Challenges to volunteers’ participation toward primary health-care system and providing managerial solutions

Mostafa Alimehr, Asgar Aghaei Hashjin

Abstract:

BACKGROUND: The role of citizens’ participation in the process of social, economic, and cultural development is necessary. Institutionalizing this role is inevitable to identify priorities and also planning, implementing, and evaluating health services. This study aimed to identify challenges ahead of volunteers’ participation toward primary health-care (PHC) system and providing managerial solutions.

MATERIALS AND METHOD: The study employed a qualitative research design. The data were collected via semi-structured interviews with key experts in the Ministry of Health, university education and health promotion officials, education experts, health center staff, and health volunteers. Then, a focused group discussion method was employed to provide solutions. The participants were selected via the purposive sampling method. The qualitative data were analyzed using a thematic analysis method.

RESULTS: The analyzed data were categorized into 6 main themes and 24 subthemes. The most important challenges were categorized into six temporal, management, education, quality of services, motivation, and infrastructural themes. Allocating special funds for the health volunteer program, paying attention to the problems of the health workers, providing motivational programs, holding regular retraining courses and providing educational software for health volunteers, holding regular training courses for health trainers and volunteers, and supporting the health volunteer program are among the solutions.

CONCLUSION: The present study showed that the health volunteer program in the PHC system faces several challenges, most of which are organizational and managerial ones. Therefore, a multifaceted approach should be used to improve the participation of health volunteers. In addition to motivational factors, factors such as allocating proper resources, empowering trainers, and mobilizing the community should be also considered. It seems that interaction among health system, people, and health volunteers should be improved.

Keywords: Challenge, empowerment participation, health volunteer, primary health care

Introduction

The ultimate goal of any health organization is to meet the citizens’ needs. The citizens themselves play a significant role in providing health services. Today, it has become clear that without citizens’ participation and support, success in many matters related to them will be difficult for officials.[3]

Due to lack of health force, the expansion of urbanization, and the role of women’s participation and positive results from volunteering in most parts of the world, other tasks include census and collection information and health education and follow-up was formed with the participation of people in the form of voluntary of programs.[2] Hence, in 1990, the Ministry of Health and Medical Education, in order to attract public participation in decision-making and planning and to
use their cooperation in providing primary health care (PHC), designed and implemented a health volunteer program.\textsuperscript{[9]} 

One of the reasons for the success of the Iranian health-care system in providing effective health services and control of communicable and noncommunicable diseases is the emphasis on teamwork. The development is due to the use of health volunteers as public ones. This can increase public participation in decision-making and implementation. The government ought to make regular plans to empower citizens to participate in health-related activities.\textsuperscript{[10]} However, empowering public participation in the health sector has not been seriously considered, and there is no comprehensive plan in the Ministry of Health to solve this problem, especially the problem of health volunteers.\textsuperscript{[11]} Health volunteers are recognized as an integral part of the PHC system, especially in low- and middle-income countries.\textsuperscript{[12]} Despite the significance of the presence of volunteers in health-care programs, in recent years, the health-care system has experienced a decrease in cooperation or disconnection with health centers, 50% of which is due to financial problems and lack of funding for this plan, while the other half is for the high workload and lack of workforce in the health-care centers. If they reduce the workload of the volunteer instructor, they can spend more time on the volunteers.\textsuperscript{[13]} Therefore, in developing and low-income countries where there are few trained health workers, using these volunteers for providing preventive and promotional aspects of health care to the community is the best alternative to the lack of formal health personnel\textsuperscript{[14]} even though social participation and empowerment of the citizens are one of the main axes of developing the PHC strategy and achieving the goals of the health-care system.\textsuperscript{[9]}

A study conducted by Mohammadi in 2019 showed that the use of diverse and appropriate channels of communication in accordance with the culture of the people, direct involvement of communities, providing economic incentives, and creating a pro-participation environment are the most important ways to attract community participation.\textsuperscript{[15]}

