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Assessing the governance of human resources for health in Iran: A qualitative study

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Abstract:

BACKGROUND: The main issue for advancing any health system is human resources for health (HRH); although efforts to address HRH shortage and performance have accelerated over recent years, HRH is still a problem for delivering quality services. Addressing key governance issues is essential for developing capable health workforce, and good governance should be an integral part of planning and implementation of HRH.

MATERIALS AND METHODS: This is a qualitative study, undertaken in 2017. Data processing included 14 in-depth interviews with the experts of human resource management in medical universities and the Ministry of Health and Medical Education. The sampling was carried out using purposeful sampling method and continued until reaching data saturation. Data analysis was performed using subject analysis method.

RESULTS: This study assessment of the human resource governance in ten principles includes strategic vision, participation and consensus orientation, rule of law, transparency, responsiveness, equity and inclusiveness, effectiveness and efficiency, accountability, intelligence and information, and ethics. The result showed that although MOHME tries to reduce insufficient and unbalance's human resources and expand the capacity building in human resource planning, there are not enough practical knowledge and skills among policy-makers.

CONCLUSIONS: Strengthening human resource governance should have been among the priorities identified in the health national strategy and government should have a long-term perspective, and all key factors in government, civil society, academia, and other stakeholders should participate in human resource policy-making and their participations should be accepted as a culture.

Keywords:

Good governance, governance, human resource for health

Introduction

The main issue for advancing any health system is human resources for health (HRH).^[1,2] Although efforts to address HRH shortage and performance have accelerated over recent years, HRH is still a problem for delivering quality services.^[3] Currently, 57 countries face a critical workforce shortage in health care while many others are unable to provide quality care to their population due to workforce problems.^[4]

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HRH has gone from a minor issue on the global policy agenda priority to one recognized as a multifaceted problem by almost all countries in the world.^[5,6] As world leaders aspire for universal health coverage, it becomes clearer than ever that this goal cannot be realized without a health workforce fit for purpose and fit to practice.^[7] As early as 2004, the Task Force on Health Systems Research has identified HRH as two of 12 research priorities in health systems for achieving the millennium development goals.^[8] Due to human resources (HR) being responsible for approximately 70% of recurrent expenditures in most health

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systems, inadequate training, regulation, distribution, and management of human resource can have enormous implications.^[1]

Experiences worldwide have demonstrated that attention to governance is important for the health systems' ability to fulfill essential health functions.^[9] Health systems' governance is defined as "ensuring that strategic policy frameworks exist and are combined with effective oversight, coalition building, regulation, attention to system design, and accountability."^[10] One of the key system barriers for implementation of integrated primary health services is poor governance^[11,12] while good governance is essential for ensuring accountability of governments and protecting the welfare of their citizens. The influence of governance in policy-making for HRH is evident at all levels.^[13-15]

We need to consider the strong link between health workforce development and health governance when examining the health workforce interaction with the larger health system.^[16] Leadership and governance are classified as one of six health system building blocks by the WHO which also classifies health workforce as a second building block.^[10]

Multisector efforts, complex mechanisms, and procedures to mediate the rights and interests of different groups are a part of HRH governance.^[15,17] Good health workforce governance will improve the quality of health care, assures equity in health, and improves efficiency in the use of health resources.^[16] Although health system governance is considered the cornerstone of health system, there has been little research to points of weaknesses and gaps in the HR governance in the health system in Iran.

Iranian government acknowledges the importance of sufficient HR for the health system and therefore integrated the medical education with health service. Accountability of the educational system to match the real needs of the population has resulted in Iran going from a country hosting >3000 working foreign physicians in 1983 to a country fulfilling all her higher education needs in the health and medical sciences.^[18]

Addressing key governance issues is essential for developing capable health workforce and good governance should be an integral part of planning and implementation of HRH.^[19] This study aims to assess the key governance principles applied at HRH sector and identify governance issues in order to facilitate proper HRH management in Iran.

