Original Article

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Quick Response Code:

Website: www.jehp.net

DOI: 10.4103/jehp.jehp_1672_21

Participation' goals of Community-based organizations in the COVID-19 pandemic based on capacity gaps: A cross-sectional study

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Received: 17-11-2021
Accepted: 03-01-2022
Published: 31-10-2022

Abstract:

BACKGROUND: There have been criticisms that local authorities develop disaster planning independently, which led to less sensitiveness and responsibility of community-based organizations (CBOs). Disasters planning should incorporate into CBOs' management processes. This study aims to set goals of a community-based plan based on preparedness capacities that CBOs need to have in the COVID-19 pandemic.

MATERIALS AND METHODS: This cross-sectional study used a prevalidated and reliable questionnaire assessing (CBOs). The tool assesses preparedness in the field of planning, training, and infrastructure. Forty CBOs met the inclusion criteria as assisting or cooperating agencies during the COVID-19 pandemic. Then, key informants, who simultaneously have been working in the health system and CBOs, prioritized low-scale items that have shown capacity gaps according to effects on the vulnerable group, sustainability, and capability of the health system. Descriptive statistics performed using SPSS18 software (SPSS Inc., Chicago, USA).

RESULTS: The results showed that the preparedness of CBOs was weak in the field of planning, training, and infrastructure. Besides, overlaps of CBOs' resources and covering the clients' medical needs in the COVID-19 pandemic were the most priority that needs to be intervened.

CONCLUSION: Providing medical needs by CBOs require legal legitimacy assigned by health authority, especially in epidemic-prone diseases. In addition, assigning a coordinator to set a priority list and mutual agreements authoried by health departments can solve the problem of overlapped resources. Therefore, functional roles of CBOs in the pandemic should focus mostly on resource allocation and the medical needs of clients to set goals and functional objectives.

Keywords:

Capacity building, community health centers, COVID-19 pandemics

Introduction

The 17th Sustainable Development Goals regarding the 9th Global conference on health promotion pave the way for the community-based participation in health programs.[1,2] Moallemi *et al*.[2] have notified on pillars of a sustainable community-based planning consisted of context-specific goals and actions. In disasters as the COVID-19 pandemic, community-based plans should help decision-makers handle uncertainties as effectiveness of previous plans would be disrupted due to instabilities.[3] Thus, capacity gaps should obviously considered in further decisions and plans through deliberation with stakeholders.[4] Planning decentralization for setting participation goals enhances community intervention, which is necessary for recognizing capacity gaps and implementing effective strategies. Strategies should include origin from goals

How to cite this article: Rezaei F, Keyvanara M, Yarmohammadian MH. Participation' goals of Community-based organizations in the COVID-19 pandemic based on capacity gaps: A cross-sectional study. J Edu Health Promot 2022;11:336.

after monitoring community issues. In this way, the capacities gaps and the participation of stakeholders will be developed in line with the community's issues.[5] On the other hand, social planners consider existing values and social standards for solving many problems and provide a base-perspective practical interventions.

In public health emergencies as the COVID-19 pandemic, plans highlight the community's roles by raising social awareness of signs, symptoms, and available healthcare facilities. Plans also create partnerships to cause sustainable and relevant interventions and strategies.[6] Nonpharmaceutical interventions including routine self-care, social distancing, and environmental disinfection measures are the best community-based activities[7] and help timely and effective community engagement. In the COVID-19 pandemic, CDC provides community partners with communication materials regarding travelers, laboratories, and at-risk vulnerable persons.[8] However, the extent of a partnership depends on policies and multi-stakeholder approaches that a governance structure provides for a balanced realization of goals with enough knowledge and facilitates procedures to increased acceptance of instructions.[9,10]

There are many active community-based organizations (CBOs) in Iran[11] that the COVID-19 pandemic has provided an opportunity to reveal their capabilities. However, although they were not trained in the field of responding to epidemic-prone disease,[9] they could help the health system by providing logistics and producing medical supplements including masks, disinfection materials, alcohol, and personal protective equipment for medical staff.[12] Therefore, we study aimed to set goals of a community-based plan based on capacity gaps that CBOs need to have in epidemic-prone diseases.