The WHO emphasizes social participation as a powerful arm in every decision-making aspect, including options for identifying solutions and empowering citizens. Given that citizens have ultimate control over key decisions, participation can play a significant role in their health. Furthermore, the ministries of health should create a space to attract public participation and encourage citizens to step in this way.\textsuperscript{[9,15]} In line with this, one of the programs of the 7\textsuperscript{th} Global Conference on Health Promotion organized by the WHO in 2009 was to empower community participation, communities that may or may not be geographically related. However, some share common interests, concerns, and identities.\textsuperscript{[12]} In many less developed countries (LDCs), the official health workforce is small in proportion to the population, and not enough services are provided to the people. Furthermore, their access to services is limited and health indicators are declining. Therefore, getting help from health volunteers in this field is very necessary and leads to the expansion of preventive, advertising, and treatment services.\textsuperscript{[13]}

Muchuri in a study showed that health volunteers are an essential element in the functioning of the health system. However, the impact of health volunteers on health systems is overlooked. Therefore, increasing the motivation and satisfaction of health volunteers is very important in raising health indicators.\textsuperscript{[14]}

Therefore, all the activities in the society are realized with the presence and participation of the citizens. In the health system, health volunteers can institutionalize this culture among families in various fields, so that there are millions of health volunteers around the world, and more than 140,000 ones are active in Iran. Therefore, the implementation of the health volunteer program in Iranian cities and villages is not only a means to achieve health goals but also the basis for achieving continuous and sustainable development in society.\textsuperscript{[15]}

Health volunteers also play a significant role in educating citizens and preventing diseases in the community and their capacity can be used to raise health indicators and provide quality services to the citizens.\textsuperscript{[16]} This study was conducted by identifying the challenges, determining and implementing strategies to increase the participation of health volunteers and the effectiveness of their activities in health education programs. The findings of this study can be used in planning and reviewing the guidelines of the health volunteer program. Therefore, the present study was conducted to investigate the challenges of health volunteers’ attraction of participation in the PHC system.

Materials and Methods

Phenomenological qualitative method used to collect the data in 2019–2020. The statistical population included relevant policy-makers and experts of the Iran Ministry of Health and Medical Education, and also relevant experts involved in the Iranian PHC system, heads of medical universities, health officials, physicians, health educators, and health staff in the level of province and city. Purposive sampling method was used to select the participants. To obtain other relevant individuals, the snowball sampling method was employed so that those who had the most information regarding the study
subject were selected and asked to introduce others experts that meet the inclusion criteria.

The sampling was continued until data saturation was reached where the new participants presented no new data. Then, the sampling was completed. The inclusion criteria included those having key information toward PHC and at least 5 years health-care experience. The in-depth semi-structured interviews were conducted by prior appointment by the participants. The duration of each interview varied from 30 to 40 min depending on the circumstances and the participants’ desire. During the interviews, for the respondent to be able to feel calm and freely express his/her feelings, thoughts, and views, each interview began with an open-ended question. For the interviews, a topic guide form, containing three general questions to clarify the objectives of the study, was prepared.

To determine the validity and ensure that the questions were meaningful to the participants, two interviews were conducted with those who were not among the selected participants. Then, according to their views, the necessary corrections were made to address the shortcomings. Recorded interviews were analyzed line by line immediately after the end of each session to know the data saturation time and to increase the accuracy of the texts. In the second part of the study, the focus group discussion method was employed to use the experts’ views. In this group discussion, conducted in the presence of health officials and deputies in the province as well as educational trainers in the cities, the data were collected. Therefore, before the meeting, the individuals present in the meeting were allowed to record the discussions. Due to the lack of opposition to this issue, the statements were recorded. At the beginning of the introductory session, the necessary explanations were provided on how to hold a focused group discussion to familiarize the performers and participants. Hence, the participants were assured that the information provided by them would be completely confidential. Participants were then asked questions by the interviewer during the session. The interviewer also tried to monitor all participants and involve those who were less involved in the discussions. In this study, the interviewees were 25 ones, of which 14 were female and 11 were male. Individual interviews were conducted with the staff managers of the Ministry of Health (3 individuals), health volunteer training university professors (11 individuals), university staff managers (3 individuals), faculty members in the field of health services management (2 people), and health volunteers (6 individuals).[Table 1] A focused group discussion was held with health volunteer trainers for obtaining rich information and studying the issue from different aspects. Immediately after the interviews were completed, the recordings were transcribed verbatim, analyzed, and used as a guide in the later stages of the study. The qualitative data (interviews) were analyzed using a thematic analysis method. For this purpose, two researchers each read the results of the interviews several times and divided them into thematic units. Then, the thematic units were summarized and the units that had the same themes were put under the same codes. Subsequently, the codes were categorized and the resulting themes were extracted as the main ones.

