers selection flow chart.

the development and implementation of HPH, investigate the relationship between the implementation and development of HPH, describe and analyze the status quo factors affecting the establishment and development of HPH.

### The language of the study

The variable that represented the language of the article, including Persian (the authors' mother tongue) and English.

### The year of publication

Including three-time spans: 1997–2004, 2005–2009 and 2010 up to end of 2016.

## RESULTS

In this systematic review, 23 papers were selected. The main characteristics of papers are presented in Tables 2–4 based on the study purposes and variables. The research on HPH has increased significantly over the past 10 years. Three papers (13%) between 2000 and 2004 and 16 papers (70%) between 2010 and 2016 were published indicating a growing trend. Among these papers, 8 articles (35%) were reviews, 8 papers (35%) were descriptive-analytic studies, 3 papers (13%) were case studies, 1 paper (5.4%) was case-control study, 1 paper (4.5%) was qualitative study, 1 paper (4.5%) was analytical study, and 1 paper (4.5%) was Mixed methods. More than half of the studies (57%) focused on identifying and explaining HPH implementation factors. Four papers (17%) described and analyzed the achievements and challenges for the implementation and development of HPH, 4 papers (17%) considered HPH standards and 2 papers (9%) evaluated HPH interventions. Table 2 shows the diversity in the studies.

Table 3 summarizes the results of the reviewed papers concerning factors affecting HPH implementation and development. Based on the aims of each study, factors were evaluated in terms of HPH criteria and indicators as well as EFQM conceptual model and with respect to two dimensions of Results and Process (Figure 1) In addition to HPH criteria, other key factors were considered in the Other Factors Column. The results on the evaluation of the reviewed articles showed that most studies considered criteria and indicators for HPH implementation and development.

Enabler factors affecting the implementation and development of HPH have attracted the attention of researchers and policy makers.

Table 4 summarizes results of review studies in this field. Previous literature represents the creation of attitudes in leaders, policy making, compilation of policy and strategies for HPH development in micro- and macroplanning, development of knowledge and human resource skills, participation of society, institutions and stakeholders in HP programs, enhancement of internal and external communications, networking, resource absorption and management, updating care process and treatment protocols, creating HP organizational structure in hospital, etc. as implementation and development of HP and enabling package for HP in hospital.

According to the Excellence Model (EFQM-WHO) (Figure 1), the factors influencing HPH implementation and development in dimension of Results include: patients (customer results), staff, society and key performance. The results review showed that real need analysis and accurate assessment of needs, attention to infrastructure factors, HPH standardization, promotion of self-care, knowledge enhancement and patient and staff skills training, improvement of quality indicators; structural development for continuous HPH activities, designing HP interventions, paying attention to clinical outcome, equity in health, promoting a healthy work environment, continuity and cooperation etc.

## DISCUSSION

This study examined 23 scientific published papers and explored the status of HPH implementation and development in these articles. The conceptual framework suggested by the WHO was used to achieve the aim of this study (Whitehead, 2004; Groene *et al.*, 2009; Azarnooosh *et al.*, 2016). The results of this study showed that more than half of the studies (57%) investigated these factors and a limited number of studies (two articles) considered the effectiveness of interventions on determined factors. Like other studies, there was variation in outlining studies in the HPH field (Mchugh *et al.*, 2010). Concerning the findings, most of the studies (39%) were reviews and 30% were cross-sectional and descriptive. The EFQM Model is based on nine criteria, including Enablers and Results criteria. These criteria comprise the constituents and achievements of an organization and interact effectively with each other (Sadeh and Arumugam, 2010). The factors influencing the development and establishment of HPH in this article were also based on the Enablers and Results criteria.

