Role of nongovernmental organizations in Iran’s health system: What do they do and what can they do?

Mohanna Rajabi, Parvin Ebrahimi, Aidin Aryankhesal

Abstract:

BACKGROUND: Nongovernmental organizations (NGOs) as entities out of the health sector can play various roles and functions at different levels of the health systems. The present study was conducted to investigate NGOs’ potential and actual functions in Iran’s health system.

MATERIALS AND METHODS: This exploratory study was carried out in two parts from April 2020 to December 2020 in Tehran, Iran. For the first part, the statute of 65 NGOs was used for document review, and in the second part, the required data were collected using semi-structured interviews with 26 key informants from the governmental sector and NGOs. Data were analyzed using the framework analysis method and MAXQDA software.

RESULTS: According to data analysis, the results of this study were classified into two sections of NGOs’ current functions and expected functions in Iran’s health system. The current functions of NGOs in Iran’s health system include service delivery, educational, research, and information activities, financing, supportive and facilitation activities, and advocacy. Other functions in which NGOs could play a role include health system management, education, and service providing and support activities.

CONCLUSION: In this study, the various roles of NGOs in Iran’s health system were explained. NGOs can act actively as the consulting and executive hand alongside the public sector in the lowest to the highest levels of Iran’s health system. Hence, health sector managers and policymakers must facilitate NGOs’ involvement in the health sector and use their capacities and capabilities to improve health and increase public access to health-care services.

Keywords:
Health policy, health promotion, health services, health-care sector, nongovernmental organization, public health, public–private partnership

Introduction

The development and improvement of the health systems, as a cross-sectoral issue, is only achieved through the collaboration and partnership among governmental, private, public, and nongovernmental organizations (NGOs) in a country.[1–3] The significance and the critical role of cross-sectoral activities and collaboration to promote the health status of different communities are also more highlighted in the Alma-Ata Declaration, the Ottawa Charter, as well as the World Health Assembly’s emphasis on NGOs’ involvement in the health sector and the Bangkok Charter.[3–6] According to the World Health Organization (WHO), intersectoral collaboration for health is defined as “a recognized relationship between part or parts of the health sector with parts of another sector which has been formed to take action on an issue to achieve health outcomes (or intermediate health outcomes) in a way that is more effective, efficient, or sustainable than could be achieved by the health sector acting alone.”[7] Nowadays, NGOs as entities out of the health sector...
play a critical role in the development and improvement of health systems worldwide.

Although the government is the mere authority in charge of the health in a majority of countries,[7] the challenges and problems facing the health systems such as the lack of financial and human resources and increased costs make governments fail in the accomplishment of this task.[8‑10] The limitations and lack of resources in the public sector, as well as NGOs’ unique features and the differences between them and governmental organizations involved in the health sector (e.g., focusing on few specific issues, high commitment, the networked structure of communication with other organizations, creativity and initiatives, quickly recognizing and responding to the target population’s needs, accessing to a lot of information about lifestyles, perspectives, facilities, and limitations of the society) have made NGOs play an effective and efficient role in promoting health systems.[11,12]

According to the WHO, service delivery, health promotion and information exchange, policymaking, resource mobilization, monitoring quality of care, and responsiveness are determined as the key areas of civil society organizations (CSO) involvement in the health systems.[13] Piotrowicz also pointed out that NGOs can play a role in all activities associated with the health system, however, service delivery and health advocacy are the main activity areas for these organizations in the health sector.[11] In his study, Fryatt recommended that governance in the health sector should provide the grounds for cooperation and new opportunities for communication and partnership between state and nonstate players to achieve the universal health coverage objectives.[14]

The outcomes of NGOs’ involvement in health systems in different countries have revealed its positive impact on improving the health status in communities, enhancing the financial resources of the health sector, promoting efficiency in exploiting the resources in this sector, and enhancing the community’s commitment and involvement when health issues occur.[11,15,16] The effect of this involvement is so significant that many health managers and experts, NGOs’ staff, and the public have highlighted the need and significance of these organizations’ involvement in various health programs.[15]

Although NGOs can play various roles and functions at different levels of the health system, results of studies conducted in Iran indicate that their advantages, position, and roles in Iran’s health system have been mostly ignored by people and the government.[12,17] Given the NGOs’ capabilities in the improvement of public health, the participation and collaboration of these organizations in Iran’s health system must be paid attention to by health sector planners and policymakers.

