

Original Article

Which Social Values Are Considered in Iranian Health System?

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Abstract

Background: Health systems have a set of limited resources for meeting the needs of communities. Health priority setting based on criteria and values is inevitable in such situation. This paper aims to identify the social values that are considered in Iranian health system.

Methods: This qualitative study was conducted in 3 steps including collecting national documents and literature review, interviewing key informants, and a 2 round Delphi. Interviews and documents were analyzed through thematic framework analysis. Statistical guidance was applied for determining consensus cut-off in Delphi technique.

Results: Five social values including freedom of choice, equity, solidarity, severity of disease(s), and burden of disease(s) were considered more important than other values in the health priority setting decisions. Moreover, 2 non-value based factors including conflict of interest and lobbying had a high effect on decision making.

Conclusion: Most health policy makers decide based on Egalitarian school, but restriction of resources in the country decreases the outcome. Moreover, personal judgments and preferences sometimes affect their decisions. It seems that developing a value-based framework and making it as a national guidance could have affirmative effect on health administrators decisions.

Keywords: Health policy, Health system, Iran, Priority setting, Social values

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Introduction

Health systems provide health services to meet the needs of population. However, health demands in communities are high and the resources of health systems are limited.^{1,2} This limitation makes it necessary to set priorities, and allocate the resources based on both ethical and technical approaches.^{3,4} Priority setting means distributing the scarce resources among competing groups of programs or patients in 3 levels including macro, meso and micro.¹ The resources incorporate health workers, physical resources, complex technologies and financial assets. Almost all countries are encountered with lack of enough resources, but the problem is more complicated in developing countries.^{5,6} The issue gets worse when the country does not develop special predefined criteria for setting priorities. Developed countries historically have used different measures and tools for fair distribution of resources among health providers.⁷ They often apply cost-effectiveness and some similar measures, but the application of these measures is limited in developing countries.^{1,8} A most common reason for this, is the

lack of capabilities in the health system for accounting the technical measures. In these developing countries, the authorities try to find short term solutions for the problems, and do not give attention to develop a sustainable model for their decision making.⁹ They often prefer to allocate resources to groups or organizations that have political support. Therefore, the values of special groups (not the public) are considered in the health systems.^{10,11} It seems that using eminent frameworks and models in health priority settings could cause better results in these countries.

Although different approaches have been used for setting priorities, there is not a consensus about which criteria should be applied in decisions.² Interestingly, most of these approaches are value-based. In fact, decision makers and economists in health sector believe that non-technical criteria have a distinctive role in setting priorities.¹² The public as the consumer of health services, expect to participate in decision making.⁴ The values like fairness, severity of illness, the urgency of health needs, age of patients and many similar values

are the most important criteria in the view of public.¹³ Recently, different approaches have been developed to give importance to societal judgements. For example, the Accountability for Reasonableness of Daniels and Sabin¹⁴ and also social values in health priority setting framework of Clark-Weale¹⁵ are the most common value-oriented frameworks which have been used worldwide. The first one emphasizes public participation and process values that should be considered in priority setting decisions. Four conditions including relevance, publicity, appeals/revision and enforcement are required to have a fair process.¹⁶ A few countries have examined their health system against this framework and have explored the level of legitimacy of decisions. The framework determines a number of necessities for health decision makers in the health organizations, but does not offer enough guidance for achieving a fair priority setting.¹⁷ The latter is the framework of social values that includes process and content values. Participation, accountability and transparency are the process values; and equity, solidarity, clinical effectiveness, cost-effectiveness and freedom of choice are the content values.¹⁵ Clark and Weale state that process values are not as clear as content values, but they are essential for making reasonable decisions. The content values are those that are used for making health priority decisions in many countries. Clark and Weale believe that it is possible to reject cost-effectiveness as a social value, but it is necessary for balancing other values. They state that the aim of the framework is to facilitate the comparison of social values roles in priority-setting decision making in international level. The framework has been applied in some countries for determining the status of social values in their health system settings including Korea,¹⁸ Australia,¹⁷ Germany,¹⁹ China,²⁰ Iran,²¹ England,¹⁵ and Thailand.²² Generally, both frameworks are valuable for assessing the value orientation of health systems.