Findings revealed that there were some problems in HPH implementation such as limited understanding of HPH concept as well as lack of financial resources, professional skills and enough time in HP programs

**Table 2:** Descriptive characteristics of the 23 considered papers that were classified by study variables

Variables		Total (n=23)	
		n	%
Study design	Case-control	1	4.5%
	Case study	3	13%
	Qualitative	1	4.5%
	Review (Descriptive / Systematic)	8	35%
	Descriptive-analytical	8	35%
	Analytical	1	4.5%
	Mixed methods	1	4.5%
Target population	Patient/ Staff/ society/Organization	5	22%
	Staff	2	9%
	Patient /Staff	2	9%
	Policy maker	1	4%
	Expert (professionals)HPH	5	22%
	Hospitals	5	22%
	Documents (Text, Book, Paper,..)	3	12%
Language	Persian	7	30%
	English	16	70%
Year of publication	1997–2004	3	13%
	2005–2009	4	17%
	2010–2016	16	70%
Focus	Factor in Implementation and development HPH	13	57%
	Achievements and Barriers HPH	4	17%
	HPH Standards	4	17%
	Effectiveness, Effective or Intervention HPH	2	9%

(Lin and Lin, 2011). Regarding first criterion that is Leadership, one of the problems concerned managerial staff's attitudes toward HPH. In order to be able to initiate and implement HPH program for patients, their families, staff and the community as a hospital everyday activity, the participation and support of hospital leaders seems essential in the HPH implementation process (Guo *et al.*, 2007; Yaghoubi *et al.*, 2016). The importance of this role is also emphasized in other studies (Polluste *et al.*, 2006). The hospital leaders have the best opportunity for the implementation of HPH; however, it is largely ignored by the HPH management team (Polluste *et al.*, 2006, Guo *et al.*, 2007). In similar vein, we can refer to Rudolfstiftung Hospital that was successful in HPH programs implementation and enjoyed the support of managers and owners (Johnson and Baum, 2001). Establishing a comprehensive HPH approach (project management and organizational development) requires leadership presence and support (Pelikan *et al.*, 2006). For various reasons, this support is weak. One reason for the managers' unwillingness to implement HP programs is that these programs are not immediately profitable; therefore, management staff does not prioritize these programs in their operating programs of the hospital.

Regarding policy and strategy criteria, it can be said that in addition to leaders' support for the development of HPH, organizational support through developing HP strategies, and funding are also essential (Johnson and Baum, 2001; Johnson and Nolan, 2004; Guo *et al.*, 2007; Pelikan, 2007). HPH manual and self-assessment form of WHO also emphasizes the key role of HPH strategy development (Groene, 2006). To create a comprehensive HPH approach, hospitals should integrate goals, values and principles of HP in the vision and mission statement (Pelikan, 2007). These factors are important in policy and strategy criteria. Two main strategies are recommended for HPH implementation; namely, the formulation of financial management and budgeting policy and allocation of resources from local communities and NGOs to solve lack of funds (Auamkul *et al.*, 1999). Certainly, after the formulation of HP strategies in the hospital, strategies must be developed and implemented using the Integration Model. A study in Taiwan investigated 52 HPHs and emphasized making policy for establishing HPH which includes, HP expression in goals and mission, funding support by the government, the creation of specialized HP committees, HP resources and policy, lack of HP health insurance coverage,

**Table 3:** Summary of factors affecting the implementation and development of HPH

Citation	Factors affecting in implementation and development HPH									
	Leader Ship	Policy and Strategy	People	Partner ships and Resources	Processes	Patient Results	Staff Results	Society Results	Key Performance	Other Factors
Heydarnia <i>et al.</i> (2009)	*	*	*	*		*			*	*
Didarloo <i>et al.</i> (2009)	*	*		*	*	*	*	*	*	*
Keshavrz <i>et al.</i> (2013)		*	*	*	*	*	*	*	*	*
Zarei <i>et al.</i> (2013)	*	*		*		*	*	*	*	*
Naderi <i>et al.</i> (2015)	*	*	*	*	*	*	*	*	*	*
Yaghoubi <i>et al.</i> (2013)		*	*	*		*			*	*
Estebsari <i>et al.</i> (2016)		*	*	*	*	*	*	*	*	
Pelikan <i>et al.</i> (2001)		*		*	*	*		*		
Guo <i>et al.</i> (2007)	*	*	*					*		
Lee <i>et al.</i> (2013)		*	*	*				*	*	
Maleki <i>et al.</i> (2012a,b)			*	*		*	*	*		
Afshari <i>et al.</i> (2016)	*	*	*		*	*		*		
Yaghoubi <i>et al.</i> (2016)		*	*	*				*	*	
Lee <i>et al.</i> (2012, 2014b)		*	*	*		*		*		*
Auamkul <i>et al.</i> (1999)		*	*	*		*		*		
Lee <i>et al.</i> (2014a)	*	*	*		*	*		*		
Mchugh <i>et al.</i> (2010)		*	*	*	*	*	*	*		*
Tountas <i>et al.</i> (2004)	*		*	*	*	*		*		
Lee <i>et al.</i> (2014b)		*	*		*		*	*	*	
Groene <i>et al.</i> (2010)		*	*		*	*	*	*		*
Rothlin <i>et al.</i> (2013)		*	*		*	*	*	*		*
Groene (2006)	*	*	*	*	*	*	*	*		
Rothlin (2013)		*	*	*	*					