Given that no in-depth studies have yet been conducted on NGOs’ functions in the Iranian health system, the purpose of this study was to investigate NGOs’ potential and actual functions in Iran’s health system. The advantages of NGOs’ involvement in the health system could be used for providing people with more effective and efficient service and their capacities could be further used to improve public health more than ever. The expansion of NGOs’ role in Iran’s health system will benefit people and reduces the burdens of the Ministry of Health (MOH).

Materials and Methods

Study design and setting
This exploratory study was carried out in two parts, document review and interviews with experts from April 2020 to December 2020 in Tehran, Iran [Figure 1].

Document review

Study participants and sampling
The activity of NGOs is based on the objectives specified in their statute, which is the basis of short- and long-term plans and protocols established between them and other organizations. Accordingly, the statute of NGOs was used as a criterion to identify their functions in the health sector.

Data collection tool and technique
Official statistics from the Ministry of Interior (MOI) indicate that 86 national NGOs are active in the field of health.[18] In the present study, NGOs’ Statute was defined as the study population. Among the NGOs active in the health sector, those being active nationally with updated websites and unexpired activity licenses were included, and their statutes were analyzed. On
the other hand, scientific-professional associations and guild associations registered as NGOs active in the health sector were excluded from the study. Given the aforementioned criteria, the statutes of 65 NGOs were eventually analyzed here. Some NGOs uploaded the PDF of their statutes on their websites and some others provided information on their Statutes on their websites under “about us.” In cases where the statute was not available online, coordination was made with the NGOs to provide the authors with their statutes. The vision, mission, goals, and methods of goal achievement/implementation were the items analyzed in NGOs’ statutes. Since there was a section titled services/responsibilities on the websites of some NGOs, the analysis also covered the content provided under these sections. Information required at this stage was extracted using a research-made form.

Eventually, data obtained at this stage were analyzed using the framework analysis approach according to the functions defined by the WHO for the partnership of CSOs in the health sector.

**Interviews**

**Study participants and sampling**

In the second part of the study, the required data were collected using semi-structured and in-depth interviews with experts and key informants. Participants were selected based on nonprobability sampling using the purposive sampling method with maximum variation. In this section, participants included experts and senior managers working in the MOH, NGO representatives in the MOI, and NGO CEOs, all of whom had a minimum of 5 years of experience in the field of NGOs’ involvement in the health sector. The process of interviews was continued until data saturation throughout May 2020 to November 2020 in Tehran. Interview questions were mainly focused on the current and expected functions and roles of NGOs in the Iranian health-care system and NGOs’ strengths and potentials for collaboration in the health sector.

**Data collection tool and technique**

The validity of interviews was confirmed by conducting pilot interviews, and their reliability was confirmed using Lincoln and Guba’s criteria.[19] Five interviews were done on the telephone and the other 21 were conducted face to face at workplaces of participants. Before the interviews, participants were provided with explanations regarding the study purpose and the authors’ adherence to the confidentiality of interview contents. The time and place for interviews were determined by coordination with the participants. The conversations during the interviews were digitally recorded and taking notes simultaneously. After each interview and before the next one, the conducted interview was transcribed and typed verbatim. The duration of interviews varied from 25 to 93 min.