Materials and Methods

This study was carried out using a content analysis approach in the year 2017. The data were collected

through individual semistructured indepth interviews and interviews were conducted by a researcher familiar with interviewing techniques. The study population included human resource managers in medical universities and the Ministry of Health and Medical Education (MOHME).

All participants invited for the interview had the following inclusion criteria: academic background in health governance or management and >5 years of experience in governance and human resource management field. This means job experience at the Ministry of Health or universities of medical sciences in Iran.

Participants were selected based on their direct involvement in health system management and governance at national and subnational levels.

These included 14 experts with relevant qualifications: two from general bureau of human resource department in the MOHME who are responsible for human resource governance in health system, five from human resource department of medical universities, two previous undersecretaries of health minister and three staff experts of the human resource department in health ministry, and two professors in human resource governance.

The goal of the researcher in this study was the assessment of governance in HRH in Iran. An introductory letter was sent to all prospect interviewees asking them for an appointment.

The sampling was carried out using purposeful sampling method and continued until reaching data saturation.^[20]

In this study, after preparing an interview guide, ten interviews that were conducted face to face were recorded using a digital recorder in the workplace of the interviewees and four others were carried out through E-mails. Each interview lasted 60–90 min on average. Interviews were conducted following with health system governance framework interview question guideline, developed by Siddiqi *et al.*^[21]

The framework developed by Siddiqi *et al.* facilitates an assessment of health governance in ten value-driven principles including strategic vision, participation and consensus orientation, rule of law, transparency, responsiveness, equity and inclusiveness, effectiveness and efficiency, accountability, intelligence and information, and ethics from national health policy formulation to policy implementation at subnational levels.

For reaching the validity of the researcher's required expertise, a number of test interviews were done before

the study and they were analyzed by expert faculty members to evaluate their validity. The actual interviews started after making the necessary adjustments. To improve the reliability of the extracted codes, some of the participants were allowed to review the results, and their opinions were taken into account. Lincoln and Guba criteria were used to determine the accuracy and reliability of the data. These criteria are similar to validity and reliability criteria in quantitative studies. To this end, four criteria of credibility, verifiability, reliability, and transmissibility were investigated.^[13]

Data analysis

The method used in this study was based on subject analysis method. That is a form of content analysis which carries out the classification based on the main subjects. Data analysis consisted of these seven steps including: first, the interviews were a transcript and typed immediately after each interview. In the next step, each interview was reviewed several times by the researcher to become familiar with the information. Third, the gathered information was divided into semantic units (codes) which included relevant sentences and paragraphs. Each semantic unit was reviewed several times, and the suitable codes were assigned to each semantic unit. To this end, subsidiary topics were determined and merged together, and the main subjects were determined after reductionism. The fourth and fifth steps which include registering reflective and marginal signs are in fact writing down the ideas and thoughts that occur to the researcher during interviews and data analysis. In the sixth step, the codes were classified and categorized based on their similarity and were summarized whenever possible. Finally, the gathered information was divided into main categories, and abstraction themes and suggestions were determined.

The main focus of analysis was on challenges associated with each of the overarching thematic governance principles that is adapted from seddigi *et al.* [Table 1].

Results

The ten principles of the analytical framework used for assessing governance of the human resource for health system are described in Table 2.

Discussion

This study examines the human resource governance in health system in ten principles which are expressed below.

Rule of law

The constitution of Iran has mentioned the human high position, the dignity of human, and human rights in having access to the health services. To achieve the desired level of health service, the Sixth Development Plan stated that for adjusting the quality and quantity of HR with health system needs, MOHME is responsible for determining the educational needs and capacity of all universities and institutes of medical education, both public and private universities, in accordance with family physician strategies, referral system and classification of services, and comprehensive scientific map of the country. The study showed that there are enough regulations and laws in this field, but there is inconsistency in some current laws and lack of executive and legal requirements in some other. Approximately 500 items of the Sixth Development Plan Act related to the health area, and there are several laws about HR, but the most important problems are excess involvement in interpretation of HR laws, the lack of operational policies, and rigid bureaucracy