The health system in Iran is almost decentralized. The Ministry of Health and Medical Education (MOHME) is the main body for macro level health decisions, and medical universities in provinces are the agents of the ministry that have a wide range of authorities for education and preventive and treatment procedures.²³ The national budget of public health sector is allocated to the ministry according to its reports and application forms. The budget is distributed among medical universities annually.²⁴ The universities must report their financial performance at the end of the financial year and apply for the budget of new financial year.²⁵ Each university leads a defined number of hospitals, health care networks, and health research centers. The managers of hospitals and health care networks are responsible for their financial operations, and they plan to get revenues

from their health services. The important point is that the recruitment of new personnel for hospitals and other organization, and also purchasing new health technologies in large scales are the tasks of the MOHME.

The Iranian health system has nearly a egalitarian approach. For instance, according to the Constitution, all people in the country must have equitable access to health services.²¹ For this reason, several programs have been developed during 35 years ago (after the great Islamic revolution) for achieving this goal. Establishing health care networks in rural areas and cities, free coverage of health insurance for poor and vulnerable people, implementation of health revolution plan, establishing the charity clinics and hospitals are some of these affairs. Moreover, solidarity and freedom of choice are other values that are important in the national documents. A previous study carried out by the authors of this paper showed that some social values like participation and transparency, and some content values have little importance in decision making.²¹ It seems that exploring the social values through examining the health managers and key experts experiences indicates the values that are used frequently in real decisions of a health system. In this paper, we aim to identify the social values applied in priority setting decisions of Iranian health system.

Methods

Data Collection

This qualitative study was conducted in 3 steps for exploring social values in Iranian health priority setting decisions through collecting national documents, literature review, interviewing key informants and Delphi method.

Sampling

In the first step, we searched some databases including PubMed, Scopus, google scholar, and SID for recognizing the social values that are considered in the health priority settings worldwide. We used keywords such as social values, societal values, priority setting, rationing, resource allocation, public involvement, public participation, health, and healthcare for recognizing appropriate Persian and English papers. Finally, 28 values were explored in this step (Table 1).

In the second step, we reviewed national documents based on values that were found in the first phase. The documents included all prominent laws from 1979 to 2014 that were available to public. After extracting all social values from documents, a qualitative content analysis was done to provide an understanding of the role of social values in each policy document. Moreover, we interviewed 30 key informants from macro, meso and micro levels of some health related organizations. They

Table 1. Social Values Identified Through Literature Review

Values (Criteria)			
Human Dignity	Financial Access/Affordability	Cost	Age
Clinical effectiveness	Burden of disease	Acceptability of health services/ acceptable services	Sex
The place of residence	Participation/involvement/public participation/public involvement/ deliberation	Type of treatment	Necessity of treatment
Cost-effectiveness	Life style	Benefits of medical intervention/ welfare	Health status
Need/health needs/ need for treatment	Severity of disease/ Severity of illness/ Severe illness	Solidarity	Equity/fairness
Freedom of choice/ Independence/freedom	Population	Transparency	Physical accessibility
Safety	Efficiency	Accountability	Treatment cycle/Treatment length

had direct participation in the health priority settings (Table 2).

All interviews carried out in the interviewees' offices by one of the authors (H.M) of this paper. A semi-structured guide was used. All interviews were recorded and transcribed. The average duration of the interviews was about 45 minutes. The interviews were stopped after reaching data saturation. Social values identified through documents analysis and interviews were showed in the Table 3. In the third phase, we conducted a 2 round Delphi to reach consensus about the values. The high validity of group opinion in comparison with individual judgments is the main reason for applying the Delphi technique. Delphi was carried out between September 2015 and April 2016 to explore the consensus and conflict around social values in health priority setting decisions.

Sampling the Experts (Participants)

For increasing the reliability of the results, various experts consisting of hospital managers, health organizations CEOs, clinical researchers, health insurance experts, and academics were recruited in the Delphi. We defined

'experts' as knowledgeable experts who had information and direct experience about priority setting in healthcare organizations. We intended to capture various perceptions of Delphi members to make sampling purposive. They were identified through review of literature in the field of health priority setting, searching website of MOHME, ministry of social welfare, health research centers, and recommendation of research team members.

Anonymity

Complete anonymity was achieved. The same degree of importance was assigned to opinions of all participants. This approach resulted in honesty of participants to give a wide range of opinions about the social values.

