Stakeholders' perspective on health equity and its indicators in Iran: a qualitative study

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Abstract

**Background:** To reduce the health inequity, it is necessary to measure and monitor these inequalities. In this regard, in Iran a plan was developed and accordingly 52 indicators to measure equity in health were developed and announced by the Ministry of Health in collaboration with other sectors. This study aims to obtain a deeper understanding of the development of health equity indicators and identify their implementation challenges and proposed solutions from the perspective of policy makers and executives responsible for the indicators development and implementation.

**Methods:** In this qualitative study, data were gathered using semi-structured interviews with 15 stakeholders involved in the development and implementation of these health equity indicators (at national and provincial levels), and the review and analysis of relevant documents including meeting minutes, working plans and working progress reports. Data were analyzed using a framework analysis approach.

**Results:** Four main themes were identified, including the concept of equity in health and its importance, the use of health equity indicators and process of indicators development, challenges of development and implementation of the indicators and laying the groundwork for the establishment of indicators. The findings showed that policy makers' viewpoint on concepts and indicators is different from those of executives and their perceptions have little in common. The establishment of indicators requires accurate stakeholders' understanding and accurate insight into the issue of equity in health, political will, financing, training and empowerment of organization's employees, legal requirements, and finally a clear action plan.

**Conclusion:** The development of the indicators requires a shared understanding among policy makers and executives. As the attention has been focused recently on the issue, in addition to knowledge improvement, proper solutions with an intersect oral collaboration approach in order to tackle challenges should be considered.

**Keywords:** Social determinants of health, Health equity, Policy analysis, Iran.


Introduction

Equity in health and reducing inequalities are considered as the main goals of all health systems (1) which is the absence of systematic disparities in health or in the social determinants of health between social groups with different levels of social advantage (2). Health inequalities are structural and systematic differences in health status between and within social groups in
society. There is a difference between the inequality and inequity in health so that inequality is regarded as avoidable inequalities (2). The term "health inequity" has been recognized as a root cause affecting health and is closely related to "social determinants of health (SDH)" including place of residence, race/ethnicity/culture/language, occupation, gender/sex, religion, education, socioeconomic status, and social capital requirements. Inequity in health is more important than other inequities because the health is the first prerequisite to achieve other capacities (3,4). Studies, for example, show that the richer individuals are healthier than the poorer ones (5). However, inequalities do exist in health care (notably in access to care), they should not be considered as the principal cause of inequity in health status (6).

In response to growing concern over the continuation and expansion of these inequalities, the World Health Organization Commission on Social Determinants of Health was established and made recommendations to develop and systematically monitor the equity in health and social determinants of health at the local, national and international levels. They may lead to design appropriate interventions and facilitate evidence-informed policy-making process (7).

Monitoring health inequalities through producing appropriate evidence can promote accountability and continuously improve equity-oriented health plans, including moving toward universal health coverage (8). Given the importance of the issue, various countries have initiated the development of such surveillance systems (9,10). Health equity surveillance systems include the analysis of groups in terms of socioeconomic status, age, gender, race, ethnicity, residence and other key factors determining socioeconomic advantages or disadvantages (11).

The above list of factors identified may not include the underlying causal factors and pathways of health inequality from the developing countries perspective. As there are differences from country to country, addressing health inequalities may need country-specific indicators. Identifying causal factors at country level is essential for prioritizing policy interventions (12).

The accurate selection of appropriate indicators can affect the proper and reliable measurement of inequality rate. General important considerations for selecting the indicators include the cost of data collection, data quality issues, availability of data for monitoring at proper time intervals, cultural appropriateness, sensitivity to the policy interventions and the required technical capacity for the analysis (12,13).

Some countries use the World Health Organization' health equity indicators. In Iran, the basis for development of health equity indicators was the Urban HEART (urban health equity assessment and response tool) indicators. Urban HEART, developed by WHO, is a simple tool and guide to identify health inequity in urban areas which was tested in some countries including Tehran (Iran) (14).