Data were analyzed using the framework analysis method at the same time as drafting interviews. The recorded and drafted interviews were reviewed several times to generate and finalize the initial codes. At the next stage, codes denoting the same concepts were categorized into subcategories. These codes were finalized, and then subcategories indicating similar subjects were classified into the main categories. All the aforementioned stages were carried out with the cooperation and agreement between the research team. Data were analyzed at this stage based on the themes obtained in the stage of reviewing documents; however, the research team eventually made modifications to these themes. The MAXQDA software was used to manage data at this stage.

**Ethical consideration**

The ethical principles observed in the present research included acquiring an ethics code from Iran University of Medical Sciences (IR.IUMS.REC.1397.1330), freedom of participation in interviews, asking for permission before recording voices, adherence to confidentiality principles, and no interference of authors’ personal opinions in various stages of the research.

Due to maintaining the confidentiality of interview texts and observing ethical principles for research, Latin abbreviations were used instead of people’s names, diseases, or specific organizations in the cases of direct speech. The letter “P” with a number refers to comments from a specific participant.

**Results**

According to data analysis, the results of analyzing data obtained from reviewing documents and interviews were classified into two sections of NGOs’ current functions and expected functions in Iran’s health system. The current functions of Iranian health-related NGOs in Iran’s health system include service delivery, educational, research, and information activities, financing, supportive and facilitation activities, and advocacy. Other functions in which NGOs could play a role include health system management, education, and service-providing and support activities [Table 1].

**The current functions of Iranian health-related NONGOVERNMENTAL organizations**

**Service delivery**

This theme indicates the service-providing role of NGOs in the health system that includes prevention and screening measures, diagnostic and treatment services, rehabilitation services, medical and health equipment.
NGOs play two types of roles in the field of service providing: they either provide services to clients directly using their own diagnostic, treatment, and rehabilitation facilities or provide clients required services through signing contracts with private or public centers.

P10 stated: “We have a comprehensive treatment center that belongs to the NGO and provides the patients with their required diagnostic and treatment services.”

“We have contracts with public and private imaging centers and laboratories, so they provide patients suffering from X disease with some discounts (35% and 40% discounts) in the cost of services.” (P15)

**Educational, research, and information activities**

NGOs play a significant role in culture building and promoting awareness regarding diseases and health-influencing issues through a variety of educational and information activities for various social classes (patients, the community, and health experts). NGOs’ research activities are usually in the form of publication and distribution of brochures, pamphlets, books, and magazines, as well as a variety of studies conducted independently or with the cooperation of other organizations, especially universities of medical sciences.

“Regarding disease X, for instance, many members of the society were not aware of this disease until 10 years ago and had no idea about it, but the X NGO worked so hard and promoted the culture-building through social media, so many people are now familiar with various aspects of the disease.” (P5)

“NGOs play an essential role in raising awareness and information regarding the process of treatment among patients and their families and even promoting public awareness on many rare diseases.” (P18)

“A part of our works is dedicated to research and education activities. We provide patients, their families, and even the general public with a variety of classes and educational programs. Over 160 student dissertation titles have been compiled in this NGO, in addition to the publication of brochures.” (P12)

**Financing**

In terms of financing, NGOs provide the required financial resources for their activities and cover the medical costs of clients under their support through attracting financial aids from philanthropists and charities, public donations, contributions from governmental and NGOs, and even donations from international organizations in some cases.

“A part of NGOs’ works is the financial support of patients which is carried out in two forms of providing them with either loans or livelihood packages.” (P1)