We tried to make our study valid through applying different data sources which allowed for triangulation²⁶ and developing the phases of the study.²⁷

Data Analysis

Qualitative Data Analysis

Interviews and documents were analyzed through thematic framework analysis that had 6 separate and

Table 2. Level, Demographic Information and Job Description of Interviewees

Organization	No. of Participants	Sex		Experience of Management		Education	
		Male (%)	Female (%)	More Than 10 years	Less Than 10 years	Medical Related Education	Non-medical Education
Macro level							
Ministry of Health and Medical Education	4	4	0	4	0	4	0
Ministry of Labor, Welfare and Social Security	2	1	1	1	1	2	0
Health Commission of Parliament	2	2	0	2	0	2	0
High Counsel of Insurance	2	2	0	1	1	1	1
Social Security Organization	2	2	0	1	1	0	2
Planning and Management Organization	2	2	0	2	0	1	1
Meso level							
Medical sciences universities	3	3	0	2	1	3	0
City consuls	3	3	0	3	0	1	2
Micro level							
Hospitals and health care networks	10	7	3	7	3	10	0
Total	30	26	4	23	7	24	6

Table 3. Social Values Identified Through Documents Analysis and Interviews

Human Dignity	Financial Access	Cost	Age
Clinical effectiveness	Burden of disease	Acceptability of health services	Sex
Participation	Severity of disease	Solidarity	Equity
Cost-effectiveness	Population	Transparency	Physical access
Need	Efficiency	Accountability	Freedom of choice
Conflict of interest	Lobbying		

in-row steps including familiarization, identifying a thematic framework, indexing, charting, mapping, and interpretation. Moreover, we applied MAXQDA 10 for categorizing the codes that were extracted from interviews.

Quantitative Data Analysis

Statistical guidance was applied for determining consensus cut-off in Delphi technique. We set acceptance or rejection of a value by at least 70% of respondents. Moreover, we checked and reviewed the distribution of responses of the remaining 30%. The values that obtained mean score above 70% were accepted as social values that are considered in health priority decisions. The values that obtained mean score less than 30% were rejected, and those obtained score between 30 and 70 entered the second round of Delphi. At the second round, we presented the mean score of each value and also the score that each respondent had assigned to each value. Then we got them to score the values again.

The result of this phase was identification of 6 social values and 2 non-value-based factors that are considered in the health priority setting decisions more than other values (Tables 4 and 5).

Results

After analyzing the data obtained in 3 phases, 6 values

and 2 non-value-based factors were explored.

Solidarity

Solidarity means the participation of government in funding the health system costs. Clark and Weale apply it to decisions where priority is given to people with severe diseases who should receive immediate medical services.¹⁵ Some believe that the concept of solidarity overlaps with equity.¹⁷ In Iran, solidarity and collaboration in the health system financing and also supporting poor people have a long history. Charity entities have supported the vulnerable people from decades ago, and now they have organized activities in the national level. Iranian Health Insurance Organization and several types of health insurance for diverse groups of the population also indicate the importance of solidarity and equity:

“As you know we have a rich history about solidarity and many non-governmental organizations such as MAHAK, Emam Khomeiny Committee that supports poor people. These are only few examples that show the social solidarity in the country.”

Equity

If patients with the same health needs access the similar health services, the equity will be attainable to some extent. According to interviews and Delphi rounds, equity could have 2 aspects: financial access and physical access.

Table 4. The Results of First Delphi

Criteria/Values	Low Score (1–3)	Middle Score (4–6)	High Score (7–9)	Result
Burden of disease	11.11	15.87	71.42	Acceptance
Severity of disease	6.34	17.46	74.60	Acceptance
Population	38.09	28.57	28.57	Reject
Resource affordability	36.50	28.57	33.33	Second Delphi
Financial access	6.34	25.39	66.66	Second Delphi
Physical accessibility	6.34	14.28	77.77	Acceptance
Participation in micro level	39.42	46.03	15.87	Reject
Participation in macro level	20.63	15.87	46.03	Second Delphi
Freedom of choice (for medical services)	39.68	23.80	33.33	Second Delphi
Freedom of choice (for choosing insurance companies)	53.96	14.28	30.15	Second Delphi
Solidarity	20.15	47.61	30.63	Acceptance
Lobbying	7.93	14.28	74.60	Acceptance
Conflict of interest	4.76	11.11	77.77	Acceptance
Efficiency	47.61	33.33	17.46	Reject

Table 5. The Results of Second Delphi

Criteria/Values	Low Score (1–3)	Middle Score (4–6)	High Score (7–9)	Result
Resource affordability	23.30	52.90	14.70	Reject
Financial access	16.58	13.17	70.25	Acceptance
Participation in macro level	10.70	21.20	66.20	Reject
Freedom of choice (for medical services)	23.58	6.40	70.02	Acceptance
Freedom of choice (for choosing insurance companies)	32.30	44.10	23.50	Reject
Solidarity	18.35	11.63	70.02	Acceptance