inconsistent government policies regarding HP and resistance to change in hospitals (Lee *et al.*, 2014). In the comprehensive HPH approach, the concept of HP should be mentioned in the hospitals' mission statements. In addition, hospitals should develop HP strategic policy documents in which the goals, targets and HP principles and core strategies are fully explained (Maleki *et al.*, 2012a,b).

The other criterion is human resources (people). Engaging and involving staff in HP programs is a key factor to have a HPH comprehensive program (Pelikan *et al.*, 2006). Hospital should assign skilled and specific personnel for HP programs, train specialized personnel to implement HPH programs, and examine the HP programs to make assure that the programs are well done (Johnson and Nolan, 2004; Pelikan, 2012). Professional HP staff should be regularly trained, especially in communication and educational skills (Mafwiri *et al.*, 2017). Engaging hospital employees in the process of policy and audit is also emphasized in the WHO HPH Manual for implementation of HP in hospitals. This engagement increases the employees' satisfaction and motivation. Lack of motivation is one of the main causes of

employee non-engagement in HPH programs (Tountas *et al.*, 2004). Paying attention to enablement and empowerment of staff is also an important factor in the development of HPH. Several studies have proven the link between education and HP (Sánchez *et al.* 2006).

This fundamental factor for empowering patients, staff and community in order to establish and develop HPH is emphasized in all examined papers in terms of assessing the needs of patients and diagnostic groups, giving clear and appropriate information to patients, providing FOLLOW UP health care and rehabilitation after discharging (Naderi *et al.*, 2015). Partnerships and resources criterion is another Enabler criterion that generally refers to long-term relationship with supplies, supplier support from products and decreased consumption of as well as desirable use of financial and physical resources (Santos-Vijande and Alvarez-Gonzalez, 2007). Lin showed that lack of true understanding of HPH concept, inadequate funding and lack of manpower, time and skills in the field of HP programs are very effective and can be barriers to HP programs (Lin and Lin, 2011). Johnson and Nolan stressed on the development and enhancement of partnerships, cooperation between hospitals and other organizations providing health services,