Materials and Methods

Design and setting

This cross-sectional study has designed in two phases. First, prevalidated and reliable questionnaire developed by Rezaei *et al*.[11] was used to assess the preparedness of CBOs. Then, based on the low-scale items in the tool, capacity gaps that need to be improved were identified to set goals.

Study participants and sampling

The first phase: The study population was 138 CBOs in the Esfahan province. Forty CBOs met inclusion criteria to complete the tool. Inclusion criteria were: CBOs that serve more than 50 clients and provide services at the time of the study with a registered office to carry out their duties.

The second phase: Key informants and stakeholders who simultaneously work in the health system and participate in community-based programs were eligible to prioritize capacity gaps. Fourteen persons in the provincial health system who met the eligibility criteria agreed to fill out the second questionnaire.

Data collection tool and technique

Receiving a compiled list of CBOs from vice-chancellery for social affairs, the tool was sent to different social networks of CBOs. In addition, we sent the participation appeal through contact channels five times for each CBOs. These are organizations that, according to experts from the Centers for Disease Control at deputy of health, possess the eligibility and capabilities necessary to work with the health system as an assisting or cooperating agencies during epidemics.

In first phase, the assessment tool contains 53 questions in the field of planning, training, and infrastructure. Each question has four-scale options including "not done (1)," "due to review (2)," "planned but not implemented (3)," and "completely implemented (4)" The tool's scores range from 53 to 212. Scores range of planning (30 questions), training (11 questions), and infrastructure (12 questions) fields is from 30 to 120, 11–44, and 12–48, respectively. Preparedness of CBOs categorizes in five degrees very weak (scores range: 53–85), weak (scores range: 86 to116), moderate (scores range: 117–148), high (scores range: 149–180), and very high (scores range: 181 and 212).

In second phase, based on the results of the first phase, questions in which more than 50% of participants have select "not done (1)" and "due to review (2), should be determined. These questions show capacity gaps that should be prioritized based on the three criteria: (1) effect on vulnerable groups, (2) effect on the sustainability of health system in epidemics, and (3) effect on the capability of the health system in responding to epidemics. Participants rated each criterion based on five-level Likert items.

Descriptive statistics were performed using SPSS18 software (SPSS Inc., Chicago, USA).

Ethical considerations

The identity of the person filling the questionnaire and their organization remained disclosed in the data collection forms; instead, a code was assigned at the time of data entry.

Results

First phase

The questionnaire contains two parts characteristics of CBOs and warm-up questions. Table 1 shows that 70% of CBOs served <100,000 clients. Figure 1 shows those CBOs having more experience, covered more population. About 72% of the personnel of the CBOs

Table 1: Key features of community-based organizations

Features of CBOs	Sub-features	*n* (%)
Building ownership	Government	21 (52.5)
	Private	6 (15)
	Rent	8 (20)
	Waqf	4 (10)
	Endowment	1 (2.5)
Financing	Government	15 (37.5)
	Paying volunteers	1 (2.5)
	Donors	24 (60)
	International humanitarian assistance	3 (7.5)
	Membership fee	3 (7.5)
	CBOs' income	4 (10)
	Training course	2 (5)
Responsible government agency	Medical university	27 (67.5)
	Red crescent	6 (15)
	Welfare organization	6 (15)
	Imam relief foundation	1 (2.5)
	State government	10 (25)
	Blood transfusion organization	1 (2.5)
	Ministry of foreign affairs	2 (5)
	Army	1 (2.5)
	Agriculture Jihad	1 (2.5)
	Department of environment	1 (2.5)
	Municipality	1 (2.5)
	Firefighting	2 (5)
Type of services	Transportation	4 (10)
	Immunization	7 (17.5)
	Elder care	10 (25)
	Children care	13 (32.5)
	Mental health	14 (35)
	Logistics	9 (22.5)
	Medical care	31 (77.5)
	Therapeutic space supply	9 (22.5)
	Refugee support	3 (7.5)
	Legal services	1 (2.5)
	Notification and risk communication	18 (45)
Covered population	≤1000	14 (5.6)
	1000-100,000	14 (5.6)
	≥100,000	12 (4.8)
Years of experience	≤10	12 (4.8)
	10-20	11 (4.4)
	20-30	9 (3.6)
	≥30	8 (3.2)
Location of provided services	Offices	10 (25)
	Municipal districts	15 (37.5)
	School	14 (35)
	Streets	5 (12.5)
	Mosque	10 (25)
	Hospitals	25 (62.5)
	Home visit	1 (2.5)
Communication channels	Telephone	23 (57.5)
	Mosque	7 (17.5)
	Schools	9 (22.5)
	Hospitals/clinics	19 (47.5)
	Work place	11 (27.5)
	Seminars	1 (2.5)
	Virtual network	20 (50)
	Volunteers	14 (35)
	Billboard	9 (22.5)
	Website	20 (50)
Type of services	Emergency intervention	13 (32.5)
	Financial assistance	13 (32.5)
	Disabled care	6 (15)
	Primary health care	18 (45)
	Training	21 (52.5)
	Environmental health	9 (22.5)
	Social services	14 (35)
	Traditional medicine	1 (2.5)
	Occupational health	1 (2.5)
	Gathering volunteer	1 (2.5)
Total		40 (100)

