

## A Model for Policy making in Human Resources for Health Sector Iran

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**Abstract:** Given several reported policy making models in health systems, there are limited policy making models for Human Resources for Health (HRH). Although, many benefits have been declared for HRH policies to the knowledge, there is no formal model for HRH policies in Iranian health system. The aim of study was to design a model for policy making in HRH sector in Iran. A descriptive-comparative method using an expert panel to design and Delphi procedure was applied to validate the HRH policy making model in this study. About 28 elicitors including university faculty members, experts of human resources and policy making answered a questionnaire about the proposed model by panel discussion for HRH policy making. The questionnaire was designed based on Likert method to grade each stage and steps of the model. A primary model including six stages was proposed by the expert panel. The agreement above the stages and steps of this model was reached after round two and three of Delphi procedure by elicitors. The mean score of steps in each stage was >3.9. The six stage model including issue identification, assessment, policy formulation, policy implementation, policy evaluation and policy review was designed for HRH policy making in Iran. Although, this model was approved by in health care and human resources fields, its application in decision making at HRH policy level needs to be evaluated via the quantitative and field surveys.

**Key words:** HRH, policy making, model, delphitechnique, mangement, Iran

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### INTRODUCTION

To address problems in the health workforce, many developing countries have devised Human Resources for Health (HRH) policies and plans. Yet, substantial gaps exist between the policies and their implementation (Egger *et al.*, 2000). Health policy is often defined as a formal legislation or procedure within institutions (notably government) which enables the provision of health services, access to those services and support for action in response to health needs, available resources and other political pressures. A number of models have been proposed as frameworks for policy making in health systems.

Today most developed and developing countries have widely recognized decision making as the key element for improving efficiency and for scaling up health and medical sectors. Although, several policy making models in health systems and public services have been introduced, a very limited number of models have been suggested for HRH policy making (Nyoni *et al.*, 2006). Human Resources (HR) as a major component of health

system stay at the center of system and can determine whether the service could be delivered effectively or not. Health systems are depended on HR more than any other resources and HR might be considered as the most strategic resource in them. Several advantages have been suggested for proper policy making in human resources of health system including (Chatora and Tumusiime, 2004; Dussault and Dubois, 2003):

- HRH policies can assist policy makers to set up future plans and characterize short, mid and long-term availabilities and necessities
- HRH policies can be used for characterizing and explaining lawful and institutional arrangements as well as defining roles and responsibilities
- They have been used to set priorities
- HRH policies as a construction based on clear criteria (e.g., effectiveness, equity and sustainability) enable decision making for selecting priorities and directing their implementation
- HRH policies as a framework allow the assessment of performance against clear standards

- HRH policies allow intensive action across a variety of stakeholders (e.g., different professional groups) and facilitate implementation of significant actions such as shift from specialists to family practitioners

In many countries, HRH do absorb a great share of health budget via salary and benefits. Human resources related costs usually can be up to 85% of public expenditures in low-and middle income countries. Therefore, very few public resources would be available for other expenditures such as investments or drugs (Busse and Schlette, 2004).

Although in the regional context, the current level of performance by Iranian public health system is acceptable, it is affected by the primary health care. Due to the demographic and epidemiological transition which Iran has gone through many believe that a framework for planning, managing and training to address human resources policy in health sectors is needed. There is currently no coherent model for HRH policy making in Iran's Ministry of Health and Medical Education (MOHME).

According to WHO Country Office in Islamic Republic of Iran (2010), there is a limited capacity and a lack of vision and strategic thinking to undertake policy analysis in MOHME. Therefore, in order to develop means for well-informed decisions to be made by the policymakers based on evidence to undertake policy analysis and propose options, a unified structure and a model for HRH policies are required.

Due to the lack of evidence based policy making for human resources within MOHME, Iranian health system suffers from poor human resources planning and management, excessive number of health professionals and consequently high rate of jobless and unemployed health professionals.

However, despite all mentioned advantages about the effects of proper policies and importance of HRH policy making, no formal policy making model has been proposed for HRH in Iran. Thus to fill this gap, this study aimed to design a model for HRH policy making in Iran.