---

**Table 1: Nongovernmental organizations functions in Iran’s health system**

| Main themes               | Subthemes                     | Related codes                                                                 |
|---------------------------|-------------------------------|-----------------------------------------------------------------------------|
| NGOs’ current functions   | Service delivery              | Prevention and screening measures, diagnostic and treatment services, rehabilitation services, medical and health equipment supply, clinic establishment, medicine supply for patients, specialized medical consultation, and psychological services |
|                           | Educational, research, and information activities | Educational activities for various social classes with various education levels, publication and distribution of brochures, pamphlets, books, and magazines, and research |
|                           | Financing                     | Attracting financial aids from philanthropists and charities, public donations, contributions from governmental and nongovernmental organizations, providing loans, or livelihood packages |
|                           | Supportive and facilitation activities | Preparing a database of the clients, empowerment and employment programs, holding extracurricular activities, and following up on patients’ treatment stages |
|                           | Advocacy                      | Development of the national act of diseases, raising awareness among the patients regarding their rights, and advocacy activates |
| NGO’s expected functions  | Health system management     | Planning, decision-making, policymaking, execution, legislation, and monitoring |
|                           | Education                     | Education to patient, community, specialists, and medical universities students |
|                           | Service-providing and support activities | Social support of patients, providing rehabilitation services for elders and emigrants, and refugees’ health care |

NGOs=Nongovernmental organizations

supply, clinic establishment, medicine supply, specialized medical consultation, and psychological services.

“An NGO focused on a specific disease covers all the respective activities, such as prevention, screening, treatment, and rehabilitation, as far as it can afford to.” (P7)

Another type of NGOs’ service-providing activities is their collaboration in health and medical equipment supply required by clients. In addition, some NGOs have expanded their activities in the health sector through establishing and operating clinics after acquiring the license to provide medical services.

“Some NGOs provide the healthcare and medical equipment required by patients hospitalized at home or hospitals. Some other NGOs have groups for treatment; what do they do? They acquire the license to establish a clinic from the deputy of treatment and examine patients for free after establishing a clinic.” (P4)
“NGOs have taken good measures in terms of providing the costs of treatment and medicine required for special and refractory disease patients over the past years.” (P26)

“In the field of service delivery, we (the NGO) provide free services for the poor clients and even pay for their transportation.” (P11)

**Supportive and facilitation activities**

Another function of health-related NGOs is the activities they carry out seeking to improve and facilitate patients’ living conditions. NGOs support patients by preparing a database of the population under their support, diverse empowerment and employment programs, holding extracurricular activities, and even following up on patients’ treatment stages.

“In addition to education and service delivery, NGOs sometimes provide entrepreneurship and employment services.” (P9)

“Besides a variety of diagnostic and treatment services, we provide patients with all sorts of welfare and social support. We have a dormitory for patients traveling to Tehran from other cities so that the patients and their families have no concerns regarding their accommodation. We also offer educational support; for instance, we cover 25% of these patients’ university expenses.” (P24)

“We arrange tourism and pilgrimage trips for our beloved clients throughout the year in this NGO.” (P8)

**Advocacy**

According to the majority of the participants, activities in the field of advocacy and demanding support are among the most influential and significant activities of health NGOs. Various forms of NGOs’ advocacy activities include collaboration in the development of the national act of diseases, raising awareness among the patients regarding their rights, and advocacy activates.

“If a specific act is to be prepared regarding specific diseases, we invite the NGOs active in the relevant field to take part in the meetings.” (P3)

“When disease X was acknowledged as a rare disease, meetings were held between the MOH and X-related NGOs to define a service package for the disease.” (P6)

“NGOs raise people’s demands and urge the authorities to be accountable due to their connection with people and raising awareness among them. A part of our work here is to train the patients and inform them about their rights.” (P17)

“Another part of our work is advocacy, which aims to create changes and influence the general public.” (P26)

Regarding the advocacy activities of the NGOs, some of the participants mentioned the NGOs’ role in the reduction of the results and circumvention of sanctions. For instance:

“As public advocates or civil activists, NGOs have helped us fight against sanctions in several cases. When talking about sanctions, we must consider that we can count on the help of NGOs if we decide to take measures at a global level.” (P16)

**The expected functions of Iranian health-related nongovernmental organizations**

In addition to their current roles and functions, NGOs can play a more prominent role in other dimensions and functions of Iran’s health system and act as a separate capacity besides the government to solve medical and health problems and improve the public health given their capabilities, strengths, and capacities, as well as their interaction with the government and the public, the expanded connection between the general public and NGOs, and higher awareness about the needs and wants of specific vulnerable groups.