CBO=Community-based organizations

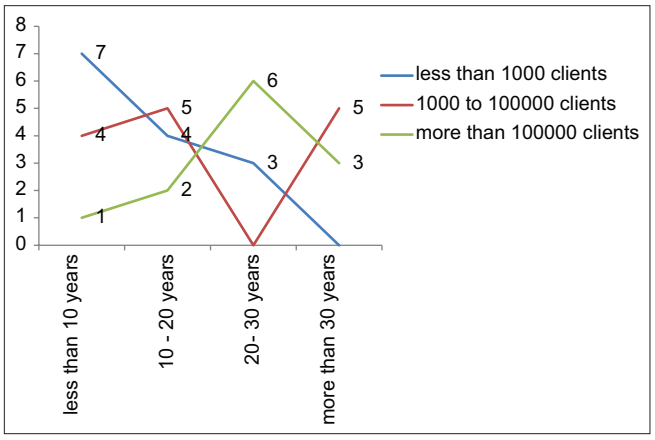

Figure 1: Comparison of covered population to years of experience

were nonclinical. Volunteers (47%) were employed more than part time (40%) and full time (13%) personnel. Figure 2 shows that the most CBOs' clients were children and adult males. Veterans and high-risk behavior groups were the least supported groups by CBOs.

As shown in Table 1, most CBOs placed in governmental buildings (52%). CBOs finance mostly though donors (60%). The most common types of service were medical care (77%), training (52%), and notification and risk communication (45%). These services were mostly provided in hospitals (62%). It can be conclude that most CBOs serve to client in hospital buildings. CBOs communicate with their clients mostly through telephone (50%) and virtual network (57%). CBOs got required licenses from medical universities (67.5) more than other government departments.

In 33 questions of the assessment tool, more than 50% of participants chose scale two and one. The questions were marked with star in Table 2.

Table 2: Percentage of participants who responded to the four options of the assessment tool