## MATERIALS AND METHODS

A descriptive-comparative method was used for designing a HRH policy making model for Iran. The research team including five ex-directors of administration and human resources in MOHME and 3 human resources experts provided a fresh review of the literature which contained 15 diagram models for policy making and health services administration. The scope of the review was limited to the models which included diagrammatic

descriptions of policy making processes thus, several journal articles on purely mathematical and stochastic modeling were excluded and in total 16 models were covered in the current study (Oldfield, 1995; Keeley, 1997; Barkenbus, 1998; Health Canada, 1998; Reid, 1998; SPMT, 1999; Hornby and Perera, 2002; LACHSR, 2000; NAO, 2001; Shakley and Gough, 2002; Friedman, 2003; Busse and Schlette, 2004; WHO, 2005; Health Products and Food Branch, 2005; Maxwell 2005; Nyoni *et al.*, 2006).

After analyzing and discussing the literature review, a primary model of HRH policy making in harmony with Iranian economic, social and cultural aspects was proposed. This primary model functioned as a springboard for the rest of the procedure.

A three-round Delphi technique was used for validating the proposed model by the expert panel. The participants in the Delphi technique were chosen according to their context of work (human resources and administration) especially in the health system.

Besides some faculty members with a background in health services administration, public health and policy making took part in the Delphi procedure. It should be noted that the experts who designed the first proposed model did not participate in the Delphi technique.

About 28 experts including university faculty members, experts of human resources and policy making took part in the Delphi procedure. They were asked to answer a questionnaire which consisted of 40 closed and 2 open ended questions about the suggested stages and steps for HRH policy making and the schematic type of the model.

The content validation of the initial questionnaire was determined using the Delphi technique by participation of six experts including some university professors and ex-managers of Iranian health care system and the reliability of the questionnaire was checked through the test retest method.

The Likert scale was used to rank the responses to the questions regarding each stage. Each closed question consisted of five equally spaced numbers and ranked from 1-5: 1 = complete disagreement, 2 = relative disagreement, 3 = no idea, 4 = relative agreement, 5 = complete agreement.

In addition, the experts were asked to provide an explanation for any stage or step with which they disagreed or to put forward as many relevant issues as possible in the first round. Cronbach's alpha value of the 40 closed items of the questionnaire was 0.89. Explanations and comments regarding stages, steps and schematic type of the model obtained via the open ended questions in each round resulted in the formulation of a

new questionnaire for the next round. It was stipulated that mean scores over 3 were acceptable. The opinions collected from the Delphi rounds were entered into a Microsoft Excel worksheet. The percentages of selections made in the three rounds for all stages and steps were determined and graphed. This study was approved by the Research Ethics Committee of Iran University of Medical Sciences. Informed consent was obtained from each panel experts and elicitors prior to any study related procedures. All responses were kept confidential and only shared with the principal researcher.

## RESULTS AND DISCUSSION

All experts participated in all rounds of the Delphi procedure and consensus was reached after three rounds. The six stages for the primary model proposed by the panel discussion were as follows: issue identification, assessment, policy formulation, policy implementation, policy evaluation and policy review. Figure 1 shows these stages as well as the proposed steps for them. Although, the number of experts was limited, a high degree of consensus was achieved after rounds two and three of the Delphi procedure as shown in Fig. 2 and 3, respectively.

In the first round of the Delphi procedure, the participants suggested using documents and evidences for all stages of the model and the stage of issue identification. However, in the last round they recommended that separating the use of documents and evidences for the issue identification stage is not necessary. Figure 4 shows the high score for each stage of the model. These figures indicate that participants agreed with the suggested stages. The mean scores obtained from the experts for the steps of different stages are provided in Fig. 5. These results indicate that the mean scores of all the steps are above four except for the second and fourth steps in policy formulation which are 3.9.

The aim of the present study was to develop a model for HRH policy making in Iran. This model can be classified as process content diagrams. These diagrams depict links between activities and they are not only readily understandable but quite helpful in better knowing how systems function. Two major objectives can be set for designing such a process model: first, to enhance understanding of a process in order to find possibilities of improvement and second, to assist document existing or planned processes in order to ensure a shared understanding (Jun *et al.*, 2009). In order to provide an appropriate process content diagram for HRH policy making, previous proposed models and related literature

were reviewed and related items were discussed by expert panel. Consequently, a six-stage model was designed for HRH policy making in Iran. These stages including issue identification, assessment, policy formulation, policy implementation, policy evaluation and policy review are designed to identify the frame of the policy making in HRH. Then the Delphi technique used to validate model, there was a high level of agreement about the proposed stages and steps of the model among the experts.