**Table 4:** Summary of Enabler and Result factors affecting the implementation and development of HPH

Citations	Summary Results of 'Enabler' factors	Summary Results of 'Results' factors
Heydarnia <i>et al.</i> (2009)	Urgency HP services, establishment of HPH committee, development of preventive clinic, the construction a HP room in clinical sections; the knowledge enhancement of general practitioners, nurses and clinical and social medicine specialists	Precise definition of HPH services in clinical, outpatient and emergency departments; funding; paying attention to the patients' demand for services; providing services in all public, private, educational etc. hospitals
Didarloo <i>et al.</i> (2009)	Creating attitudes and motivations in executives and clarifying HPH's social impact; provision of HPH resources by leaders; HP's modern policy-making; continuous training of HPH for staff and managers; engaging participation of society and institutions in HP programs.	Attention to the infrastructure factors(upstream): political support; allocation of resources; infrastructure development; positive attitude towards health care experts and policy makers; funding for health education, HP and HPH announcement in publications; increasing patient and staff's awareness
Keshavrz <i>et al.</i> (2013)	The implementation of laws, increase of human incentives and managers' flexibility, reinforcement of external and internal organizational communications, control of hospital infection	Providing educational and counseling services to patients and fellows, skills training to physicians and nurses concerning patient care, reverencing clients; creating a healthy physical and mental environment for the patient and staff
Zarei <i>et al.</i> (2013)	Proficiency of department staff, the active participation of health committees, employee participation, enhancement of staff's communication skills, human resources development with TQM, patient education	HBM development, skills training for enhancing patient and staff relationship, improving quality using TQM, considering environmental health and nutrition standards
Naderi <i>et al.</i> (2015)	HPH announcing, compilation of HPH policies in hospital sections, training HPH standards, safety, occupational diseases, health-related occupational style, increase of welfare facilities and updating care process and treatment protocols	HP training to patients, satisfaction, needs assessment of specific groups and performing HPH in collaboration with the hospital quality improvement team
Yaghoubi <i>et al.</i> (2013)	Strategic leadership; HP in the Mission statement; policy making, management policy, action plan in accordance with needs; participation of stakeholder, networking; fundraising; evaluating the processes as well as HP results and feedback	Assessing the status quo, society needs and values; designing the HPH index; defining and implementing the HPH project techniques; attracting public attention; presenting and publishing the project progress, business meetings, problem analysis
Estebesari <i>et al.</i> (2016)	Compilation of the HPH strategic plan; developing HPH management structure and committee; training and practicing creative resources; communicating with society stakeholders; holistic health prospective in processes.	Patient's satisfaction, a system for staff recommendations; promoting quality of life in the society; focusing on HP interventions indicators; considering clinical outcomes; justice and equity in health; promoting a healthy work environment; continuity and cooperation.
Pelikan <i>et al.</i> (2001)	Codifying HP strategies for development of healthy hospital; cooperating partners (healthy alliance) to implement HP policies and strategies, improving the work process for reducing risk and improving the health of employees; re-orienting education and research towards HPH; empowering patients in their treatment and achieving their health (a co-producer).	Collaboration with schools and large markets to build healthy nutrition; collaboration with other companies and institutions in the society for HPH programs, <b>Hospital as an Advocate</b> and Change Agent.
Guo <i>et al.</i> (2007)	Allocating specific resources, budgets to HPH programs; establishing HPH committee; regulating HPH plan annually; training staff in health concepts; health programs for employees.	Society-need assessment; developing educational programs for the society; disseminating health information and preventing diseases through media.
Lee <i>et al.</i> (2013)	Senior management and support for HP programs; budget allocation; policy development, making available HPH policies and programs; participating and encouraging employees on HPH programs; employees'	Hospital co-operation with other health service providers in the society; regular evaluation of HPH's plans; compilation of HP consequence indicators,

(continued)

**Table 4:** (Continued)

Citations	Summary Results of 'Enabler' factors	Summary Results of 'Results' factors
	freedom of action in the field of HPH programs, establishing HPH committee and specialized teams, integrating the principles and objectives of HPH in Mission and Hospital Prospects, attention to the values and needs of the society.	processes and HP structure and quality; focusing on quality indicators instead of productivity.
Maleki <i>et al.</i> (2012a,b)	Collaboration and coordination of the hospital with other foreign organizations, staff participation in HPH strategies formulation and decision making, training plan for occupational safety and health.	Strengthening society infrastructures to respond to public needs, enabling people in manage their chronic illnesses, improve their life style; enabling health care owners in the area of HP; enabling staff to improve their life styles; collaboration with the society; informing the patient and his relatives about the type of illness, health status and therapeutic measures.
Afshari <i>et al.</i> (2016)	Engaging staff, allocating adequate resources, training HP skills to staff, documenting information related to HPH interventions and plans, mapping, informing and making available HPH policies for employees and the workplace, comprehensive human resources strategy, including HP development and training	Attention to patient's cultural and social backgrounds; assessing the needs of patients in diagnostic groups; providing transparent and appropriate information to patients; follow up and convalescence care after discharging; cooperation and collaboration with community organizations and providers of health services in the community
Yaghoobi <i>et al.</i> (2016)	Establishing strategic leadership, regulating policies, launching and implementing HP, setting up a project team, fundraising to implement HP project, mentioning the concept of HP in the mission and strategic planning.	Epidemiologic evaluation (health issues and community disability patterns); publication and dissemination of plans and HP interventions in international conferences, news and public media; continuous evaluation of HPH programs.
Lee <i>et al.</i> (2012, 2014b)	leaders support, setting up HP mission and strategy, promoting pro-HP activities, in-house structures, HP-inclusive system, participation of organizations, resource management, performance and project, user access to HPH information.	Training and enabling patients; motivating the engagement of staff and organizations in implementing HP programs; pursuing plans; creating a healthy environment for the patient and staff; considering community culture and values and native health policies.
Auamkul <i>et al.</i> (1999)	Establishing nuclear meetings between administrative and technical administrators to support HPH, outlining sponsors and funding sources, regulating rules and policies of HPH, carrying out research and development programs in the field of HPH, ongoing evaluation and review processes.	Holding workshops and creating interactions between selected hospitals to implement HPH programs.
Lee <i>et al.</i> (2014a)	Reviewing the mission and vision of HPH, support administrative and medical department managers, rewarding the staff and sections in the field of HP, setting up the information system for HP activities, providing adequate funding for HP support, need analysis and prioritization regarding HP, incorporating HP services into operational procedures for medical staff.	Determining the frequency of HPH committee holding; evaluating process, impact and outcome of HPH programs using performance indicators.
Mchugh <i>et al.</i> (2010)	Leadership and senior managers support, long-term HP planning, budget improvement, perform pilot of HPH and type 4 hospital, staff education planning, strengthening communications and participation of patients and staff, justice, ad comprehensive support.	Improving HP awareness among patients and staff, promoting the general concepts of HPH, staff shortages, practical frameworks and HPH standards, Quality assurance (QA), partners, health education, resources.