Options Planning items	Not done	Due to review	Planned but not implemented	Completely implemented
1. Do you have a list of necessary telephone numbers to contact the responsible organizations during the pandemic?	15	10	7.5	67.5
2. Is there a plan to send warning messages to personnel?	22.5	22.5	7.5	47.5
3. Is there a specific committee or chain of command for the pandemic response and preparedness?	27.5	12.5	7.5	52.5
4. Is it possible to contact the person in charge of the CBOs in 24 h?	20	15.5	2.5	65
5. Did the role and responsibility of your organization define to other responsible organizations?	17.5	15	10	57.5
6. Is there a specific method for informing your organization in emergencies?	37.5	12.5	2.5	47.5
7. Has a written response and preparedness plan been developed for personnel?	42.5*	22.5*	5	30
8. Is there a plan to follow the immunization of personnel in as soon as possible?	55*	15*	10	20
9. Is there a plan to approve the authorization of clinical volunteer staff during the pandemic?	45*	25*	10	20
10. Is there a plan for continuity provision of routine medical needs of clients?	30*	27*	15	27
11. Is there a plan to provide mental support for the covered population?	25*	27*	22	25
12. Do you have any plans to support the mental and moral well-being of children during the pandemic?	42.5*	22.5*	12.5	22.5
13. Is there a plan to care for children whose guardians have died or isolated for a long time?	65*	22.5*	0	12.5
14. Is there a plan for re-assembling family members after the pandemic?	72.5*	10*	5	12.5
15. Is there a plan for informing the covered population about how to access prevention services?	40*	22.5*	12.5	25
16. Is there a plan for communicating with the media and the general public?	20*	25*	17.5	37.5
17. Is there a plan for accessing covered groups within 24-48 h, to make them aware of available services?	40*	25*	12.5	22.5
18. Is there a specific communication network to disseminate and receive information from other CBOs or social groups?	30	20	20	30
19. Is there a plan to work with other health centers to provide care to the affected population at the time of the epidemic?	22.5	17.5	7.5	52.5
20. Are there plans to facilitate participation in working groups, councils, and health committees in the province?	22.5*	30*	17.5	30
21. Is the process of getting help from your organization ensuring the urgent needs of the health system to be met, been clarified?	42.5*	25*	2.5	30
22. Is there a plan to increase your organization's volunteers in an emergency?	35*	22.5*	17.5	25
23. Is there a plan to provide primary health care to the covered population?	17.5	12.5	12.5	57.5
24. Is there a plan to report suspected cases of a disease in the covered population to the medical university?	27.5	7.5	7.5	57.5
25. Is there a plan for triage and referral of patients to appropriate treatment zones in coordination with the medical university?	22.5	7.5	5	65
26. Is there a plan to provide workforces of investigation teams and conduct active surveillance to help the health system?	35*	17*	7.5	40
27. Is there an agreement with your organization to finance the human resources needed by the health system in the pandemic?	62.5*	15*	5	17.5
28. Does your organization have a plan to provide environmental health services to clean the treatment spaces when a pandemic happens?	35*	15*	5	45
29. Is there a plan to overcome the overlaps of your organization's resources with other CBOs during the recent pandemic?	57*	10*	10	22.5
30. Is there a plan to evacuate the affected area by a biological incident?	45*	15*	15	25
Training items				
1. Have your organization been provided any training and instructions regarding preparedness and response during a pandemic?	45	5	10	40
2. Is there a plan to educate the health and clinical members of your organization to screen, surveil, and report cases of biological incidents?	50*	12.5*	10	27.5
3. Is there a plan to train members of your organization to support the mental and moral health of the affected population during pandemics?	27.5*	37.5*	5	30
4. Is there a plan to train the members of your organization to resuscitate patients?	25	10	5	60
5. Have you already provided the department of health's guidelines for disaster management to your organization?	42.5	7.5	12.5	37.5
6. Are there instructions for the covered population to access health services in case of infection?	37.5*	17.5*	15	30

Contd...

Table 2: Contd...

Options Planning items	Not done	Due to review	Planned but not implemented	Completely implemented
7. Have the necessary training and skills to adapt psychologically in the pandemic been provided to members of your organization?	42.5*	27.5*	5	25
8. Have epidemic training programs tailored to target groups (responsible personnel, volunteer citizens, and covered population) been considered?	42.5*	30*	10	17.5
9. Are there documented lessons learned from the experience of partnership with the health system in epidemics?	45*	17.5*	2.5	35
10. Does your organization have plans to participate in exercises and drills related to disasters and emergencies?	35*	25*	12.5	27.5
11. Is there a plan to train your organization's members conducting exercises and drills of disasters?	32.5	17.5	17.5	32.5
Infrastructure items				
1. Are there appropriate services and technology to notify an epidemic to the university of medical sciences?	47.5*	7.5*	10	35
2. Do you plan to share the information of the covered population with the health system?	47.5*	12.5*	12.5	27.5
3. Can you determine the specific needs of the covered population in epidemics?	35*	30*	15	20
4. Is your organization able to provide the necessary facilities for vaccination and mass immunization?	52*	12.5*	5	30
5. Can your organization provide an abundant supply of drugs, vaccine, and serum through during emergencies?	45	5	17	32
6. Can you provide logistic support of health care in accidents? (e.g., power supply, heating equipment, ventilators, ventilation systems, oxygen generator)	42.5	7.5	12.5	37.5
7. Is there a plan to eliminate the legal barriers of participation when responding to the pandemic?	55*	15*	15	15
8. Have you introduced your workforce to help the health system during epidemics? (as personnel, volunteers, and students)	37.5*	20*	15	27
9. Is there an agreement to receive emergency funding from government organizations during emergencies?	75*	7.5*	2.5	15
10. Has the health system defined the priorities of resource allocation in the pandemic?	57.5*	17.5*	10	15
11. Can you provide transportation facilities for affected patients? (like ambulance, etc.)	37.5	10	10	42.5
12. Is there an emergency planning for needs such as food, water, medicine, etc., at the time of the pandemic?	45*	15*	0	40