One of the main ideas in open-ended questions was using documents and evidences in the entire process of policy making model. With all these tips mentioned earlier, this model is just a preliminary model and presents a logic picture for HRH policy making. Therefore, its application in practice needs further investigations. Critical analysis of the proposed policy in this model can be considered as a proper way to evaluate the impacts of model implementation in decision taking at HRH policy level. In addition, the outcomes of the policies based on this model can be compared with the results of previous methods of policy making through quantitative studies.

Differences between countries in terms of contexts, cultures and backgrounds and the current divide between the developed and developing world partially make it difficult to use a global model of HRH policy making. Therefore, we aimed to develop a model for HRH policy making in Iran. The model was designed based on a comparative table of wide selection of policy making models adapted for health systems and public services in different countries and organizations.

Issue identification is the first stage in the suggested model. The most important stage in policy making is identifying the issues and goals. If setting the priorities and goals goes wrong, achievements would not be in the best interest of health system. According to Richardson, policies must focus on major and significant problems of health system. As Donaldson and Moony (1991) imply, those subjects must be chosen for policy making who have the greatest impacts on health promotion. Based on the comparative table and related discussions, almost all studied models somehow initiated the policy making with identifying the issues.

These issues should include the current problems of HRH, future prospects in health system, health development and population needs. Assessment which is suggested as the second stage of HRH policy making seems to be necessary for studying existing resources and expecting results (Richardson, 2005). This section can help policy makers to have a good vision of the backgrounds and contexts which are around policies. Consequently, the adopted policies might be more appropriate and applicable (Donaldson and Moony, 1991).