In this regard, In Iran the responsibility of the development of health equity indicators was delegated to the Ministry of Health and Medical Education. To develop these indicators, several expert meetings were held and 52 indicators were determined using the Urban HEART and after several refinements. Some of these indicators are international and some other are based on the local circumstances of Iran. The indicators have been determined in five domains, including health (20 indicators), human and social development (17 indicators), economic development (4 indicators), physical environment and infrastructures (7 indicators) and governance (4 indicators). In addition, appropriate practical classification variables to calculate were determined for each indicator. Data associated with 12 indicators will be collected using survey studies while data related to 40 other indicators will be gathered through the routine data recording system (13). To ensure the enforcement of the health equity indicators, they were announced to the relevant organizations after
In order to plan for reducing inequalities, stakeholders should have sufficient knowledge and awareness of the issue of the equity in health and its indicators and reach a consensus about the system for monitoring these factors. It is necessary to clarify the challenges and consequently relevant scientific and practical solutions can be applied using the international, national and local evidence.

Given the importance of awareness of the health equity indicators and its implementation challenges and lack of study in this area in the country, this study aimed to investigate stakeholders' perspective on equity in health and its 52 indicators in Iran. The results of the study can help policy makers better understand the issue in order to effectively plan and implement the health equity indicators.

Methods

In this qualitative study, data were gathered through semi-structured interviews and the review and analysis of relevant documents, including meeting minutes, working plans and working progress reports. The interviews were conducted using a topic guide developed according to a literature review and expert opinion. It was pilot tested using interviews with three policy makers and executives and based on their comments it was revised and finalized. The participants were given the information sheet and consent form prior to the interviews. After research ethics committee approval, interviews conducted in-person on a one-to-one basis after consent was provided by the research director and two trained colleagues. All interviews were recorded and later transcribed verbatim. A framework analytical approach was used for data analysis (15).

Participants were selected using purposive sampling method. The key informants (n=15) at national and provincial levels were purposively selected according to their roles, responsibilities and positions on health equity and its indicators in Iran. The key informants were involved either in the development or in the implementation of health equity indicators. With regard to the number of participants in this study, it should be emphasized that most of policy makers directly involved in health equity issues were interviewed. Despite difficulties in access to relevant executives, key informants of them were also interviewed. As there are no explicit criteria for the number of interviews and according to the qualitative nature of this study, data saturation occurred. A total of 23 individuals were invited, 8 (35%) of whom refused to take part in the study of various work-related reasons or the lack of willingness to participate. There were five policy makers and 10 executives. Among the executives, two were governors of major cities. Interviews continued until data saturation was reached and no new code was found. Table 1 shows the characteristics of the participants in the study.

The focus of the policy makers’ interview questions was primarily on the process of indicators development and participation and interaction of various sectors in this process, the developing indicators as well as the steps of the indicators development process. Executives answered questions mainly regarding their perception of the health equity and related indicators’ calculation and implementation processes.

To assure reliability and validity of the research, the credibility, transferability, conformability and dependability were considered.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Number</th>
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<tr>
<td>Executives</td>
<td>10</td>
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<td>Policy Makers</td>
<td>5</td>
<td>4</td>
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Table 1. Characteristics of participants
Credibility refers to confidence in the truth of the study's findings (16). To achieve credibility, the member checks and data saturation was used. In this study, researchers submitted the study findings (interview transcripts and a draft of research report) for reviewing and commenting by the interviewees and their opinions were incorporated in the final analysis. It helped to ensure that the findings were congruent with the participants' perceptions and opinions. Data saturation was another strategy used to ensure credibility.

Conformability refers to the neutrality of the data (16). In this study, conformability was considered through inquiry trail. An inquiry trail includes an inspection of the data and supporting documents by an external reviewer. For an inquiry audit, researchers develop an audit trail, that is, a systematic collection of material and documentation that allows an independent auditor to come to conclusions about the data. The audit trail for this study includes interview topic guide, audio taped interviews, interview transcripts. In this study a draft of all the documents were sent to three independent researchers to receive their comments.

Transferability refers to applicability of the findings in other setting or groups (16). In this study, transferability was addressed through conducting interviews with different participants, providing direct quotes of the interview data and rich description of the design and findings of the study.

And finally, dependability refers to constancy of data over time and over conditions (16). To achieve dependability, in this study, two researchers independently read and coded the same interview transcripts. The two researchers compared their codes, discussed discrepancies and revised them until consensus was reached. After completing coding, a qualitative researcher review the interview transcripts and certified the findings with two coder.

Results
During the analysis process of data, 4 main themes were identified including the concept of equity in health and its importance, the use of health equity indicators and process of indicators development, challenges of development and implementation of the indicators and laying the groundwork for the establishment of indicators. The lack of coordination between policy makers and executives in the establishment of indicators was observed in some cases indicating the necessity of gaining more support from executives and laying the proper groundwork for the calculation of these indicators.