Equity in Physical Access

Physical access in the health system of Iran has 2 dimensions. In the healthcare networks that offer prevention services, people could access a complete range of health services consist of immunization, environment and job safety, and mothers and child health services, with no cost. These networks have been established from 35 years ago and have been successful till now especially in rural areas. The health indices of population have been improved, and WHO recommends other countries to learn from Iranian health networks experiences. For example one of the interviewees in our study stated:

“More than 90% of Iran’s 23 million rural population has access to health-care services through health houses which results in improving health indices. Moreover, we have to remember that economic improvement in rural and urban areas accelerates the improvement of health indices in the country.”

Another believed:

“Our PHC was a successful experience in the world. You can visit websites of WHO or UNICEF that present it as a good model for developing countries.”

Albeit, some interviewees have different views:

“I believe that PHC couldn’t achieve all goals, for example because of poor inter-sectoral coordination between primary and secondary levels, weak coverage of PHC in urban areas, limited budget and”

Second dimension of physical access is access to medical treatments. Many cities have general hospitals, but some especial medical and diagnostic services are accessible only in big cities especially in capital of country. Recently, the implementation of health reform plan (*Tarhe Tahavolle Salamat*) in national level resulted in improvement in access to some specialty services:

“Tarhe Tahavolle Salamt has been conducted for providing access to professional services especially in rural and deprived cities. We follow the sustainable presence of doctors in rural areas, and our observations show that total access of people to health services and their satisfaction have increased in the first year of the plan implementation.”

However, health managers believe that the health system needs more efforts for reaching the universal equity.

Equity in Financial Access

High cost of healthcare services causes patients neglect going to health care centers. Health systems in the world

apply various solutions to provide affordable services for the public. Like other countries, different ways such as health insurance coverage for poor people, financial support of the poor and vulnerable people by charities are used in this regard. Moreover, one main goal of the health reform plan was the equity in financial access, which was achieved to some extent.

Severity of Disease(s)

Severity of illness means the status of health or disability that affects the length or quality of life. In other words, severity of illness is a condition that needs acts of health care providers to prevent strong deficits in patients’ health.²⁸ Some interviewees stated that in the health system of Iran 2 conditions are considered as severe. First, the illnesses that have a short golden time for treatment and often are referred to emergency rooms in hospitals. Second, acute and communicable diseases that affect a large number of people in short time. In fact, the conditions that need urgent health arrangements and make high costs in future are considered as severe conditions. Interviewees believe that the cost-effectiveness of interventions is not counted exactly, and just pure cost of illness or health condition is important in decision making of health administrators and policy makers.

In terms of importance, MOHME allocates more funds for treatment and prevention of acute and communicable diseases. Moreover, the ministry develops regulations for hospitals to treat such emergent conditions. The hospitals that obey the regulations acquire higher grade in ranking system of hospitals. Moreover, the ministry gives an especial attention to some communicable diseases like El Tor that spreads rapidly in summer and creates high concerns.

Burden of Disease

According to interviewees, the burden of disease (BOD) study was a common project conducted with collaboration of WHO, World Bank and Harvard University since 1988, and its results were published in 1993 which now are used in health priority setting and health planning.²⁹ Estimation of BOD has some difficulties, but what is important is considering this measure to determine the

outcomes of diseases and quantifying the qualitative measures.

According to key informants, first studies about BOD were started in 2003 in Iran and their results were published in 2007. Now, these studies are one of the most important plans of ministry of health and medical education. However, some interviewees believed that BOD data have not been applied in decision making yet. On the other hand, some stated that Action Plan for Prevention and Control on NCDs vastly used BOD to set goals for health system of Iran.

Freedom of Choice

Freedom of choice means that people have enough independency to select health services, health care providers and even they can decide to spend their money on health or other issues.¹⁵ In the health system of Iran, people have different rights for choosing the health services. In other words, they have little independency to select the primary health care services, but relatively they are more independent to select the medical services. The Primary Health Care network is responsible for delivering the primary health services to a predefined population in both rural and urban areas. The Primary Health Care network is a public entity and is financed through public resources. People must go to determined centers for receiving these services. In fact, this limitation is due to scarce public resources and the obligation for receiving primary health services.