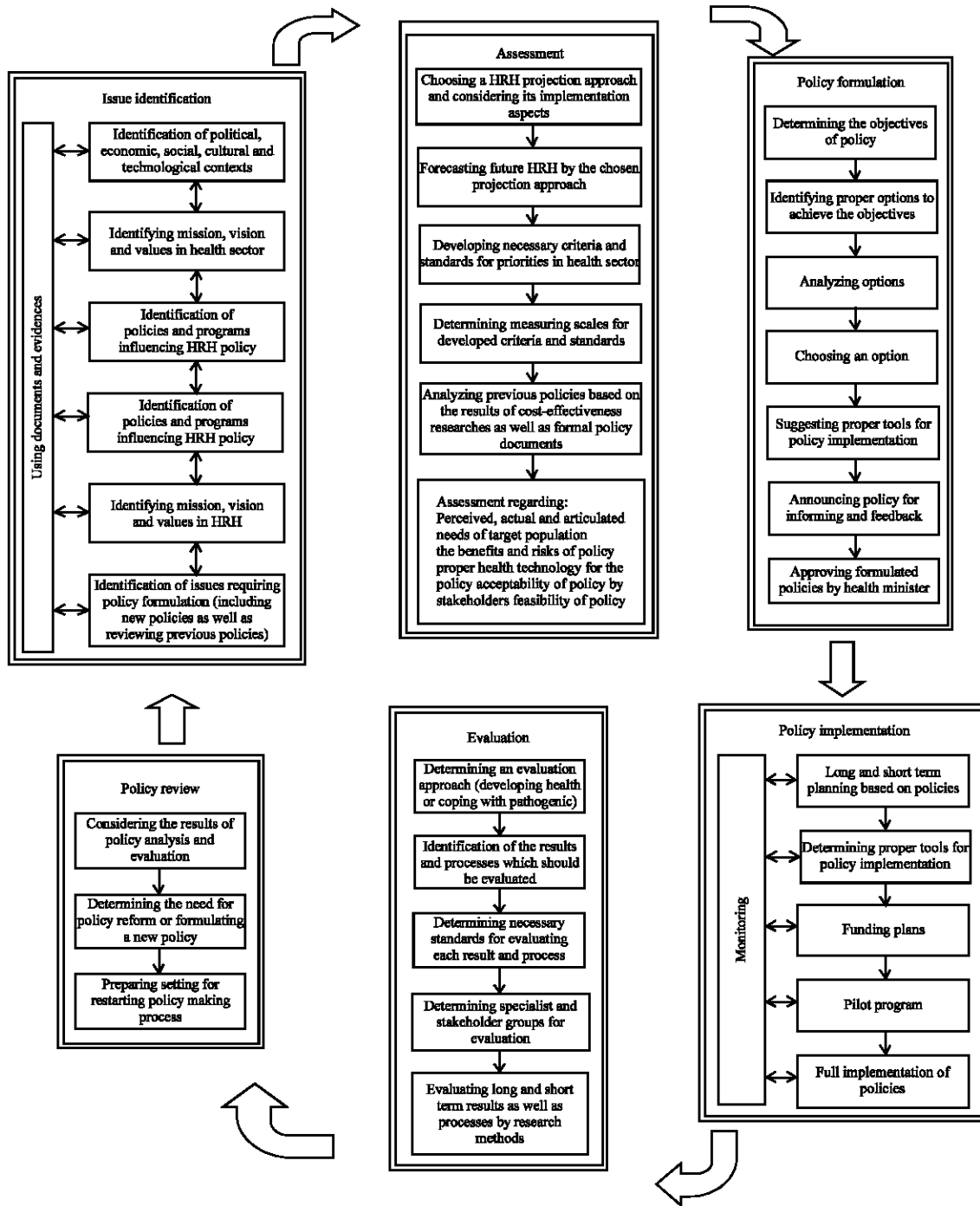


Fig. 1: Primary model of HRH policy making for Iran based on panel discussion

Wharam and Daniels (2007) suggest that assessment must be done in a systematic and predesigned manner and also it must consider effectiveness of the policies. This stage has been lent different weights in different models (Oldfield, 1995; Keeley, 1997; Health Canada, 1998; Reid, 1998; SPMT, 1999; Shakley and Gough, 2002;

Health Products and Food Branch, 2005; Nyoni *et al.*, 2006). The policy formulation is the main element of the model. According to the comparative table of policy making models, all the models include this stage one way or another. Maxwell (2005), Friedman (2003) and Barkenbus (1998) consider this stage as a major stage.