**Health system management**

Health system management is among the areas that require NGOs’ presence and active collaboration. NGOs can help to more successfully implement the programs of the health sector through active participation and presence in planning, decision-making, policymaking, execution, legislation, and monitoring meetings. This participation must not be limited to asking NGOs’ opinions and receiving their suggestions, but the public health sector must take advantage of these suggestions at various stages of implementing plans and programs.

“Indeed, NGOs’ must not only focus on executive work. They must work on thinking, documentation, and planning, and all of these tasks can only be realized by a nongovernmental sector. The government itself lacks such an option and I believe that it should support, empower, and validate NGOs so that they can play these roles.” (P3)

“NGOs can take part in decision-making and management programs since they work with the community. There are a variety of matters that might be invisible to us but they see them clearly since they work with the community and are present among people. The bottom line is that the role and position of healthcare NGOs must be highlighted in the planning, decision-making, monitoring, and evaluation sectors.” (P13)

P9 believes: “We have words to say in all fields and the government could think of NGOs as its consulting hand and make connections with us, specifically in terms of regulating rules and legislations and policy-making for rare disease patients since we have dealt with them for years and know all about the patients’ needs and wants.”
**Education**

Although educational activities currently make up a part of the NGOs’ workload, self-care and culture-building could and must be improved through expanding NGOs’ educational programs since they have a strong social platform among various social groups and extensive communications with them.

“It would be a great help to us in controlling diseases in terms of many health issues if we had NGOs educating people and specializing in education and self-care; for instance, in the field of dental healthcare or men’s and women’s self-care. Training such simple tasks could take a heavy burden off the healthcare system.”(P25)

“NGOs could help us educate students of various medical disciplines. For instance, they could permit our students to have close contact with patients of special and rare diseases, such as cancer, and better understand their conditions since it takes so long for a student to meet a case in academic hospitals.”(P2)

“According to the health system functions, the greatest role of NGOs is service delivery and financing, but we have not paid enough attention to their role in education and culture-building. I believe that this is necessary and we must somehow take advantage of NGOs’ collaboration in these sectors as well.”(P14)

**Service-providing and support activities**

As the missing link of the health system, the social support of patients is a function that requires a more visible presence of NGOs.

“The health system is not able to provide patients with social support and follow-up for a variety of reasons. The important activity that NGOs can and must carry out in the health system is to organize networks that can provide various groups of patients with social support.”(P7)

According to some of the interviewees, health-related NGOs can also accept the responsibility of providing specific services in fields such as rehabilitation services for elderslies and emigrants and refugees’ health care.

“Due to the increasing rate of aging in the country, more investment is needed in this context to help the elderly. Fortunately, our NGOs have a good capacity and can expand their activities or establish new NGOs to engage in this sector and will be surely successful.”(P19)

“NGOs could play the main role in maintaining and improving the health condition of refugees and immigrants.”(P21)

**Discussion**

In this study, the various roles of NGOs in Iran’s health system were explained based on the results of analyzing NGOs’ statutes and the opinions of participants in both the government sector and NGOs. Health-related NGOs can participate in the lowest to the highest levels of legislation and decision-making Iran’s health system. Although NGOs play diverse roles in the health sector, their capabilities have partially been neglected or have not been considered properly in improving public health and resolving the issues of Iran’s health system.