Theme 1: The concept of equity in health and its importance
Many respondents pointed to the difference between concepts of equity and equality and cited that equality or inequality is an instrument or an indicator. A large number of participants considered the concepts of equity and equality as two separate issues. Differences in the definition of equity and equality were observed between policy makers and executives. While policymakers defined the equity as the lack of unjustifiable inequalities, most executives at university level referred the term "equity in health" to equal enjoyment of health care services: "Equity in health is fair access to good quality health care services across the whole of society, fair distribution of facilities, medical and treatment equipment in order to promote the health of the entire population and improve health indicators in every society".

In regard to the concept of equity in health, executives paid particular attention to access for the poor and vulnerable groups. Also, a policymaker categorized the concept of equity in health into two areas of equity in health and equity in healthcare system. According to his statement, equity in health refers to equity in health outcomes that can be associated with proper functioning of health system and other external systems while equity in health systems is more associated with fair distribution of, access to and possibility of benefiting from health services.
Additionally, a policy maker stated that it is better that health promotion be along with equity in health. Policymakers also emphasized that the improvement in the health indicators does not necessarily signify the equity, but rather these indicators must be considered of various socio-economic, cultural, ethnic and gender groups and they expressed the concept of social determinants of health (SDH).

On the other hand, definitions of equity in health discussed by the executives mainly focused on health system and fair access to health services but less on social determinants of health.

In addition, the policy makers emphasized on the special importance of the equity in health and believed that the equity is resulted from several systems' functioning. Equity in health is more important than other aspects of the equity such as economic equity due to its more important impacts on population lives. The inevitability of addressing the equity was another reason discussed by the policy makers. According to the religious beliefs and traditions in Iran, the equity consideration was mentioned as a necessity.

Many respondents discussed the economic importance of the health equity issue and pointed advantages of achieving equity for society as a whole. They added that all economic deciles can benefit from the achievement of equity because even the upper strata of society may incur losses resulted from inequity. So, the usefulness of this issue for the whole of society reflects its importance from the viewpoint of participants.

Some executives regarded the health equity as an investment in countries and pointed to the higher economic productivity and growth in healthier societies.

Some executives acknowledged that achieving equity is a public demand and request which the government must meet it. In this regard, one of the executives stated:

“Equity is a public demand and in fact, governments are responsible to provide such services. Obviously, this important demand having undeniable and strong decisive effect on the economic growth should be met in every society.”

Theme 2: The use of health equity indicators and process of indicators development

The participants were questioned about reasons for the development of health equity indicators. Most mentioned the better possibility to monitor and evaluate health plans and the basis for planning and resource allocation as the reasons for developing the indicators.

Furthermore, a number of respondents believed that the indicators development is the first step in monitoring equity in health and recognizing poor and vulnerable groups.

Since, indicators are not developed and data are not gathered at the level of various socio-economic groups, the identification of vulnerable groups is not simply possible. In this regard, one interviewee stated:

“If we are not aware of differences between these indicators among various groups, plans will be too general. The development of indicators and the identification of vulnerable groups are, therefore, necessary for the resource allocation, specific planning and monitoring them.”

In regard to the pattern and design of the indicators, the respondents cited that the international evidence and the World Health Organization's urban health equity indicators (Urban HEART) have been used. Additionally, those Iranian experts attended international health equity consultation meetings were also invited to develop Iranian indicators. Viewpoints of these well-known experts having high authority and international experiences played a key role in leading and participation of organizations working in other sectors. Several weekly meetings were held for a year to develop the indicators. In addition, the political, social, cultural conditions of the country were also taken into account. Policymakers mentioned the features of the process of indicators development including different relevant individuals’ involvement, openness to express views by stakeholders, the key...
individuals’ and experts’ participation in the formulation of indicators and intra and intersectoral collaboration. In regard to the identification of stakeholders, most participants held similar opinions. They pointed to the participation of a wide range of stakeholders such as the Statistical Center of Iran, Organization of Education and Training, universities, Ministry of Interior, Organization for Civil Registration.

It seems that the stakeholders’ opinions and exerting the process owners’ viewpoints have been considered very important in this process. Internal consensus at the indicators development meetings was a matter of particular importance and the relevant process owner’s opinion about each indicator had high priority.