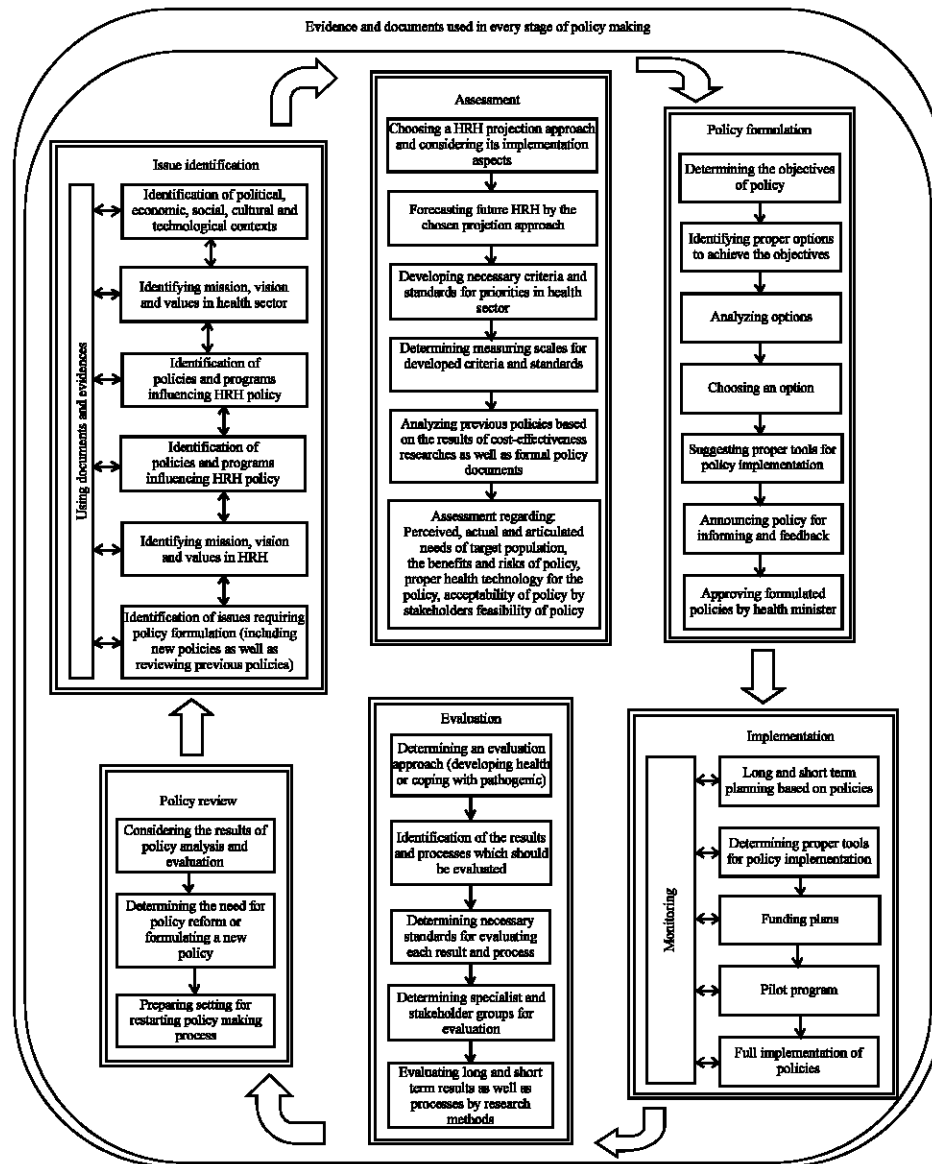


Fig. 2: The model of HRH policy making for Iran after first round of Delphi technique

Although, majority of studied models do not explicitly name policy formulation as a separate stage they explain the processes to achieve policy formulation (Health Canada, 1998; Reid, 1998; SPMT, 1999; LACHSR, 2000; NAO, 2001; Busse and Schlette, 2004; WHO, 2005; Nyoni *et al.*, 2006).

Advantages including problem solving, proper response to the needs of target population and dealing with future issues would be considered in this stage. Formulated policies should be announced in a formal statement.

Problem solving and decision-making models can be useful to accomplish this stage. Implementation stage

which is another element of the model includes proper mechanisms for achieving policy goals. Without a doubt, success of properly designed policies depends on appropriate policy implementation. This stage is used in Maxwell (2005), Friedman (2003) and Barkenbus (1998) and NSW health department models as a main stage (Reid, 1998).

Other studied models describe the implementation stage in some more details. For instant, implementation through planning is considered in the HRH policy making model of WHO African region (Nyoni *et al.*, 2006) and Oldfield (1995) in short-view policy development considers developing and administering programs as a