Few Iranian studies have addressed the role and function of NGOs in the health system. Khodayari-Zarnaq et al. investigated various aspects of NGOs’ participation in health policymaking and pointed out that their studied NGOs were not involved in health planning and policymaking, being often active in the respective sectors of service delivery, financing, and resource supply.[17] Damari et al. examined 97 Iranian health-related NGOs and concluded that the overall services provided by NGOs were in the third, first, and second levels of prevention, respectively. Besides, the NGOs believed that their success rates were higher in educational interventions, providing treatment services, prevention, and consultation than in advocacy interventions.[12] According to Damari et al., NGOs play no role in health sector planning and policymaking.[12]

Although these studies have highlighted functions for health-related NGOs in the health sector, it could be argued that as one of the main actors of Iran’s health system,[20] NGOs are more involved in executive works to service delivery and play no role in health planning, policymaking, and decision-making. In addition to various aspects of health system management, NGOs have the capability and potential to provide social support and promote education in the community and medical science universities, which necessitates paying attention to this type of their functions to reinforce the Iranian health system.

In the European and low and medium income countries, the experiences of NGOs’ participation in health systems indicate that they are among the main actors alongside their governments and pursue the reinforcement of the health system and achieving the final goals of health systems.[2,4,8,21,22]

A comparison of NGOs’ functions in Iran’s health system with the four functions of health systems[8] and WHO’s suggested the roles for the participation of CSOs in the health sector[14] indicates that, contrary to many developing countries where NGOs play parts in all functions, they are most active in service delivery, health promotion, financing, and – to some extent – resource supply in Iran. Thus, this reveals the lack of NGOs’ involvement in various aspects of health system management.
Although the statutes of the Iranian health-related NGOs have underlined their participation in policymaking, legislation, planning, and decision-making in the health sector as their objectives, they have no practical role in these regards according to the analysis of participants’ opinions. A worthwhile point is that NGOs’ participation in the health systems depends on the tendency of governments to cooperate with NGOs and their capacity to collaborate in various health programs, in addition to the economic, social, cultural, and political conditions of various countries. Unlike many developing countries, it is evident that the functions and roles of NGOs are quite inconspicuous and limited in Iran. The government can and must provide the context for NGOs’ more prominent presence in the health system to improve their role since the development of the health system is currently impossible without the presence and participation of NGOs. In return, NGOs can also improve their position in the health system by reinforcing and improving their capabilities.

In this study, to identifying the functions of health-related NGOs, in addition to reviewing NGOs’ statutes, the opinions of people working at governmental and nongovernmental sectors were also examined, which led to a comprehensive understanding of the role of NGOs in Iran’s health system.

Limitation and recommendation
The main limitations of the present study include a lack of access to some NGOs’ statutes, cancelation of some interviews despite predetermined meeting appointments due to the coronavirus crisis, conservatism of some participants in the open expression of their opinions, and confinement of the study to some provinces of the country. It is suggested that, to increase awareness and knowledge about the roles of NGOs in Iran’s health system, similar studies should be done in other provinces to identifying health-related NGOs’ functions at the local level.

Conclusion
According to the results of this study, Iranian health-related NGOs were mostly active in the areas of service delivery, financing, and supportive and facilitation services. On top of these roles, NGOs have the ability and capacity to act actively as the consulting and executive hand alongside the public sector in the successful implementation of the health system functions. NGOs can have active roles in educating the community, various stages of planning and implementation of health programs, human resource supply and training, compensating the financial resource shortages, health service delivery to immigrants, and social support of patients. NGOs’ involvement in various dimensions of health system management is one of the strengths of these organizations’ participation in Iran’s health system, which has been neglected. Hence, health sector managers and policymakers must facilitate NGOs’ involvement in the health sector and use their capacities and capabilities to improve health and increase public access to treatment and healthcare.

Acknowledgment
This study was a part of a Ph.D. thesis entitled “Developing a model for partnership of non-NGOs in Iran’s health system” and supported by Iran University of Medical Sciences (grant No: IR.IUMS.REC.1397.1330).

Financial support and sponsorship
This study was financially supported by Iran University of Medical Sciences.

Conflicts of interest
There are no conflicts of interest.