Hospitals and other healthcare providers give more freedom to their clients. Especially in private sector, people have more right to select the desired health service(s) and physician(s). In public sector, resources are limited and patients should behave according to the hospital regulations and limitations. On the other hand, in private hospitals patients can behave based on their financial power and decide to select a special service or even a physician.

Some participants believed that freedom of choice results in inequity, because poor people cannot visit high level hospitals.

"I think poor people are the victims of high independency in health system; they can't visit best doctors because they don't have enough money...."

Moreover, some stated that independency of patients causes low pursue of the referral system and generates extra costs for health system.

Conflict of Interest

Conflict of interest occurs when the interests of health workers and professionals outpace patients' interests.³⁰ Conflict of interest sometimes results in defecting the quality of treatment, educations and research and the

trust of the public.³¹ Although it is not a criteria or value, the study showed that it has an important role in health priority setting decisions. For example, some hospital managers who work in private sectors don't permit hospitals to purchase some medical equipment because they want to restrict that technology. Another example of conflict of interest occurs when physicians prescribe some brands of drugs. These physicians have contracts with pharmaceutical companies to increase their products marketing. Moreover, some clinicians are working in MOHME and they have some conflict of interest in developing some regulations:

"I remember an old law (Prohibition of employment in private and public sectors) that threatened the interests of doctors. This law was not implemented."

The other feature of conflict of interest arises between MOHME and Ministry of Welfare because of limitation of resources. Both of them want to receive extra financial resources without any compromise in negotiations.

The last feature of conflict of interest relates to health professionals who write papers or reports in medical journals to directly or indirectly encourage people to use some especial health technologies.

Lobbying

According to findings of our study, lobbying is the other factor that affects health priority setting decisions. Some countries have a special organization to register lobbying activities.^{32,33} In Iranian health system, lobbying happens due to limited resources. In other words, having high lobbying power means having more resources. Hospital managers prefer to lobby with parliament (*majlis*) representatives than request formally to get extra financial support. The power of lobbying is high and sometime the lobbyists have prevented the adoption of some rules in the parliament committees. Some important health plans have failed because of lobbyists efforts. Albeit, some macro health plans have been developed and implemented through lobbying. In other words, some interviewees believed that lobbying is not a bad event if it supports the health system functions:

"In fact we have no clear and defined process for lobbying in our country, so some useful regulations are not enacted, and some resources are not allocated to the health system..."

Finally, hospital managers can buy some forbidden equipment (purchasing of some health technologies is banned because of their surplus number in big cities) through lobbying with the authorities of MOHME.

Discussion

This qualitative study conducted to identify the social values that are considered in decisions of health priority setting in Iranian health system. According to the findings

of the study, some of the identified values were similar to values in Clark-Weale framework. For instance equity, solidarity, and freedom of choice were similar in our study and their framework. Interestingly, all identified values were content values and no process value was identified in the study. BOD is an economic criterion and severity of illness is a clinical criterion, but according to experts' claims, we can interpret them as societal values. In other words, considering these criteria in decisions will have outcomes that the public can understand and appreciate in their life or relatives' life.

Findings of our study showed that different affairs have been done to provide an equitable health system. Health care networks in a large number of rural areas provide healthcare services with low cost. In terms of financial support, different insurance plans cover poor people and rural residents. Moreover, charities and non-governmental organizations support health care providers through funding and giving various grants to them. However, it seems that our country has a long way to go to achieve a good and fair situation in health.

According to findings of our study, solidarity is another value that is considered in health priority setting decisions. Solidarity and equity almost have similar meanings. Both of them are in relation with financial protection of people against health costs. This study has found that government and public generally try to protect solidarity in the community, but it seems that providing equity in health care is the main function of government. Participation of people in different insurance plans is an instance of solidarity in the health system of Iran. Solidarity is a positive criterion, but some believe that public participation in health financing imposes high costs to people. In other words, the government relies on public support more than its resources. Therefore, a probable solution could be mixing different financial sources for health system.³⁴ Recently, the Iranian health insurance organization has implemented a national plan to cover all people who have no insurance coverage. In this plan, poor people and informal workers can be registered through website of the organization and could access health services. In fact, this plan is an instance of governmental affairs to keep solidarity in the health system.