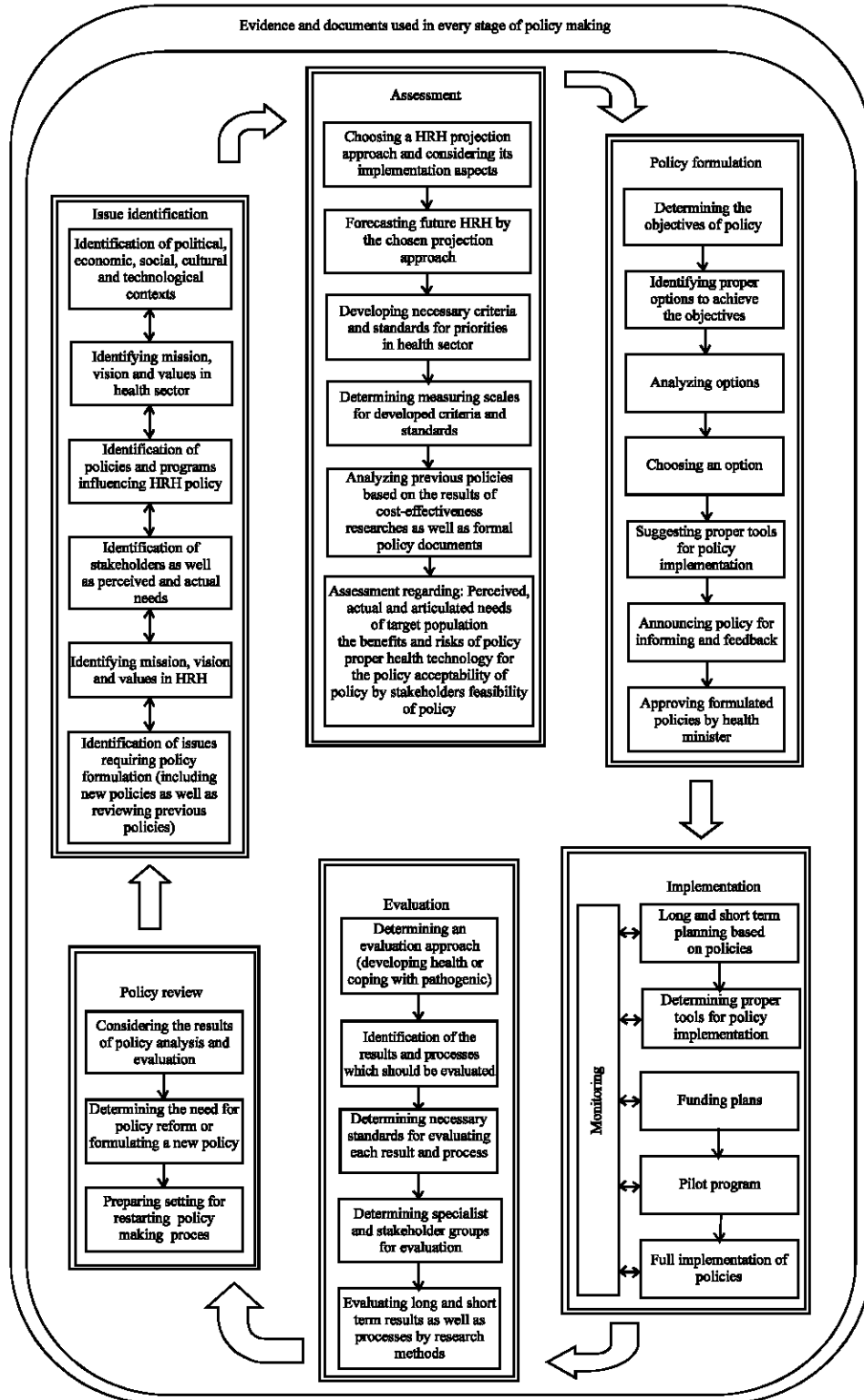


Fig. 3: The final model of HRH policy making for Iran

step 1 for implementation of program-level policy strategy (Oldfield, 1995). The steps of implementation stage were designed to attain the best system performance which could not be achieved before the suggested policies are carried out through delicately According to the model, output and outcomes of policy making process should be evaluated in policy evaluation stage. It is required for designing a proper policy making model. This suggestion has been considered in other models by a stage for policy evaluation (Barkenbus, 1998; Reid, 1998; Maxwell, 2005). The HRH policy making model of WHO African region

contains a stage for policy evaluation and review. Unlike Oldfield model, evaluation and implementation feedback has been appreciated by others mentioned before. Schmidt (2007) implies that policy and related issues should be criticized. Evaluation not only measures the current situation but also helps to predict the future situation. In addition, it affects current and future policy flourishing. In fact, evaluation is a rational and classic method which provides bureaucratic systems for ensuring achievements of model goals.

Policy review can complete the cycle of HRH policy making model. This stage has been seen obviously in the NSW health department model (Reid, 1998) and WHO African region HRH policy making model (Nyoni *et al.*, 2006). In addition, it is considered with few implications in some other studied models (Barkenbus, 1998; SPMT, 1999; Hornby and Perera, 2002; NAO, 2001; Busse and Schlette, 2004; WHO, 2005).

However in some models, this stage has been neglected. Based on the research team, this stage is hidden in evaluation section and ends the cycle but this stage is considered as a main stage to emphasize on the importance of using the evaluation results and revising the policies. It is the complementary part of the model and policy making process. Additionally, it provides some possibilities for adaptation of policies to future issues.

It seems that the capacity of the Ministry of Health and Medical Education to formulate health polices with considering the local context and drawing on international