In cases where there was disagreement among the researchers, ambiguity was resolved through discussion. In this study, ethical principles including confidentiality of the information and obtaining informed consent from the participants for the interviews and recording the interviews were observed while maintaining anonymity and confidentiality. The right of participants to withdraw at any stage of the research was reserved.

Results

Financial resource dimension [Table 2]

Every program needs a special budget to start and survive, and the health volunteer program is no exception. Therefore, it is necessary to consider special budgets to advance the programs and activities of the volunteers and encourage them. To achieve their goals, the health volunteer program needs special budgets to upgrade educational equipment and make physical infrastructures suitable for holding courses as follows:

1. Allocating budget for the volunteer program
2. Financial support

In this regard, one interviewee believed “the health volunteers work hard but do not receive sufficient fee” (Interviewee#1). Another believed that the higher authorities should provide special budgets for the

---

**Table 1: Demographic information of the interviewees**

| Variable                  | Dimensions                  | Frequency |
|---------------------------|-----------------------------|-----------|
| Age (years)               | Under 30                    | 2         |
|                           | 30-40                       | 14        |
|                           | Over 40                     | 9         |
| Gender                    | Man                         | 11        |
|                           | Woman                       | 14        |
| Marital status            | Married                     | 21        |
|                           | Single                      | 4         |
| Education level           | Bachelor degree             | 11        |
|                           | Master degree               | 6         |
|                           | PhD degree                  | 8         |
| Organizational position   | Health volunteer trainer    | 11        |
|                           | Managers of the ministry of health | 3   |
|                           | Faculty member              | 2         |
|                           | University staff managers    | 3         |

---
Table 2: Challenges and strategies for attracting the participation of health volunteers