Freedom of choice is another value that has high importance in the health decisions. Experts believe that independency is a principal criterion in health priority setting decisions. However, there is a little difference in degree of freedom for selecting curative services or preventive services. In curative services, people can go to any hospital or clinic and receive treatments and diagnostic services. An important point is that the financial status of people has an important role in choosing health care

providers. In other words, people with high incomes can go to private hospitals that offer high quality services with the shortest waiting time, while others must receive health services in public hospitals and clinics. In the latter, people have limited independence and they must go to certain health centers and visit definite physician. According to the findings, high independence in health system might cause inequity. It means that the financial status of people would play a main role in accessing good healthcare. In UK,¹⁵ Germany,¹⁹ and Australia,¹⁷ people should visit physicians through referral system (limited freedom), but in Korea,¹⁸ people have more choices and can receive health care services from private sector. Iranian people traditionally have had relative freedom in social activities, and after the Islamic Revolution, the republic government has tried to give them a high level of independence for choosing desired services. It can be concluded that high freedom of choice is a main characteristic of republic regimes.

According to findings of our study, BOD is another societal value that is considered in decisions. The costs of some diseases and their negative outcomes make policy makers pay special attention to BOD. BOD information aims to provide evidences for policy making, developing and allocating resources, and prioritizing health care plans. This criterion is supportive in decisions of Iranian health system, but it is possible to cause reverse outcomes if the appropriate methods are not used for calculating the BOD. Findings of our study indicated that BOD has a significant importance in health policy makers decisions, so the government advises the authorities of MOHME to apply this criterion especially in developing basic health packages. Similarly, in the health system of Uganda, BOD is used for designing essential healthcare baskets.²⁹ In other words, using the criterion results in appropriate management of limited resources of health systems.

It seems that severity of disease is not exactly a social value, but our findings showed that most of interviewees and Delphi participants believe that severity of disease has some social outcomes and must be considered in decisions. MOHME often develops programs for paying more attention to severe illnesses like cancers, traffic injuries and also acute communicable diseases such as El Tor that increase in some seasons. Hospitals can acquire top grades if they have appropriate equipment and professional medical staff for treating acute diseases. Like Iranian health system, the health system of France,⁷ the United Kingdom,³⁵ and Norway³⁶ use the severity of disease as an important criterion in health priority decisions. A study in Korea showed that severity of disease is an important criterion in the eyes of public.³⁷ Similarly, Kapiriri et al³⁸ and Richard Cookson & Dolan³⁹

have emphasized the importance of this criterion in their studies.

Although lobbying is not a societal value, the findings of our study confirmed that it has an important role in decisions. The main reason for lobbying is the limitation of resources in the health system. Managers often try to be linked with political parties or parliament's members for getting extra funds. According to Utilitarianism, if lobbying increases population's health, it would be acceptable.³³ Lobbying activities are not structured in Iran, while other countries have organized structures for registering and supervising lobbyists. It is possible that establishing certain committees in the MOHME or parliament for registering lobbyists would have positive effects on lobbyists' efforts in long term.

Conflict of interest as another non-value based factor affects decisions of managers and physicians. It seems that lack of sufficient control on health providers is one of the reasons of conflict of interest.³⁰ It exists in all levels of health systems and indicates that robust control tools must be used for decreasing unwanted outcomes. Unfortunately, weak supervision regulations and non-committed personnel in health organizations intensify conflict of interest. Establishing some processes for recognizing conflict of interest and taking measures and punitive arrangements for offenders would control these behaviors.

In conclusion, social values in this study are values that are considered in real decisions. In other words, they are not exactly consistent with other ethical frameworks in the world. Some important values like transparency and participation are not identified in the present study. However, we asked about them in the interviews. The findings indicated that personal judgments and preferences have a key effect on priority setting decisions rather than objective criteria and values. We can conclude that there is no model for value-based priority setting in the health system and even none of other social systems, and this affects the quality of decisions.

Totally, it seems that values of freedom of choice, solidarity, and equity indicate the importance of fair health system for health policy makers. In other words, most of them work based on Egalitarian school, but the restriction of resources in the country decreases their efforts results. Interestingly, those mentioned values are considered in most of the countries; however, the weight and importance of the values are different.

The present study had a number of limitations. First, some interviewees didn't know the exact concept of social values, so the interviewer suggested some examples that could affect their interpretation of social values. Second, parliament members and administrators were the participants of the present study, while it was better to

interview the general population too.

Authors' Contribution

AR contributed to the study design, analysis and writing of numerous sections of the paper. HM contributed to the study design, gathering data, analysis and writing of numerous sections of the paper. MA and MRVM and KA contributed to the study design and critical revision of the manuscript for important intellectual content. All authors read and approved the last version of the paper.

Conflict of Interest Disclosures

The authors declare that there is no conflict of interests regarding the publication of this paper.