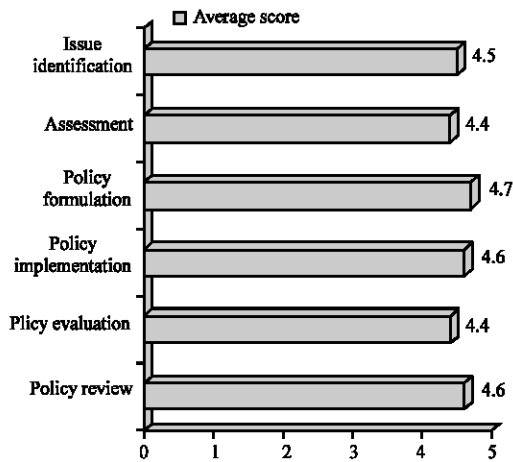


Fig. 4: Mean scores for suggested stages of HRH policy making model in Iran

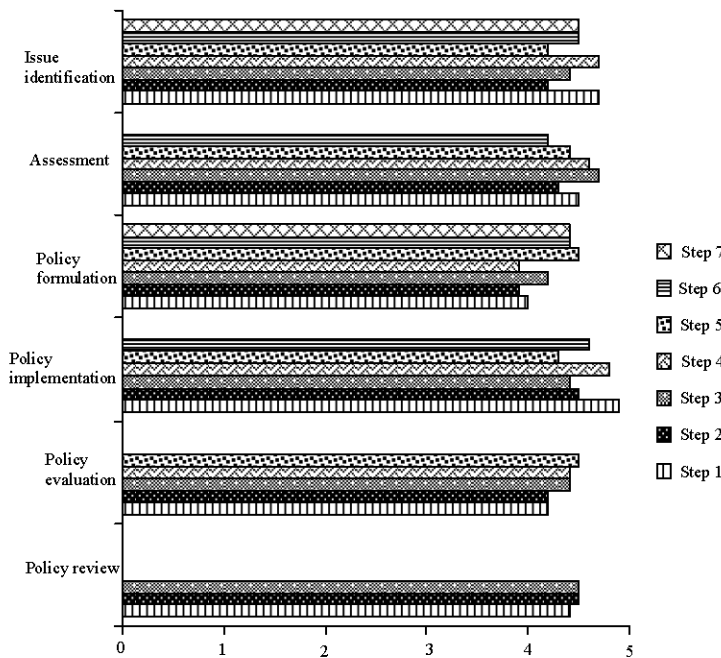


Fig. 5: The final scores of Delphi technique for suggested steps in HRH policy making model in Iran

experience is relatively limited. There is a lack of vision and strategic thinking and limited capacity to undertake policy analysis in the Ministry.

Although, several sections in the MOHME are involved in dealing with policy issues in their respective areas of concern, the absence of a unified structure to undertake policy analysis and propose options for informed decisions by the policymakers as well as, link it to the integrated planning process of the MOHME and the Management and Planning Organization is apparent. A section in the HRH administration office in the MOHME might be organized in order to develop HRH policies. Furthermore, this section can be used in the health system policy making with a matrix organization which helps the other health policies. HRH in Iran has not followed a clear pattern; responding to the demands of the provinces, universities of medical sciences and the ministry of MOHME, the PMs concluded some grants for increasing the number of HRH at different levels of health services. Granted HRH distributed in the provinces based on need and often there were some more demands for human resources. After the implementation of the state law, it was supposed all public organizations work under one employment law but it seems that it is easier said than done and HRH is very delicate.

One of the advantages of the model is that it has been approved by the scientists in charge of decision making and the elites in the health sector of Iran. This model might be appropriate for HRH policy making in Iran as well as some countries with similar local contexts. Most considered policy making models in current study emphasize on issue identification, policy formulation, policy implementation and policy evaluation while the stages of assessment and policy review have been also stressed in the proposed model.

An obvious limitation of the model is that the number of respondents which were available to take part in the present study was very limited. Although, the theoretical model has been approved in the present study, it needs to be applied in action. Besides, it considers stakeholders a very critical component of decision making but it has not set proper arrangements to use their ideas directly. Moreover, some of its concepts and approaches need to be explained for policy makers in the very first place of introducing the model. Finally, there is not a formal policy making model in the health system and policies are made based on the cabinet overall policies.

### **CONCLUSION**

According to discussion of the research team and Delphi procedure, a six-stage model is designed for HRH

policy making. This model includes issue identification, assessment, policy formulation, policy implementation, policy evaluation and policy review.

### **RECOMMENDATIONS**

At the end all suggested steps were approved but some changes were recommended by the respondents; one of the most important changes was about using documents and evidences in the policy making model. According to the respondents, using evidences and documents should be considered in all HRH policy making stages and encircle the entire process. Considering permanent and high costs of employing human resources in the health sector, there is a consensus about the needs for a HRH policy making model. The absence of a proper policy making model in Iranian health system is obvious. Thus, the proposed model could help demonstrate the HRH needs based on evidences.

### **ACKNOWLEDGEMENT**

The researchers wishes to thank all the experts who participated in the primary discussion and the Delphi rounds in this study.

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