| Main themes       | Subthemes                                      | Challenges                                                                                     | Proposed solutions to empower education                                                                 |
|-------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Financial         | Allocating budget for the volunteer program   | Lack of funding and nonallocation of funds for the program of contacts                          | Allocating a special budget for the health volunteer program                                            |
|                   | Financial support                             | Lack of financial support                                                                       | Preparing gifts for some occasions to appreciate the volunteers                                          |
| Management        | The officials' attention to the health volunteer programs | Lack of officials' attention to the health volunteer program and problems                       | Managers' planning to address the health volunteer program                                              |
|                   | The officials' support                        | Lack of managers' financial and motivational support of health volunteers                       | Presenting motivational programs and paying attention to the health volunteer problems                  |
|                   | Supervision of training courses               | Lack of officials' supervision of training courses and lack of the health staff's seriousness of courses | Managers' direct communications with the coordinators and their evaluation of the training courses      |
| Educational       | Educational software and digital books         | No use of software and digital educational books to facilitate education                        | Providing educational software and digital books by the ministry of health and the deputy minister for health volunteers |
|                   | Virtual courses                               | The poor holding of virtual courses in the health-care system                                    | Codified planning for holding virtual classes                                                            |
|                   | Holding courses on how to use educational aids| Lack of teaching aids                                                                            | Holding computer training courses and using the SIB system, inspection system, office automation, etc., to keep the volunteers active |
|                   | Internet access                               | Lack of Internet access in most educational spaces and places                                    | Facilitating continuous access to the Internet in educational spaces and places, especially rural health centers, which are a priority for the training of volunteers |
|                   | The instructors' teaching methods              | Insufficient mastery of training instructors on educational topics                             | Allocating enough time by trainers to train health volunteers                                           |
|                   | Educational facilities                        | The banality of educational issues                                                               | Using an up-to-date and diverse educational method by health volunteer trainers                         |
| Quality of services| Health volunteer knowledge                   | Insufficient knowledge of health seekers                                                          | Holding training courses                                                                                  |
|                   | Discipline and attendance in classes          | Lack of discipline in the presence of instructors and volunteers in training classes             | The regular presence of health educators and volunteers according to the training schedule               |
|                   | Acceptance of volunteers in the community      | Insufficient acceptance of candidates by the community                                           | Introducing the health volunteers to the citizens as a health representative by the health system        |
|                   | Communications                                | Inefficient communication of volunteers with the community                                       | Establishing effective communication between citizens and health volunteers with the support of managers  |
|                   | Physical space for training                   | Lack of physical space for training in some centers                                              | Providing a suitable educational space for education with desirable facilities                            |
| Motivational      | Welfare support                               | Lack of holding scientific and recreational camps and lack of free points for medical services by the system | Holding scientific and recreational camps by the health-care system and giving some privileges of free services |
|                   | Financial incentives                           | Lack of remuneration for the volunteers' long-term activities                                    | Giving a fee, however small, for the health volunteers’ encouragement by the health system               |
|                   | Recruitment                                   | Not considering the health volunteers’ points in the recruitment calls of the health-care system | Considering the privilege of being a volunteer in the recruitment calls of the health-care system and creating a platform for attracting more volunteers by the health-care system |
|                   | The traffic path                              | The distance of the training classes and not attending the class                                 | Making transportation equipment available by the system for the presence of volunteers in training classes and following up patients |
| Social norms      | Lack of some activities by female volunteers   |                                                                                                 | Dividing activities between male and female volunteer forces                                            |
|                   | Organizational distrust                       |                                                                                                 | Justifying the health volunteers’ families regarding the important role of their spouses in improving the health indicators of the community |
|                   | A special view toward the health volunteers    |                                                                                                 | Holding training courses to acquaint the citizens with the health volunteers’ duties                    |
|                   |                                               |                                                                                                 | Increasing the sense of trust and cooperation between the staff and health volunteers                   |
volunteers to provide the necessary infrastructures and facilities for the courses to be held and to continue their activities (Interviewee#10). Another interviewee said, “I think they should pay a small amount of money every month, or give a gift instead of money. The volunteers should be encouraged and praised for their activities” (Interviewee#9).

Management dimension
Because of its spontaneity, the health volunteer program needs to be structured and planned by senior managers at different levels of the health organization. Furthermore, the sufficient attention of the higher authorities to the health volunteers creates a suitable platform for their prosperity in the health systems. This main theme consists of three subthemes as follows:

1. The officials’ attention to the health volunteer programs
2. The officials’ support
3. Supervision of training courses.

One interviewee believed that “the network manager should supervise all the units that can be active in attracting health volunteers” (Interviewee#3). Another stated that “every time we go to the officials for gifts for the volunteers, they say we have no budget and the volunteers are not a priority for the ministry to pay for them” (Interviewee#6). “In some cases, the officials have to sit in the classrooms to listen closely to the volunteers and see their problems, both in terms of facilities and in terms of training. The presence of higher officials in the classrooms encourages the volunteers, makes them work harder, and attracts other citizens to the system” (Interviewee#7).

Educational dimension
Considering the significance and sensitivity of the discussion of education in all health-care sectors, special attention should be paid to the purposeful and practical health volunteer education. This theme includes six subthemes as follows:

1. Educational software and digital books
2. Virtual courses
3. Holding courses on how to use educational aids
4. Internet access
5. The instructors’ teaching methods
6. Educational facilities.

“Most health centers do not have access to the Internet. Even if they do exist in some health centers, it is not permanent. Therefore, health volunteers have difficulty in training.” (Interviewee#9). This interviewee continued that “because of the distance to go to a training class or to take care of household chores, if the training is remote and the need to travel to the health center is reduced, it can increase work efficiency” (Interviewee#9). Another said that “if training software and digital books could be provided for health volunteers, it could be effective both in time and in the quality of training” (Interviewee#12). Another interviewee said: “I expect educators to hold pieces of training regularly and to provide us with more information about diseases” (Interviewee#15).