Ethical Statement

Ethics Committee of Tehran University of Medical Sciences approved the study. The number of approval was 9021557006. Necessary information about the study was verbally presented to interviewees. Furthermore, complete anonymity was achieved in Delphi technique.

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References

1. Mitton CR, Donaldson C. Setting priorities and allocating resources in health regions: lessons from a project evaluating program budgeting and marginal analysis (PBMA). *Health Policy*. 2003;64(3):335-48.
2. Makundi E, Kapiriri L, Norheim OF. Combining evidence and values in priority setting: testing the balance sheet method in a low-income country. *BMC Health Serv Res*. 2007;7:152. doi: 10.1186/1472-6963-7-152.
3. Dawson A, Jennings B. The Place of Solidarity in Public Health Ethics. *Public Health Rev*. 2012;34(1):65-79. doi: 10.1007/bf03391656.
4. Ng NY, Ruger JP. Ethics and Social Value Judgments in Public Health. In: Culyer AJ. *Encyclopedia of Health Economics*. San Diego: Elsevier; 2014:287-91.
5. Braveman P. What is health equity: and how does a life-course approach take us further toward it? *Matern Child Health J*. 2014;18(2):366-72. doi: 10.1007/s10995-013-1226-9.
6. Kamuzora P, Maluka S, Ndawi B, Byskov J, Hurtig AK. Promoting community participation in priority setting in district health systems: experiences from Mbarali district, Tanzania. *Glob Health Action*. 2013;6:22669. doi: 10.3402/gha.v6i0.22669.
7. Mirelman A, Mentzakis E, Kinter E, Paolucci F, Fordham R, Ozawa S, et al. Decision-making criteria among national policymakers in five countries: a discrete choice experiment eliciting relative preferences for equity and efficiency. *Value Health*. 2012;15(3):534-9. doi: 10.1016/j.jval.2012.04.001.
8. Ottersen T, Mbilinyi D, Maestad O, Norheim OF. Distribution matters: equity considerations among health planners in Tanzania. *Health Policy*. 2008;85(2):218-27. doi: 10.1016/j.healthpol.2007.07.012.
9. Asante AD, Zwi AB. Factors influencing resource allocation decisions and equity in the health system of Ghana. *Public Health*. 2009;123(5):371-7. doi: 10.1016/j.puhe.2009.02.006.
10. Baltussen R, Niessen L. Priority setting of health interventions: the need for multi-criteria decision analysis. *Cost Eff Resour Alloc*. 2006;4:14. doi: 10.1186/1478-7547-4-14.
11. Youngkong S, Kapiriri L, Baltussen R. Setting priorities for health interventions in developing countries: a review of empirical studies. *Trop Med Int Health*. 2009;14(8):930-9. doi: 10.1111/j.1365-3156.2009.02311.x.