*Cumulative percentage of participants who chose options of "not done" and "due to review." CBO=Community-based organizations

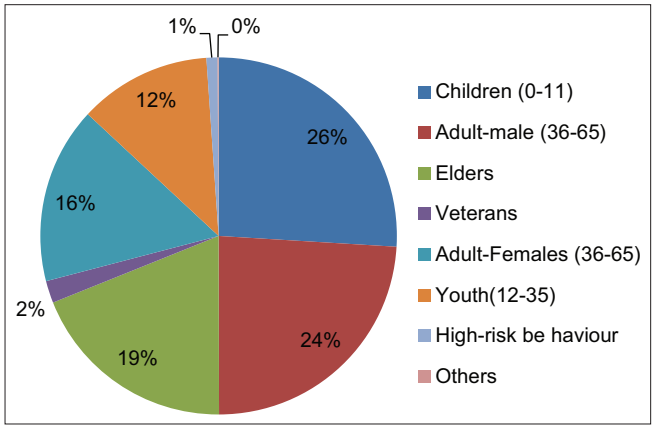

Figure 2: Percentage of clients groups that community-based organizations covered

Table 2 shows percentage of participants who responded to the four options of the assessment tool. The results shows that the preparedness average level of CBOs is week in the field of planning (60.35 μ/25.29%), training (23.77μ/29.02%), and infrastructure (26.22μ/29.62%). The total preparedness level of the tool was weak (110).

Second phase

In the second phase, questions were paraphrased to show future goals. Key informants scored the goals based on the three criteria [Table 3]. According to the research team's agreement, goalsthat got 4.5 ≤ scores were the priorities to set relevant strategies and planning.

Discussion

The results show that the preparedness of CBOs was weak in the fields of planning, training, and infrastructure [Table 2]. The two priority goals were both in the field of planning including overcoming the overlaps of CBOs' resources and covering the medical needs of clients in epidemics [Table 3]. Therefore, strategies and functional roles should focus first on the two goals.

Considering three main areas of training and planning as the most challenging functions in capacity building for CBOs' preparedness in disasters notified by Murphy *et al*. Besides, the infrastructure involved only in 18% of nonimplementing the guideline.[13,14] Shipp Hilts

Table 3: Mean scores of setting goals based on three criteria

Goals	Criteria			Mean
	Effect on vulnerable groups (1-5)	Effect on sustainability of health system in in epidemics (1-5)	Effect on capability of health system to respond in epidemics (1-5)	
1. Development of a written response and preparedness plan for personnel	4.21	4.28	4.35	4.28
2. Development of a plan to cover the client's medical needs in the epidemic*	4.64	4.64	4.28	4.52
3. Development of a plan to care for children whose guardians have died or isolated for a long time	4.35	4.64	4.28	4.42
4. Development of a plan for informing the covered population about how to access prevention services	4.57	4.28	4.14	4.33
5. Development the process of getting help from your organization ensuring the urgent needs of the health system to be met and clarified	4.34	4.64	4.21	4.39
6. Development of a plan to overcome the overlaps of your organization's resources with other CBOs during the recent pandemic*	4.57	4.42	4.57	4.52
7. Development of a plan to train your organization's members conducting exercises and drills of disasters	3.57	4.42	4.46	4.15
8. Determination the specific needs of the covered population in epidemics	4.28	4.21	3.71	4.06

*Goals that got the highest priority for intervention

et al. also stated that planning and training were the most challenging issues for health-care personnel in responding to Hurricane Katrina.[15] In Iran, week infrastructure might be due to less technical and professional knowledge. Besides, economic sanctions and recession in Iran decrease investing in infrastructure of CBOs. However, capacity building in training and planning is in progress through a bilateral effort between world health organizations and Isfahan University of Medical Sciences.