Quality dimension
The quality of service dimension of the health volunteer program should be given special attention because there is no specific budget for this program defined by the Ministry of Health. The health network system itself must provide facilities and physical spaces. As a result, the acceptance of the quality of the health volunteer program will attract more staff from the volunteers. This theme includes five subthemes as follows:

1. Health volunteer knowledge
2. Discipline and attendance in classes
3. Acceptance of volunteers in the community
4. Communications
5. Physical space for training.

One of the interviewees stated that “unfortunately, most of the knowledge and literacy of the health volunteers is low, so it is difficult to communicate with the citizens and vice versa” (Interviewee#17). Another believed: “discipline in holding classes is poor. The class schedule should be weekly, but this weekly program used to be run regularly; however, it is not the case at the moment. Much attention is not paid to the educational programs of the health volunteers” (Interviewee#16). Another one believed that “there is no acceptance on the part of the citizens to accept the volunteers, and unfortunately most of them do not cooperate” (Interviewee#12). Regarding the physical space, an interviewee held that “educational space in the health-care centers is very small and in most cases does not exist” (Interviewee#9).

Motivational dimension
Motivation is the driving force of human resources and organizations which need capable human resources to advance their goals. Therefore, to increase the motivation of the workforce, codified planning should be done, and health volunteers need motivational support from health-care managers to continue their activities. This main theme consists of four subthemes as follows:

1. Welfare support
2. Financial incentives
3. Recruitment
4. The traffic path.

An interviewee stated that “officials should make clinical tests free for free health volunteers, give them some gifts on occasions, grant them facilities for touring and camping, and give points to their families” (Interviewee#7). One of the health volunteers believed that he/she should be
“be financially supported” (Interviewee#17). Another interviewee said: “it is mentioned in the employment law that if someone has done voluntary work for 1 year or more, it is considered a privilege in the discussion of employment in any organization” (Interviewee#1). Another one stated that “the system does not cooperate with us regarding the means of transportation and following-up of patients” (Interviewee#3).

### Infrastuctural dimension
In the health volunteer program, much attention should be paid to the discussion of infrastructure, because in any program, first the infrastructure must be provided and then other dimensions of the program must be considered.

This main theme also includes three subthemes as follows:
1. Social norms
2. Organizational distrust
3. A special view toward the health volunteers.

One of the interviewees complained that “our spouses do not like that we refer to the patients’ houses for following up their states.” Besides, the health staff was not confident in the follow-up we were doing (Interviewee#15). Another said that “the citizens’ cultural levels in society are different, so it is not possible to train them and communicate with them” (Interviewee#14).

### Discussion
The present research results show the challenges and problems of attracting the participants to different dimensions. The main challenges are related to financial resource dimension, management dimension, educational dimension, quality of service dimension, motivational dimension, and finally, infrastructural dimensions, which had the most significant priorities among the challenges of engaging health volunteers from the interviewees’ viewpoints.

### Financial resource dimension
As the findings of interviewing with the experts revealed, the lack of funding for the health volunteer program in the PHC system has caused the health network system to not be able to cover their basic needs, so this has discouraged many volunteers from working in the health system. In a study titled “Recruitment and Retention of Health Volunteers in Health Care Centers in Kerman City in 2013: A Qualitative Study,” Nekouei Moghadam et al. showed that health volunteers can meet many educational needs and health information of the society by compensating for the lack of the workforce in PHC through voluntary activities. Despite the significance of the presence of volunteers in health programs, in recent years, the health system has witnessed a decrease in cooperation or disconnection with health centers. The inadequacy of the health system in attracting and retaining these forces as well as the lack of budget for the health volunteer program has reduced the number of health volunteers and their unwillingness to continue in the health system.\[17\]