12. Hipgrave DB, Alderman KB, Anderson I, Soto EJ. Health sector priority setting at meso-level in lower and middle income countries: lessons learned, available options and suggested steps. *Soc Sci Med.* 2014;102:190-200. doi: 10.1016/j.socscimed.2013.11.056.
13. Kapiriri L, Norheim OF, Martin DK. Priority setting at the micro-, meso- and macro-levels in Canada, Norway and Uganda. *Health Policy.* 2007;82(1):78-94. doi: 10.1016/j.healthpol.2006.09.001.
14. Daniels N. Accountability for reasonableness. *BMJ.* 2000;321(7272):1300-1.
15. Clark S, Weale A. Social values in health priority setting: a conceptual framework. *J Health Organ Manag.* 2012;26(3):293-316. doi: 10.1108/14777261211238954.
16. Kapiriri L, Norheim OF, Martin DK. Fairness and accountability for reasonableness. Do the views of priority setting decision makers differ across health systems and levels of decision making? *Soc Sci Med.* 2009;68(4):766-73. doi: 10.1016/j.socscimed.2008.11.011.
17. Whitty JA, Littlejohns P. Social values and health priority setting in Australia: an analysis applied to the context of health technology assessment. *Health Policy.* 2015;119(2):127-36. doi: 10.1016/j.healthpol.2014.09.003.
18. Ahn J, Kim G, Suh HS, Lee SM. Social values and healthcare priority setting in Korea. *J Health Organ Manag.* 2012;26(3):343-50. doi: 10.1108/14777261211238981.
19. Kieslich K. Social values and health priority setting in Germany. *J Health Organ Manag.* 2012;26(3):374-83. doi: 10.1108/14777261211239016.
20. Docherty M, Cao Q, Wang H. Social values and health priority setting in China. *J Health Organ Manag.* 2012;26(3):351-62. doi: 10.1108/14777261211238990.
21. Mostafavi H, Rashidian A, Arab M, Mahdavi MR, Ashtarian K. Health Priority Setting in Iran: Evaluating Against the Social Values Framework. *Glob J Health Sci.* 2016;8(10):53834. doi: 10.5539/gjhs.v8n10p212.
22. Tantivess S, Perez Velasco R, Yothasamut J, Mohara A, Limprayoonyong H, Teerawattananon Y. Efficiency or equity: value judgments in coverage decisions in Thailand. *J Health Organ Manag.* 2012;26(3):331-42. doi: 10.1108/14777261211238972.
23. Mehrdad R. Health system in Iran. *Japan Med Assoc J.* 2009;52(1):69-73.
24. Rashidian A, Alinia C, Majdzadeh R. Cost-effectiveness analysis of health care waste treatment facilities in Iran hospitals; a provider perspective. *Iran J Public Health.* 2015;44(3):352-60.
25. Doshmangir L, Rashidian A, Ravaghi H, Takian A, Jafari M. The experience of implementing the board of trustees' policy in teaching hospitals in Iran: an example of health system decentralization. *Int J Health Policy Manag.* 2015;4(4):207-16. doi: 10.15171/ijhpm.2014.115.
26. Denzin NK, Lincoln YS. *The SAGE Handbook of Qualitative Research.* 3rd ed. London: Sage Publications; 2005:784.
27. Rosenberg-Yunger ZR, Thorsteinsdottir H, Daar AS, Martin DK. Stakeholder involvement in expensive drug recommendation decisions: an international perspective. *Health Policy.* 2012;105(2-3):226-35. doi: 10.1016/j.healthpol.2011.12.002.
28. Nord E, Johansen R. Concerns for severity in priority setting in health care: a review of trade-off data in preference studies and implications for societal willingness to pay for a QALY. *Health Policy.* 2014;116(2-3):281-8. doi: 10.1016/j.healthpol.2014.02.009.
29. Kapiriri L, Norheim OF, Heggenhougen K. Using burden of disease information for health planning in developing countries: the experience from Uganda. *Soc Sci Med.* 2003;56(12):2433-41.
30. Parker SE. *Conflict of Interest and Incentives in Health Care.* California: University Of California; 2013.
31. Parrish A, Blockman M. Who will guard the guards? Medical leadership and conflict of interest in South African healthcare. *S Afr Med J.* 2014;104(11):757-8.
32. Gray V, Lowery D. State Lobbying Regulations and Their Enforcement: Implications for the Diversity of Interest Communities. *State and Local Government Review.* 1998;30(2):78-91. doi: 10.1177/0160323x9803000201.
33. Landers SH, Sehgal AR. Health care lobbying in the United States. *Am J Med.* 2004;116(7):474-7. doi: 10.1016/j.amjmed.2003.10.037.
34. Titelman D, Cetrangolo O, Acosta OL. Universal health coverage in Latin American countries: how to improve solidarity-based schemes. *Lancet.* 2015;385(9975):1359-63. doi: 10.1016/s0140-6736(14)61780-3.
35. Charlson ME, Sax FL, MacKenzie CR, Fields SD, Braham RL, Douglas RG, Jr. Assessing illness severity: does clinical judgment work? *J Chronic Dis.* 1986;39(6):439-52.
36. Defechereux T, Paolucci F, Mirelman A, Youngkong S, Botten G, Hagen TP, et al. Health care priority setting in Norway a multicriteria decision analysis. *BMC Health Serv Res.* 2012;12:39. doi: 10.1186/1472-6963-12-39.
37. Lim MK, Bae EY, Choi SE, Lee EK, Lee TJ. Eliciting public preference for health-care resource allocation in South Korea. *Value Health.* 2012;15(1 Suppl):S91-4. doi: 10.1016/j.jval.2011.11.014.
38. Kapiriri L, Arnesen T, Norheim OF. Is cost-effectiveness analysis preferred to severity of disease as the main guiding principle in priority setting in resource poor settings? The case of Uganda. *Cost Eff Resour Alloc.* 2004;2(1):1. doi: 10.1186/1478-7547-2-1.
39. Cookson R, Dolan P. Public views on health care rationing: a group discussion study. *Health Policy.* 1999;49(1-2):63-74.