In this study, first goal emphasizes "development of a written response and preparedness plan for personnel." However, disaster plans are effective when they increase community participation and involvement. In this regard, CBOs have potential capabilities that can be employed in disasters by preplanning and coordinating. In addition, CBOs are more willing to cooperate by providing financial support, developing participatory networks, and allocating sufficient time.[16,17] However, in epidemics, CBOs' leaders should develop official channels of communication with health authorities to present their capabilities in disasters. If health authorities and CBOs' leaders make any alliance, mutual benefits will be achieved for health systems and communities by disaster plans.[18] However, impediments to achieving the expected community-based health outcomes are inadequate transportation systems, equipment, medications, weak community-based programs, lack a suitable health infrastructure, inaccessible services, insufficiently community health workers, cultural beliefs, short of funds, and negative effects on national insurance programs.[19] CBOs should get involved in community-based disaster planning to be prepared and experience ways of providing help for a health system.

In this study, the second goal evolves coping strategies to supply the medical needs of vulnerable groups underneath of a CBO in epidemics. Sustainable provision of health needs of vulnerable and deprived people is one of the main challenges in epidemics that Frenk *et al*. proposed community partnerships to solve the problem.[20] In this regard, a multidisciplinary and integrated system is required to provide not only qualitative health services but also eliminating health-based injustice.[21] To achieve this, community stakeholders who are able to supply the needs of vulnerable people and provide services; should involve in disaster response.[22] In Iran, as CBOs mostly established to cover the health needs of vulnerable and deprived people, they are the main community stakeholders. CBOs can give state authorities a deep understanding of the specific needs of the target community and clear the best way of delivering health services adjusted to community culture and values.

Besides, the third goal addresses children as vulnerable groups. Childcare recieved the least concern of CBOs that authorities should pave the way for participation of CBOs by incentives and facilitated procedures.[23] Thus, CBOs can provide care for children whose guardians have died or isolated for a long time by volunteers during epidemics.

The fourth goal indicated the necessity of "informing the covered population about how to access prevention and health services" has been obtained as one of the planning goals. The goal refers to "risk communication" which is

one of the eight capacities for outbreak preparedness.[24] CBOs can remove risk-communication impediments partly by educating and employing local people. In epidemics, locally trained health workers can educate the community in the prevention procedures, visit homes, do field visits, and eventually report suspicious cases.[25] In addition, it is necessary to determine the level of people's knowledge, especially vulnerable groups served by CBOs.[26] Ethnicity, age, and education are factors influencing the level of community knowledge in preparing for an outbreak. Therefore, studies have recommended the use of means of communication appropriately to various groups of people,[27,28] as community access to reliable and timely information is important in epidemics.[29] Considering limited access for deprived and vulnerable groups to communication channels, CBOs are the best way to reach and inform them. On the other hand, teaching health workers about the mechanisms of partnership with the community is considered less in studies. In this regard, the development of the process of getting help from CBOs to ensure meeting the urgent needs of the health system was proposed in fifth goals.

Regarding the fifth goal, to ensure that the urgent needs of the health system would be met and clarified by a CBO, studies have shown that trained volunteers increase participation in community-based interventions, especially in the field control and surveillance of diseases.[1,30] However, bureaucratic and administrative processes should be facilitated to increase participation in social work during the incident. In addition, if CBOs' leaders have extensive political relations in society, they will have more power to get volunteers to involve in disasters. Clarification of the cooperating roles of CBOs in epidemics througha development of a written response and preparedness plan (first goal) would facilitate the functions of a health system. Besides, CBOs' personnel should receive required training and gain technical competence to do their cooperating roles. The goal requires that legal and cultural limitations of the subjected community be considered. Finally, it should be noticed that agreement on cooperating roles should not proceed with imperative instructions by health authorities as to the aim of participation is the attitude change.