(continued)

**Table 4:** (Continued)

Citations	Summary Results of 'Enabler' factors	Summary Results of 'Results' factors
Tountas <i>et al.</i> (2004)	Training staff in HPH, developing teamwork and partnership, motivating the employees, promoting health work environment, introducing HP concept to day-to-day work.	Improving the overall view concerning the hospital in the community, assessing the quality of the provided HPH services.
Lee <i>et al.</i> (2014)	Senior managers support, allocating funds, integrating HP, teamwork culture and staff participation, providing budget for the projects, interconnection, need analysis, providing documentation and evidence for HPH programs, motivating the staff, employee suitability system.	Participating in international HPH conferences, creating patient-centric culture, continuous evaluation of HP's plans, establishing community health / medicine section, continuous evaluation of HPH quality improvement.
Groene <i>et al.</i> (2010)	Responsiveness, resource management, HP performance improvement and monitoring, access to patient's information and specialist therapeutic procedures for staff such as guidelines and documentation of patient's information and access of partners and stakeholders to HPH.	Enabling patient's HP; participation of social organizations; tracking patient-related HP activities; implementing a healthy environment for the patient and staff; applying new human resources and maintaining experienced and informed HP personnel.
Rothlin <i>et al.</i> (2013)	To implement and develop HP in a hospital should be a structure created using the following approaches: HP routine quality assessment, HPH office, a full-time HPH coordinator and officially documented HP policies, strategies or standards.	Using the capacity of organizations to create an organizational structure in the hospital in line with HP implementation.
Groene (2006)	Access to the hospital policy by all medical personnel and sections, posing HP policy, providing eligible personnel, considering HP in the goals and mission of the hospital, compiling job descriptions in line with the implementation of HPH policy, providing training programs and achieving professional development of human resources, assigning resources for HP programs and practices, providing supportive environment for HP, documenting the progress of HP programs, defining specified budget for provision of HP resources and services.	Providing guidelines for HP patient needs, HP guidelines for specific disease groups, assessing patient's current satisfaction, success in follow-up and rehabilitation of patients, the availability of well-documented guidelines for tracking illness and referral, assessing services provided by staff (concerning HP), having a codified program with peer organizations to provide non-identical services, documental process for the exchange of information between peer organizations.
Rothlin (2013)	Continued support of leaders and managers, HP integration in organizational decision making, strategic management mechanisms, participatory strategic management, indirect governance of HP programs.	

and establishment of relationship between administrative and clinical staff at all organizational levels (Johnson and Nolan, 2004). Cooperation with other partners (healthy alliance) is essential for the realization of policies and strategies in this criteria (Pelikan *et al.*, 2006). Attracting community participation and organizations outside the hospital is an important factor for the success of HPH; so that a study in Taiwan revealed that inadequate support from the external environment of the hospital can be barriers to the implementation of HPH (Pelikan *et al.*, 2006; Lee *et al.*, 2014). According to the results of the aforementioned study, the topic of HP is multi-sectoral and HP institutionalizing and development in a complex organizational structure of hospital which requires cooperation, coordination, and interaction with all stakeholders (internal and external) that is in line with the majority of previous studies.