Table 1: Governance principle and definition

Governance principle	Operationalization
Strategic vision	Leaders should have a clear vision for short- and long-term perspectives on health and human development, along with plans of actions to accomplish those goals
Participation and consensus orientation	All men and women should be able to determine their choice for health, either directly or through legitimate intermediate institutions that represent their interests
Rule of law legal	Legal frameworks pertaining to health should be fair and enforced impartially, particularly the laws on human rights related to health
Transparency	Focuses on the free flow of information for all health-related matters
Responsiveness	Institutions and processes should serve all stakeholders to ensure that the policies and programs are responsive to the health and nonhealth needs of its clients
Equity and inclusiveness	All men and women should have opportunities to improve or maintain their health and well-being
Effectiveness and efficiency	Processes and institutions should produce results that meet population needs and influence health outcomes while making the best use of resources
Accountability	Decision-makers in government, the private sector, and civil society organizations involved in health are accountable to the public, as well as to institutional stakeholders
Intelligence and information	Intelligence and information crucial for understanding health system to make inform decisions that cater the needs of different interest groups
Ethics	The commonly accepted principles of health-care ethics include respect for autonomy, nonmaleficence, beneficence, and justice. Health-care ethics

Table 2: Principal findings in human resource governance in Iran

Governance principle	Principal findings
Strategic vision	Clear broad and long-term perspective on human resource is being development
Participation and consensus orientation	Private sector, civil society, and other stakeholders rarely consulted directly in decision-making for human resource for health There is no clear process about how does government reconcile the different objectives of various stakeholders in human resource decision-making
Rule of law	Laws are passed in parliament in consultation with the MOHME The law, in cooperation with the specialized team (experts), translated into rules, regulations, and procedures
Transparency	The information about financial procedures does not available and there is little transparency in regard to free flow of communication for administrative procedures
Responsiveness	The allocation of subsidies in the field of human resources is determined by the population size and the degree of deprivation and distances from the big cities, but ultimately, the main factor for allocation is the bargaining and lobbying process Needs assessment conducted as part of the policy process, but restrictions on resources fail to achieve their desired goals
Equity and inclusiveness	There is an unequal distribution in human resource for health in the country After the implementation of health transformation plan, inequality has decreased in the distribution of physicians throughout the country, but more human resource needed to improve accessibility for physician and other human resources to the deprived groups, especially in rural areas
Effectiveness and efficiency	The tenure of leadership in human resource department of MOH and ME is high There are difficult and exhausting bureaucratic relations in human resource scope The effectiveness of human resource is good, but its efficiency is less than the optimal level Top-down communication is good, but the low-down communication is undesirable
Accountability	There are enough legal mechanisms for overseeing adherence to financial and administrative rules, but in practice, few of them are implemented
Intelligence and information	There is enough information about the number and distribution of the health workforce throughout the country, and this information is available in the human resources system but not for everyone
Ethics	There are committees for medical ethics at the national and regional levels, in the case of the Islamic Republic of Iran

in enforcement of these laws. An interviewee at the ministry level stated:

The 11th government plan for the health sector has Comprehensive rules. We do not have a legal shortage. The main problem is the enforcement of law and difficulties in coordination with other stakeholders inside and outside the Ministry of Health and Medical Education leading to difficult and time-consuming implementation of laws.

A study in Uganda showed that the health laws of this country have been written long time ago and outdated. It cannot meet the current conditions and should be reviewed in these rules, and the government is seeking to improve the capacity of local government to provide better health services.^[20]

A study in Sudan also confirms that there is a limited capacity for legislation in the Ministry of Health that is due to lack of experience and expertise as well as mechanisms for monitoring and evaluation in implementation the rules are not efficient.