### Management dimension
Health managers play the most significant role in the health volunteer program, but they pay the least attention to the health volunteer program and look at the health volunteers as extra workforces. Top managers should try to attend meetings where facilitators are encouraged to motivate them. In this regard, via a study titled “Motivation among Hospital Volunteers: an Empirical Analysis in Portugal,” Ferreira et al. showed which motivations can affect health volunteer satisfaction. Therefore, the factors affecting satisfaction and relationships between the health volunteers were identified, including motivations related to internal factors, and officials’ support, and job security. Besides, the officials’ attention toward health volunteers’ needs may encourage them.\[18\]

### Educational dimension
Education is the most important pillar in the health system, and the basis of all activities is health education. So for health volunteers, training courses should be held regularly. In a study titled “understanding the motivation and performance of community health volunteers involved in the delivery of health programs in Kampala, Uganda: a realist evaluation,” Vareilles et al. indicated that health volunteers should be supervised and supported via formal training. The training aims to create a sustainable volunteer network in society. Furthermore, health volunteers can update their knowledge by attending classes periodically.\[19\]

### Quality of service dimension
As the findings obtained from interviews with the experts indicated, problems such as poor management of health volunteer training classes, lack of specific planning in teaching instructors, no use of lesson plans before the courses, and lack of physical space and facilities for training classes were expressed. In a study titled “Impact of community participation in PHC: what is the evidence?” Bath and Wakerman found that the quality of infrastructures as well as the training of community health volunteers has a special status. Some of these infrastructures are including health improvement, justice, access to services, communication, acceptance, quality, and accountability.\[20\]

### Motivational dimension
As one of the key issues that play a decisive role in attracting the participation of health volunteers,
motivation is the driving force of the organization’s personnel. The health-care network system is required to motivate volunteers to achieve long-term goals and sustainability in the implementation of the health volunteer program.

Conducting a study titled “prioritization of motivational and satisfactory factors of health volunteers and medical personnel in natural disasters,” Aminizadeh et al. found that the most important tool affecting the health volunteers’ behaviors is the strategy of recruiting and retaining them to know their motivations. Financial incentives, though small, are required to encourage them. Furthermore, by getting acquainted with the motivators of health volunteers, the managers of health organizations can attract their participation and satisfaction and have plans to attract these capable citizens.[21]

Infrastructural dimension
To achieve sustainable social development and improve the citizens’ health in society, the cooperation of all citizens is needed. Hence, in the first place to start the program, health volunteers at any level need to design and improve infrastructures because to achieve ideal goals in each program, the principles must first be precisely defined and specified. In this regard, Safari et al. conducted a study titled “participatory community-based research, a model for health promotion” and showed that health volunteers can serve as a model for promoting community health by creating social participation, community empowerment, and determination to be used among health stakeholders in solving health problems in society. Besides, to empower the health volunteers to conduct needs assessment based on quantitative and qualitative methods and to prepare research priorities in the region based on the list of needs, a workshop on the principles of needs assessment and research priorities can be held with the presence of health volunteer groups for solving their problems and attracting their participation.[22]

Limitations recommendation
This study was not conducted in all urban areas of Iran, so due to geographical, economic, cultural, and social differences between different regions of the country, the possibility of providing research to other cities may not be reasonable.

Conclusion
Considering that the health volunteer program has a key role in advancing the goals of the health-care system and is the basis for achieving continuous and sustainable development in society, so special attention should be paid to this group by senior officials. The main problems in attracting volunteers in the field of health are the lack of coherent planning and weak management of upstream, lack of specific budget allocation, and also weakness in infrastructure, which can be said that managers do not pay attention and responsibility to this sector. It has discouraged the volunteers. Therefore, considering that in recent decades, many efforts have been made to reduce health problems in the country, the Ministry of Health should have a written plan to solve the problems of this group of volunteers and to increase participation. They should make special arrangements and make serious decisions.

Acknowledgment
We hereby thank the Vice Chancellor for Research at the Iran University of Medical Sciences for confirming the present study with the code IUMS/SHMIS 98-4-37-17264. The license was obtained from the Ethics Committee from Iran University of Medical Sciences with the code IR.IUMS.REC.1398.1241.

Financial support and sponsorship
This study was financially supported by the Iran University of Medical Sciences. There are no conflicts of interest.