Other research has indicated that for the implementation of HP programs, hospitals must consider the methods of management, sharing and optimal utilization of resources; and cooperate with other social organization. As mentioned before, one of the barriers against HPH development in hospitals is low profitability and late economic gain of HP activities. Hence, the allocation of resources and budgets to healthcare that has more immediate economic gain attracted more attentions in hospitals.

The explanation of the role of organizations and their scope of activity in policymaking for the development and implementation of HPH was one of the challenges in previous studies. Multi-sectoral studies with the participation of stakeholders are needed to have effective HPH system and beneficial future programs and

strategies. In the Process criterion, the organization tries to change the design and the management and improve the process. In addition, it examines the current behavior and needs of the customer in order to provide products with higher quality (Santos-Vijande and Alvarez-Gonzalez, 2007).

According to WHO, HPH seeks to improve health gain through the development of structure, culture and processes (WHO, 2007). Concerning the importance of Process criterion, it can be said that it affects Customer Results criterion and emphasizes management and improvement of customer relationship (Gené-Badia *et al.*, 2001). One of the issues attended in this criterion is whether the hospital continuously evaluates its key activities and whether the way of interaction with the patient assures patient's trust and loyalty.

In addition to Enabler criteria, EFQM model comprises four Results criteria. There is a dynamic relationship between Enablers and Results in a way that Enablers affect Results (Sánchez, Letona *et al.*, 2006). In Society Results, we can refer to cooperation with schools and large markets in order to create healthy eating along with collaboration with other companies and institutions in the community for HPH programs. 'Hospital as an Advocate and Change Agent' is one of these contributions. Assessing community needs, developing training programs for public health, disseminating relevant health information and preventing disease through media comprise the other activities in the field of Society Results (Aujoulat *et al.*, 2001). Another effective factor in the establishment and development of HPH is Employee Results.

The approach of healthy working at health centers and hospitals considers promotion of health, workplace safety, social responsibilities and environmental health and safety which requires deep and comprehensive perspective toward health and safety at the society, in this section is being examined. Previous interventional studies presented the contributing impact of this criterion (Zarei *et al.*, 2013). Employee Results criterion also includes investigation of employee's satisfaction, skill and efficacy based on needs assessments, employee participation through a suggestion system, establishment of staff encouragement and support system, considering welfare, promotion a healthy lifestyle, suggestive system, establishment of staff encouragement and support system, considering welfare and promoting a healthy lifestyle. In Customer Results, the status of customer is evaluated. Patients and their families' satisfaction is one of the key factors concerning the establishment of HPH. The other consequence of HPH establishment is better planning and a shift in organizational practices (WHO, 2004; Whitehead, 2004).

Key performance Results is among other criteria for HPH establishment. One of the intended results is a shift from focus on profitability to focus on quality. This change can lead to higher quality of care and more interaction between care providers and caregivers (Johansson *et al.*, 2010) less of this attitude in hospitals that are profit-driven will reduce the effect of HPH approach access to services, presenting Appropriate access to health services means providing 'right services at the right time and in the right place' (Gulliford *et al.*, 2002). According to previous studies, another important factor is the existence of an appropriate structure for the establishment of HPH (Röthlin *et al.*, 2015). This article, using the EFQM structure and determining its criteria, can be a model for hospitals having a tendency to run HPH.

## CONCLUSION

The number of articles investigating hospitals committed to HP has increased significantly over the past 10 years. Using conceptual framework, the establishment of HPH criteria and indicators (Figure 1) was considered along with other factors examined in other studies, including health education and HP funding, HPH announcement in publications, HP integration in organizing quality management system, promoting health centers and converting them to healthy work environments, indicators and standards of HP centers, attention to HP intervention indicators, attention to clinical outcomes, equity in health and focusing on SDH. Capacity building and comprehensive development of HPH implementation resources are emphasized and HPH programs are recommended to be implemented in hospitals based on one of the frameworks emphasized by WHO such as EFQM.

## RECOMMENDATIONS

Future research on HPH is recommended to apply mixed method and quantitative tools to investigate the dimensions related to HPH standards, index and indicator. In this way, the health policy makers can get familiar with appropriate and effective factors for implementation and development of HPH.

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