Overall, the use of international experiences, the policy transfer, the internal consensus and the localization can be mentioned in the process of the development of the health equity indicators in Iran.

Theme 3: Challenges of development and implementation of the indicators

The process of the development of health equity indicators in Iran is a good example of the intersectoral collaboration but sometimes there was a problem regarding the lack of attendance of senior managers and decision makers in related organizations at the meetings and also those attended meeting who did not have necessary authority to make decisions and express their opinions.

Stakeholders interviewed considered the selection of indicators as the first difficulty in the development of the indicators. Various stakeholders pointed to certain indicators with respect to their own views. Even when it seemed to have reached a consensus on some cases, insufficient definitions and lack of clarity of some indicators were observed.

Additionally, some respondents argued that the issues of stewardship and leadership are very important to establish the indicators i.e. what individuals and organizations establish the indicators. So the integrated and strong leadership in the establishment of indicators is critical. The attendance of key and professionals experts and the need of establishing a secretariat office devoted exclusively to the establishment of indicators were other issues mentioned by the policy makers. In this regard, some policymakers cited that the secretariat of health equity must work exclusively in this area and it must not have any other duty because this issue requires devoting special attention and activities. Some also believed that the current secretariat is within a department in the Ministry of Health with several duties which may result in the lack of focus and special attention to the issue of health equity.

Some respondents discussed issues regarding the establishment and the implementation of the indicators including no specific steward for some indicators, the lack of data for some indicators, the costly and time consuming process.

Other challenges mentioned by participants were the complex nature of work, the necessity of its accurate follow-up and training as well as the empowerment of individuals involved in the establishment of the indicators since this initiative is in its infancy.

Furthermore, they stated that organizational forms need to be changed in accordance with the required information to calculate indicators. It was considered as an important challenge requiring time and money.

The imperfect infrastructure for information access in order to collect relevant data was also perceived as a problem. In this regard, the executives pointed to other problems including lack of intersectoral solidarity, administrative instability, poor teamwork, shortage of financial resources and lack of proper program leadership.

One of the executives argued that governors of the provinces and cities should be the stewards of the establishment of the indicators because many indicators and related data are out of the scope of the Ministry of Health. At present the governors of the cities are responsible to implement indica-
tors but despite the orientation programs, there is still a lack of sufficient and appropriate awareness and proper attitudes among the executives. Ministry of Health should exercise more efforts in order to improve participation of the governors and executives in the process.

**Theme 4: Laying the groundwork for the establishment of indicators**

Gaining support of other organizations and agencies was considered as the first step in laying the groundwork for the establishment of indicators. It is very difficult to establish indicators unless other organizations are justified, understand the benefits of the establishment of indicators and identify their position and responsibilities in this process.

Empowering organizations was another mentioned issue in order to understand, use and implement indicators. Furthermore, holding meetings with policy-makers, decision-makers, politicians and university presidents were considered as measures for laying the groundwork.

The stakeholders also pointed to the information system reform. In this regard, a policy maker stated:

“Information system should be changed into a system in which all data needed for these indicators and their stratifies are available.”

The announcement to the universities about the establishment of research centers of social determinants of health in the Departments of health was suggested by policy makers. The interviewees also pointed to activities such as writing and publishing books and educational packages as well as sending them to universities and other organizations.

The regulatory approval and support for the establishment these indicators in the main and relevant councils such as the supreme council of health and nutrition as well as the increase of commitment by ministers were also the proposed suggestions. Also, to better implement the program, the governors of the provinces and cities are in charge of the program in their local areas. Finally, the human resource training such as training students in social determinants of health was another issue mentioned by the policy makers.

**Discussion**

The equity and equity in health are not only the issue of international interest but also have been considered in Iran development plans. Furthermore, committee on social determinants of health in the final report from the World Health Organization (2008) titled "closing the gap in a generation" emphasized on national and global health equity surveillance systems for routine monitoring of health inequity (5).

The issue of stewardship in health equity is a matter of great importance. Health system need to lead by taking a stewardship role in supporting a cross-government approach that focuses on the social determinants of health and performing as catalysts to all society. The Health in All Policies programs of the European Union and South Australia promote inter-sectoral collaborations to health equity (17). The establishment of a common language for health sector and other agencies is considered as an important challenge in its leadership. Gopalan et al. suggested that a lack of awareness among stakeholders restricted the inter-sectoral convergence on combating health inequities (17).