References
1. Okeyo I, Lehmann U, Schneider H. The impact of differing frames on early stages of intersectoral collaboration: The case of the first 1000 days Initiative in the Western Cape Province. Health Res Policy Syst 2020;18:1-14.
2. Knabe A, McCarthy M. Civil society organisations and public health research – Evidence from eight European Union new member states. Cent Eur J Public Health 2012;20:287-93.
3. Damari B, Vosoogh Moghaddam A. Improving approaches of intersectoral collaboration for health by health and food security high council in IR Iran. J Sch Public Health Inst Public Health Res 2014;11:1-16.
4. Adeleye OA, Ofili AN. Strengthening intersectoral collaboration for primary health care in developing countries: Can the health sector play broader roles? J Environ Public Health 2010;2010:272896.
5. Zabdyr-Jamróz M. Voluntary (NGO) sector involvement in health promotion for older population in Europe. Epidemiol Biostat Public Health 2017;14 2 Suppl 1:e12420-12.
6. Angwenyi V, Aantjes C, Bunders-Aelen J, Criel B, Lazarus JV. Context matters: A qualitative study of the practicalities and dilemmas of delivering integrated chronic care within primary and secondary care settings in a rural Malawian district. BMC Fam Pract 2020;21:1-2.
7. World Health Organization. The World Health Report 2000: Health Systems: Improving Performance. Geneva, Switzerland: World Health Organization; 2000.
8. Biermann O, Eckhardt M, Carlfjord S, Falk M, Forsberg BC. Collaboration between non-governmental organizations and public services in health – A qualitative case study from rural Ecuador. Glob Health Action 2016;9:32237.
9. Alonazi WB. Exploring shared risks through public-private partnerships in public health programs: A mixed method. BMC Public Health 2017;17:1-7.
10. Rouhi N, Gorji HA, Maleki M. Nongovernmental organizations coordination models in natural hazards: A systematic review. J Educ Health Promot 2019;8:44.
11. Pietrowicz M, Cianciara D. The role of non-governmental organizations in the social and the health system. Przegl Epidemiol 2013;67:69-74, 151-5.
12. Damari B, Heidarnia MA, Rabbari M. Role and performance
of Iranian NGOs in community health promotion. Payesh 2014;13:541-50.

13. World Health Organization. Strategic Alliances: The Role of Civil Society in Health. Geneva, Switzerland: World Health Organization; 2001.

14. Fryatt R, Bennett S, Soucat A. Health sector governance: Should we be investing more? BMJ Glob Health 2017;2:e000343.

15. Yagub AI. Collaboration between Government and Non-Governmental Organizations (NGOs) in delivering curative health services in North Darfur State, Sudan – A national report. Iran J Public Health 2014;43:561-71.

16. Saber M, Haghdoost A, Taghdisi MH, Eftekhar H, Safinejad H, Mehr A. Providing and promoting health-oriented services by nongovernmental organizations: A qualitative study. J Educ Health Promot 2021;10:166.

17. Khodayari-Zarnaq R, Kakemam E, Arab-Zozani M, Rasouli J, Sokhanvar M. Participation of Iranian non-governmental organizations in health policy-making: barriers and strategies for development. Int J Health Gov 2020;25:46-56.

18. Iran’s Ministry of Interior. Nongovernmental Organization. Available from: https://www.moi.ir. [Last accessed on 2021 Apr 23].

19. Lincoln YS, Guba E. Naturalistic Inquiry. 1st ed. London: SAGE Publications; 1958.

20. Mehrdad R. Health system in Iran. JMAJ 2009;52:69-73.

21. Anbazhagan S, Surekha A. Role of non-governmental organizations in global health. Int J Community Med Public Health 2016;3:17-22.

22. Ejaz I, Shaikh BT, Rizvi N. NGOs and government partnership for health systems strengthening: A qualitative study presenting viewpoints of government, NGOs and donors in Pakistan. BMC Health Serv Res 2011;11:122.

23. Lewis D, Kanji N, Themudo NS. Non-Governmental Organizations and Development. Abingdon: Routledge; 2020.