In Lebanon, the Ministry of Health is consulted for all health-related legislation and there is no legal shortage in this area, and also many ministries have close cooperation in the formulation of health legislation.^[22]

Strategic direction

The intent behind health governments is to effectively improve the public health situation in the country with special emphasis on the five key regional priorities, leading to development of the document of health workforce demand. According to this document, the country's need for human resource will be determined in different areas based on strategic vision 1404 for health. However, an important issue that should be considered is that there is a conflict of interest between policy-makers in determining the strategic direction of human resource for health because some of policy-makers are dual practice. The MOHME based on the strategic vision 1404 for health, efforts to manage the gender equity and rights issues through achievement the universal health coverage and monitoring health equity.

A study in Uganda showed that the Ministry of Health created a minute for strategic plan and revised it in 2012. However, one of the most important challenges in it is the lack of integrated policies for all health services.^[20]

The study in British Columbia showed that the Ministry of Health in collaboration with health authorities, colleges, associations and unions, educators, and other stakeholders established a single provincial health

human resource framework that will be used to plan, link, and coordinate go-forward actions and initiatives, but the main obstacle for applying it is the lack of overall health system perspective and precludes effective in the infrastructure for health HR.^[23]

Participation and consensus orientation

Although people's participation in management, decision-making, planning, and implementation of health programs is aimed at health promotion and community empowerment, in the field of human resource, there is the lack of clarity of mandates and roles, particularly for population. Stakeholders do not have a direct way to meet their expectations to participate in HR decision-making and their demand usually ignored.

Centralized decision-making system in the health sector reduces the opportunity for private sector and other stakeholders to participate in decision-making. On the other hand, Continuous change of managers and shorten their Management period decreases their ability to engage other stakeholders in decision-making

This barrier is evident in the following statements:

"Managers are worried about their future and do not know how much time they remain in their positions, so they make short-term decisions and try to decide centrally and Other population don't involved in this area."

Human resource planning is done at the MOHME with the participation of the Management and Planning Organization of Iran, and final decisions were based on consensus among them. The MOHME annually allocates a number of recruitment licenses among medical science universities all over the country. The universities are then permitted to employ any kind of permanent workforce based on the licenses for their affiliated hospitals and the other facilities, and therefore, people do not have participation in this process. A manager in medical university stated,

"Most of our planning for human resources will not be executed due to disagreement of Management and Planning Organization. They decided base on their own criteria and bargaining power plays a key role in this process."

The study in Turkish showed that the effective participation of all key stakeholders, such as national expert associations or representatives of medical groups, did not exist in the formulation of policies for the development of Turkish health transformation program, and this was a drawback of this program.^[24]

The study in Canada states that there is a strong relationship between effective governance by regional health boards and participation of a community.^[25]

Based on a study sponsored by United States Agency for International Development, participation of all key stakeholders, especially local level, can make the health system more responsive to community health needs.^[26]

Transparency

There is a lack of transparency in the relationship among the health policy-maker and other parts of health system. There is no awareness about the criteria used for human resource allocation in the various levels among health policy-makers.

Although the MOHME must present annual reports based on the Sixth Development Plan, indicating the importance of transparency in national documents, there is no mechanism that allows access to government information and documents by the general public recently with e-government law that promotes electronic government services in order to improve public access to government information and services, the human resource department designed ten electronic websites to simplify all administrative procedures, but a lot of people are not aware of them, and the information is not accessible to those concerned with them, but recently, efforts have been made to design the necessary mechanisms in this regard.

A previous undersecretary of health minister stated,

"Recently, MOHME has launched 10 websites for transparency of administrative decisions. The government has passed the free flow of information law, but, as always, the problem is in the implementation of law. Available documents pertaining to human resource for health Policy don't show Justifications for these decisions, and there aren't any Measurable Indicators to evaluate these decisions."

The study in India stated that the lack of transparency in human resource policies is one of the most important challenges facing the country and should be considered by policy-makers.^[23]

Recently, the Ministry of Public Service introduced a code of conduct for the Uganda Public Service which sets out the standards of behavior for Uganda's public servants. It was also designed to ensure the impartiality, objectivity, and transparency. The Uganda Ministry of Public Service designed the code of conduct that has been tangible progress in establishing the required legal institutional framework to monitor transparency of administrative decisions such as recruitment and increasing the transparency.^[27]

Responsiveness

The MOHME of Iran has undertaken a reform to response the health and nonhealth needs of its clients.