In Iran, the Ministry of Health is the steward of health equity goals and it is suggested that a secretariat or an independent office be established for health equity.

According to the definitions of equity concepts provided by the stakeholders, the difference between viewpoints is obvious and their perceptions on the main concepts of equity in health are different from each other. This study showed that many executives and some policy makers disagreed on key concepts of equity in health and the executives had insufficient information about the concept of equity in health as desired by the policy makers. In general, many executives considered the equity in health mainly...
as fair access to and distribution of health system resources. Also, Low study showed that access to health services alone is not sufficient to achieve equity in health (18). However city governors and medical science universities are executives responsible for implementing the indicators in the region, they lack sufficient attitudes and awareness towards the issue of equity in health. It seems that orientation programs by the Ministry of Health should be more comprehensive and with an aim of emphasizing a higher priority of the issue for executives. The establishment of these indicators requires capacity building, training and shifting the attitudes of the executives implementing this program. So training and improving the awareness of the key actors are main effective steps for the establishment of health equity indicators. Training and improving the awareness of executives are facilitated by providing regulatory requirements helping the decision-making.

Beheshtian et al suggested that the Consensus-Oriented Decision-Making (COMD) model for more intersectoral collaboration and consensus among other areas can be used in Iran (13). After the development of the indicators and in the establishment step, interaction between politicians, policy makers and regulatory authorities is essential in order to establish these indicators.

There are some challenges regarding the calculation of the health equity indicators in the country. However 40 out of 52 health equity Indicators are collected through routine system, investigation and survey are needed for remaining 12 indicators. The routine system itself needs to be reformed and improved including hardware and software improvements. Furthermore, the preparation and participation of organizations to change their statistics and reporting systems are also required. Therefore, gaining a wide intra and intersectoral participation is needed to collect data for the indicators and change statistical forms. This participation should be established at levels of policy makers and high authority officials.

In addition to the above mentioned issues, creating the infrastructure for electronic data recording and defining access level may help to the establishment of the indicators.

The establishment of indicators requires financing, training and empowerment of organizations employees, legal requirements, and finally a clear action plan. A report from the Pan American Health Network on the development of health equity indicators in Canada also cited the similar challenges such as the need for financial resources, being time consuming as well as limitation of sources of information (19).

As the establishment of the indicators is in its the primary steps, so the executives responsible for implementing the indicators have not had the possibility for complete and necessary adaptation to ministry of health instructions and gaining more support for the executives, training them as well as laying the proper groundwork for calculation these indicators are obviously necessary.

It is debatable whether these indicators show the extent of the health equity in the country. Many policymakers stated that the World Health Organization and international indicators provided the basis for the country indicators but some changes were made in them according to cultural and social conditions of the country. In this regard, an important point mentioned by the policy makers is that as these indicators had not previously been identified, so the development of them can be considered as a positive step and they will be revised in the future according to feedbacks from universities and other organizations. Braveman in his study argued that data utilization to develop interventions is far more important than data collection itself (20). The results of this study are in consistent with those of current study, because many policy makers argued that the establishment of these indicators can be helpful if appropriate interventions are developed based on information they provide. It is, therefore, necessary to specify solutions for using the indicators in decision making. Policy making for reducing inequity in health is too diffi-
cult because it is an intersectoral policy making requiring various areas and organizations involvement and this, in turn, demands the specification of common goals, integrated accountability and increased organizational responsibilities (13).

Overall, the results of the study showed the inadequate awareness of stakeholders on equity in health, lack of proper infrastructure and insufficient support from stakeholders are the important challenges regarding the establishment of the indicators; these findings are consistent with those of a study by Gopalan et al (21).

Limited access to some policy makers and executives was a limitation. A small number of the governors and executives were interviewed while there were more policy makers and stakeholders participating in the development of the indicators.

Conclusion: As the establishment of the indicators is in its the primary steps, so the executives responsible for implementing the indicators have not had the possibility for complete and necessary adaptation to ministry of health instructions and gaining more support for the executives, training them as well as laying the proper groundwork for calculation these indicators are obviously necessary. The development of the indicators requires a shared understanding among policy makers and executives. As the attention has been focused recently on the issue, in addition to knowledge improvement, proper solutions with intersectional collaboration approach in order to tackle challenges should be considered.

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