References
1. Sahabi F, Niksadat N, Keshavarz N, Tohidi M. Function of health volunteers in Iran. J Med Council Iran 2016;34:157-62.
2. Rezakhani Moghaddam H, Allahverdipour H, Musavi S, Shekarchi AA, Matlbi H. Why people choose to volunteer? Women health volunteers’ activities, reasons for joining and leaving. J Caring Sci 2019;8:241-7.
3. Nodehi, Hadi Karimi, et al. Determining and investigating the factors affecting community participation in provision of primary health care. Depict Health 2019;10:84-92.
4. Yazdi Feyzabadi V, Ansari M, Amini Rarani M, Naghibzadeh Tahami A, Heydari A. Health team in primary health care: facilitators and inhibitors of the effective function. Int J Med Inform 2014;2:74-66.
5. Damari B. Challenges and directions of public health development in Iran from the viewpoint of provincial health deputies and health center. J Schl Public Health Instit Public Health Res 2015;13:1-16.
6. Kok MC, Kane SS, Tulloch O, Ormell H, Theobald S, Dieleman M, et al. How does context influence performance of community health workers in low- and middle-income countries? Evidence from the literature. Health Res Policy Syst 2015;13:13.
7. Nekou Moghadam M, Khandani N, Sepehrian R, Sharifi T. Recruitment and retention of health volunteers in health care centers in Kerman city in 2013: A qualitative study. J Payavard Salamat 2017;10:379-92.
8. Shrestha S. A conceptual model for empowerment of the female community health volunteers in Nepal. Educ Health (Abingdon) 2003;16:318-27.
9. Van Lerberghe W. The World Health Report 2008: Primary Health Care: Now More than Ever. World Health Organization; 2008.
10. Mohamadi NK, Bahreini F. A review on the role of community participation in health promotion programs.
11. Daher M. Overview of the world health report 2000 health systems: Improving performance. J Med Liban 2001;49:22-4.
12. Petersen PE, Kwan S. The 7th WHO global conference on health promotion-towards integration of oral health. Community Dent Health 2010;27 Suppl 1:129-36.
13. Maher D, Cometto G. Research on community-based health workers is needed to achieve the sustainable development goals. Bull World Health Organ 2016;94:786.
14. Muthuri RN, Senkubuge F, Hongoro C. Determinants of motivation among healthcare workers in the east African community between 2009-2019: A systematic review. In: Healthcare. Multidisciplinary Digital Publishing Institute 2020. p. 164.
15. Hoodfar H. Health as a context for social and gender activism: Female volunteer health workers in Iran. Populat Develop Rev 2010;36:487-510.
16. Akintola O. What motivates people to volunteer? The case of volunteer AIDS caregivers in faith-based organizations in KwaZulu-Natal, South Africa. Health Policy Plann 2010;26:53-6217.
17. Nekoui Moghadam M, Khanjani N, Sepehrian R, Sharifi T. Recruitment and retention of health volunteers in health care centers in Kerman city in 2013: A qualitative study. J Payavard Salamat 2017;10:379-92.
18. Ferreira MR, Proença T, Proença JF. Motivations which Influence Volunteers’ Satisfaction. In: 10th International Conference of the International Society for Third Sector Research; 2012.
19. Vareilles G, Pommier J, Kane S, Pictet G, Marchal B. Understanding the motivation and performance of community health volunteers involved in the delivery of health programmes in Kampala, Uganda: A realist evaluation protocol. BMJ Open 2015;5:e006752.
20. Bath J, Wakerman J. Impact of community participation in primary health care: what is the evidence?. Aust J Prim Health 2015;21:2-8.
21. Aminizadeh M, Torabi SJ, Nourayi T, Haghdoot A, Bardsiri HS. Prioritizing motivational and satisfactorily factors of volunteer medical and health personnel in natural disasters. Health Emerg Dis Quarterly 2016;1:79-88.
22. Safari M, Bahreini F, Vafaei F, Salari M, Yousefi M, Rezaei M, et al. Community based participatory research, a model for health promotion. J Schl Public Health Institute Public Health Res 2013;11:17-28.