The Health Transformation Plan which began in 2014 aims to reach universal health-care coverage and increase the accountability of the health system.

Another mechanism used to increase the responsiveness of the health system was decentralization where lower level managers are given new roles and responsibilities in a decentralized system in which HR managers can provide the appropriate services according to the needs of their region.

The MOHME, to ensure that the population, especially those disadvantaged and vulnerable, have access to health care, provides 90% of the required HR (doctor and midwife) for deprived areas in country, but there is not any evidence that ensures that people will access to these services within a reasonable timeframe. We need a stronger guideline to assess the health and nonhealth needs.

A health professor stated,

Another important issue is that whether people's needs are properly estimated? Is this a real need? Is there an induction demand? Is the government obliged to respond to all human health needs? Are there enough resources to answer these needs? Human resources managers must think about all these issues.

A study in Tunisia has shown that accountability in private sector is not assessed and health policies are subject to very limited community involvement.^[22]

A study in Syria stated that at the national level, policies are designed to identify deprived and vulnerable groups, but there is not a regular systematic survey about the health needs at the community level, and also in Jordan, service delivery is not based on the need measurement too.^[22]

Equity and inclusiveness

The results of the study show that health equity is on the agenda of policy makers and HR specialists are working hard to make a fair distribution of HR (both specialist and nonspecialist) across the country by policies such as the attracting native volunteers for study in medical science, obtaining a commitment to serve workforce in a specific area, consider a quota for native workforce volunteers in each region, family physician plan, and so on.

people in deprived areas are still faced with poor access to health services due to a shortage and inequitable distribution in HR Which has increased the waiting time for receive health care, particularly for specialized services.

On the other hand, health sector is simultaneously faces with surplus in some filed of HR such as laboratory, radiology, operating room, anesthesia, and midwifery and shortage in others filed such physicians and nurses , due to lack of connection between the education system and human resources department and the weakness in HR research

A human resource manager of medical university said the following about this issue:

If we want to reach the acceptable level for the health care, we must have at least 2 nurses per hospital bed. That means, our number of nurses should be twice the current condition. Therefore, lack of human resources is one of the most important challenges in the country and the other issue is that the high treatment cost in privet sector especially in deprived areas that there is no public hospital or waiting queue is very long.

In Lebanon, the government is responsible for providing health services to the entire population of the country. However, equity is not well established because poor people pay a higher percentage of their income. In Sudan also, there is a wide disparity between urban and rural populations in access to health services and the distribution of infrastructure and human resource for health.

Turkey implemented a health Transformation plan to increase equitable access to high-quality health services, but the disadvantage of this program was the lack of stakeholder involvement in policy formulation

Turkey to increase the equitable access to, high-quality health services implemented Health Transformation Program but the weakness of this program was the lack of stakeholder participation in policy formulation.^[24]

Effectiveness and efficiency

The MOHME performed sustainable and targeted changes to increase efficiency, equity, and effectiveness of human resource policy, and one of the most important reforms is decentralization that transfers the authority and responsibility for public functions from the central government to subordinate/quasi-independent government organizations or the private sector. Implementation the law for formation the board of trustees in medical universities was the first step of this action. Some of the other strategies used to improve the effectiveness and effectiveness by MOHME include: Determine the minimum characteristics required for each job in job contract and Improve human resource structure in the hospital, however career structures for health workers are not still well-defined.

Some other strategies. Salaries of public sector staff are unsatisfactory and physicians commonly are dual practice.

The previous general bureau of human resource in the MOHME stated,

Experience has shown that when we absorb our human resources through the contract, the expenditures are reduced and workforce efficiency is increase but about its effectiveness no study has been done.