Regarding the six goal, overlaps of resources would occur when the responsible departments did not have any unified mechanism to declare resource needs to CBOs. Resource allocation in an emergency should decrease the waste of time and costs. Thus, relief organizations always confront the challenges of allocating scarce resources (including equipment, water, electricity, transportation vehicles, and communication devices) timely and efficiently.[31] In this regard, it is recommended to manage all resources by a single organization in disasters to increase the efficiency and effectiveness of allocating resources and eliminate overlaps.[32] In Iran, frequent overlaps of CBOs' resources have emerged due to governmental regulation regarding CBOs' function in disasters. First, If CBOs had the required licenses of the responsible state department; they are permitted to enter the incident scene. Second, various government departments (including the Red Crescent, Welfare, Sports and Youth, and county Governor) have the authority to permit resources entry to the scene of the incident.

CBOs' capabilities need to be examined with exercises and drills to assess preparedness for an infectious disease outbreak.[33-35] community coalitions almost do not have sufficient partnerships with partner organizations to conduct exercises and drill. In this regard, coalitions might not cover all the high-risk groups as each organization specialized in serving a specified group of people.[36] In Iran, CBOs cover a considerable number of high-risk groups. In this regard, coalitions should strongly cooperate with CBOs in order to increase the preparedness and response to the needs of high-risk groups. Therefore, the seventh goal refers to training CBOs' members by exercises and drills that help the health system to identify CBOs' potential capacities. This will change attitudes of authorities to CBOs to as assisting agencies, rather than a source of gathering donations.

Finally, regarding to "determination the specific needs of the covered population in epidemics" a new research methodology is requires to conduct a needs assessment in order to understand the nature, characteristics, scope and magnitude of health issues in affected communities during disasters.[37] Need assessment of target groups in disasters can lead to effectively allocated-resource, implicit community's capacities, capacity-building, strong community advocacy, and well-managed disparities.[38]

Limitation and recommendation

The different education levels of CBOs' stakeholders were the challenge of filling the assessment tool. In addition, key informants who were specialized both in health fields and had experience in CBOs should fill out the assessment tool. Therefore, the presence of the researcher as a facilitator at the time of filling the forms had a significant impact on the validity of the research data. On the other hand, few researches in the field of CBOs' preparedness in Iran's epidemics have been done. Therefore, there are few resources to compare.

Regarding the importance of community participation in epidemic, we need make CBOs prepared and ready

in areas where there are fewer capacities, according to the results of this study. Thus, future results can search strategically on ways of managing overlaps of CBOs' resources and covering the medical needs.

Conclusion

Previous studies have shown that avoiding top-down approach in planning is required to develop relevant and effective policies and instructions. Disaster plans are not also an exception. Therefore, communities should participate in collecting data, designing plans, and implementing instructions.[6,39,40] One of the CBOs' challenges is community involvement in planning and decision-making. CBOs act as liaison organizations that define the community's willingness and incentive to participate in disaster preparedness.[41,42] To provide medical needs in disasters, consultation with experienced health authorities should be done to consider political and social acceptablity. However, official authorities should support CBOs and their volunteers' participation legally, especially in epidemics. Besides, overlap of resources in disasters should be solved by developing a priority list. In this regard, an assigned coordinator among state departments should announce the priorities to CBOs. Mutual agreements between state departments should approve that which CBOs provide which resources in disasters. Therefore, task will be divided between CBOs.

Acknowledgment and ethical code

The authors very much appreciate the support by the executive managers of CBOs in the Esfahan province and liaisons of community-based programs in health departments of the Medical University. We besides, the research ethic committee of the Isfahan University of Medical Science have provided the ethical approval code: IR.MUI.NUREMA.REC.1400.030.

Financial support and sponsorship

This study was financially supported by Isfahan University of Medical Sciences approved the article with ethical code: IR.MUI.NUREMA.REC.1400.030.

Conflicts of interest

There are no conflicts of interest.

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