A study in Indonesia showed that decentralization in health HR not only did not increase efficiency but also prevented monitoring and planning.^[28]

Accountability

There is no formal mechanism for decision-makers in health department to hold various stakeholders involved in the policy formulation for human resource, accountable based on their contribution for decisions and policies borne out in case of false advices.

Conventionally available mechanism used by the MOHME authority to hold various stakeholders accountable is ethical. As well as, the MOHME oversights contract as a part of holding its staff accountable for implementing the human resource policy.

The MOHME has recently used information system that generates key performance indicators to foster accountability in human resource planning, but it is in its infancy era, and there is no any type of sanctions for keeping policy-makers responsible.

In Tunisia, there is a formal and legal mechanism to hold the policy-maker accountable, and several independent bodies examine the health sector. Furthermore, the media are very focused on the health sector.^[22]

Intelligence and information

There is adequate capacity at national, provincial and district levels for data collection, processing and analysis on aspects of HR. MOHME also can obtain technical support from international organizations such as WHO. But there is a strong need in establishment an integrated and comprehensive information system for inform evidence-based HR policies.

In the MOHME, there are a number of units that work on the production and recording of evidence to respond to the MOHME information needs, but these units are also separate and unrelated to each other, and there is a nonintegrated information system. Promoting the increased use of analytical tools such as national health accounts, burden of disease assessments, and

cost-effectiveness analysis of various public health interventions for strategic planning needs in order to strengthen the intelligence infrastructure. Human resource department in the Ministry of Health now designed and launched several websites for manpower management such as HR planning and recruitment system. This information system has all employees' information of the Ministry of Health staff. All employees are visible based on their age, sex, place of employment, work experience, and field of study. Human resource department designs a distribution system for human resource management. This system provides a balance in geographical distribution of physician and nonphysician staff throughout the country.

One expert in the human resource department in the MOHME stated:

We have launched many information systems, but the information extracted from this system isn't available for policymakers to adopt evidence-based policy.

In Syria, policies are usually adopted without the use of scientific evidence, and there is no centralized and organization for collecting health data from public and private sector.^[22]

Ethics

The regulatory body in the MOHME designed an ethical structure that provided ethical guidelines. Health policy-makers are aware of ethical principles and try to act in policies based on accepted ethics and beliefs.

In the field of HR that dealing with issues such as the distribution of resources, the consideration of professional ethics by policy-makers plays a very important role in resource allocation because the goal of resource allocation is fair decision-making and the policy-making about resource allocation at every level requires certain ethical considerations.

After implementation of health transformation Plan in Turkey, despite the rising incomes of physicians and nurses, their job satisfaction has decline.^[24]

In Jordan, there is no law to maintain professional ethics, and even in the case of patient rights, there is no formal and written law.^[22]

Conclusions

Assessing human resource governance in health system showed that although the MOHME tries to reduce insufficient and unbalance's HR and expand the capacity building in human resource planning, but there are not enough practical knowledge and skills among policy-makers.

Strengthening human resource governance should have been among the priorities identified in the health national strategy and government should have a long-term perspective, and all key actors in government, civil society, academia, and other stakeholders should participate in human resource policy-making and their participations should be accepted as a culture.

To achieve good governance in human resource, the best-recommended way is to have a model that suited to the cultural characteristics of the health system of Iran.

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Conflicts of interest

There are no conflicts of interest.

References

1. World Health Organization. The World Health Report 2006: Working Together for Health. World Health Organization; 2006.
2. World Health Organization. Report of a Joint FA. World Health Organization; 2006.
3. Dieleman D, Hilhorst T. Improving Human Resources for Health: Turning Attention to Governance Amsterdam. Royal Tropical Institute (KIT); 2010.
4. World Health Organization. Models and Tools for Health Workforce Planning and Projections. World Health Organization; 2010.
5. Dussault G. Bringing the health workforce challenge to the policy agenda. In: Kuhlmann E, Blank RH, Bourgeault IL, Wendt C, editors. The Palgrave International Handbook of Healthcare Policy and Governance. Palgrave Macmillan, London: Springer; 2015. p. 273-88.
6. Kuhlmann E, Blank RH, Bourgeault IL, Wendt C, editors. Healthcare policy and governance in international perspective. In: The Palgrave International Handbook of Healthcare Policy and Governance. Palgrave Macmillan, London: Springer; 2015. p. 3-19.
7. World Health Organization. No Health without a Workforce. World Health Organization Report; 2013.
8. Haines A. Informed choices for attaining the Millennium development goals: Towards an international cooperative agenda for health-systems research. *Lancet* 2004;364:997-1003.
9. Brinkerhoff DW, Fort C, Stratton S. Good Governance and Health: Assessing Progress in Rwanda. TWUBAKANE Decentralization and Health Program Rwanda Report; 2009.
10. World Health Organization. Everybody's Business-Strengthening Health Systems to Improve Health Outcomes. WHO's Framework for Action; 2007.
11. Saraceno B, van Ommeren M, Batniji R, Cohen A, Gureje O, Mahoney J, et al. Barriers to improvement of mental health services in low-income and middle-income countries. *Lancet* 2007;370:1164-74.
12. Thornicroft G, Alem A, Antunes Dos Santos R, Barley E, Drake RE, Gregorio G, et al. WPA guidance on steps, obstacles and mistakes to avoid in the implementation of community mental health care. *World Psychiatry* 2010;9:67-77.
13. Campbell J, Buchan J, Cometto G, David B, Dussault G, Fogstad H, et al. Human resources for health and universal health coverage: Fostering equity and effective coverage. *Bull World Health Organ* 2013;91:853-63.
14. Kaplan AD, Dominis S, Palen JG, Quain EE. Human resource governance: What does governance mean for the health workforce in low-and middle-income countries? *Hum Resour Health* 2013;11:6.
15. Santric Milicevic M, Vasic M, Edwards M. Mapping the governance of human resources for health in Serbia. *Health Policy* 2015;119:1613-20.
16. World Health Organization. The World Health Report 2000: Health Systems: Improving Performance. World Health Organization; 2000.
17. World Health Organization. Transforming and Scaling up Health Professionals' Education and Training: World Health Organization Guidelines. World Health Organization; 2013.
18. Azizi F. The reform of medical education in Iran. *Med Educ* 1997;31:159-62.
19. World Health Organization. Treat, Train, Retain: The AIDS and Health Workforce Plan: Report on the Consultation on AIDS and Human Resources for Health. World Health Organization; 2006.
20. Mugisha J, Ssebunnya J, Kigozi FN. Towards understanding governance issues in integration of mental health into primary health care in Uganda. *Int J Ment Health Syst* 2016;10:25.
21. Siddiqi S, Masud TI, Nishtar S, Peters DH, Sabri B, Bile KM, et al. Framework for assessing governance of the health system in developing countries: Gateway to good governance. *Health Policy* 2009;90:13-25.
22. Jabbour S, yassin S, nuwayhid I, giacaman R, dewachi O. Public health in war and violent conflict. In: jabbour S, editor. *Public health in the Arab World*. 1st Ed. New york: cambridge university press; 2012. p467-
23. Nandan D, Nair K, Datta U. Human resources for public health in India: Issues and challenges. *Health Popul Perspect Issues* 2007;30:230-42.
24. Agartan TI. Health workforce policy and Turkey's health care reform. *Health Policy* 2015;119:1621-6.
25. Veenstra G, Lomas J. Home is where the governing is: Social capital and regional health governance. *Health Place* 1999;5:1-12.
26. Blair H. Participation and accountability at the periphery: Democratic local governance in six countries. *World Dev* 2000;28:21-39.
27. Mathauer I, Imhoff I. Health worker motivation in Africa: The role of non-financial incentives and human resource management tools. *Hum Resour Health* 2006;4:24.
28. Dieleman M, Shaw DM, Zwanikken P. Improving the implementation of health workforce policies through governance: A review of case studies. *Hum Resour Health* 2011;9:10.