Iranian J Publ Health, Vol. 41, No.9, Sep 2012, pp.48-55

Original Article

Community Capacity Assessment in Preventing Substance Abuse: A Participatory Approach

KH Shahandeh [1], R Majdzadeh [1,2], *E Jamshidi [1], N Loori [1]

1. *Center for Community Based Participatory Research, Tehran University of Medical Sciences, Tehran, Iran*
2. *Dept. of Biostatistics & Epidemiology, School of Public Health, Tehran university of Medical Sciences Tehran, Iran*

***Corresponding Author:** Email: e_jamshidi@razi.tums.ac.ir

(Received 16 Oct 2011; accepted 21 Jun 2012)

Abstract

Background: Community-based participatory research (CBPR) increasingly is being used to address health issues. Few evidence exist to indicate how builds the capacity of communities to function as health promoter and what resources are required to promote successful efforts. This article presents the result of a capacity assessment for preventing drug abuse through CBPR, which working with rather than in communities, to strengthen a community's problem-solving capacity. For exploring the perception of stakeholders, a dynamic model of the dimensions of community and partnership capacity served as the theoretical framework.

Methods: In this descriptive research, stakeholder analysis helps us to identify appropriate of stakeholders (Key stakeholders). Data were collected using a topic guide concerned with capacity for preventing drug abuse. Interviews were audiotape and transcribed. Data were analyzed thematically.

Results: CBPR has been undertaken to involve local people in making decisions about the kind of change they want in their community and the allocation of resources to reduce substance abuse. We identified key stakeholders and examining their interests, resources and constraints of different stakeholders.

Conclusion: The current study has shown the benefits of community-based participatory approach in assessing capacity. Through CBPR process people who affected by Drug issue engaged in analysis of their own situation and helps identity innovative solutions for their complex problem. This participatory approach to a capacity assessment resulted in a synergistic effort that provided a more accurate picture of community issues and concerns.

Keywords: Participatory, Community, Capacity, Stakeholders

Introduction

Communities are facing health issues with complex socioeconomic components. For this reason, the process of building participation into a community is far more complex than it first appears because some socioeconomic groups are often left out. As a mean of addressing this complex issue Communities have turned to bottom-up approaches (1, 2).

According to the Bangkok Charter (WHO), support for capacity building is important because 'well organized and empowered communities are highly effective in determining their own health, and are capable of making governments and the private sector accountable for the health consequences of their policies and practices (3).

Community-based participatory research (CBPR) approach has played an important role in the area of preventing drug abuse, with its accent on community priority, and community collaboration (4). Chambers (1997) stated that for the building of better relationships between stakeholders, participatory sessions with people revealed their

knowledge about resources and allowed them to explain in detail the problem in their community (5). Many authors argue that it is appropriate to assess capacity in relation to a specific object or objective of change; that is, 'capacity for what'. 'It is critical that community capacity assessment undertaken through a participatory process involving community stakeholders (6-8).

Fenton (2004) developed an instrument for measuring capacities, including decision-making structures and processes; having a skilled workforce and network of facilitations and having adequate human, financial and information resources through structured telephone interviews with key stakeholders (9).

Another community capacity assessment by using qualitative approaches was undertaken by Cavaye (2005). He assessed capacity through individual discussion, focus group discussion and scaled responses. It builds capacity by improving understanding of the social and economic resources available at the institutional or organizational level (10). Experience shows that an understanding and appreciation of the "stake" of all stakeholders at all levels are necessary. As Taylor et al. (2000) developed a model for measuring eight elements of capacity at the individual level and seven elements of capacity at the community level (11).

Thomson and Pepperdine (2003) grouped dimensions of capacity under communications and empowerment and program design themes. They identified the need to understand the relative importance of different capacities (12). Furthermore, Webb and Curtis (2002) identified several elements of capacity and grouped under forms human capital, economic capital and social capital (13).

Participatory capacity assessment through CBPR provides opportunities for greater understanding of the needs and barriers of community's capacity. It helps measure strengths and weakness of the capacity of local community. Furthermore, baseline social capacity data will be established. It also determines what specific capacities are required for local community to achieve preventive drug abuse outcomes.

To adders this gap, as well as focusing on the stakeholders' roles and relations, we looked at the substantial work of researchers who have focused much effort on exploring community capacity assessment.

The main purpose of the study was to determine the capacities, skills, and assets of community members, agencies, and organizations.

This participatory approach to a capacity assessment resulted in a synergistic effort that provides a more accurate portrait of community issues and concerns.

The specific objectives of the capacity assessment were to: a) identify the capacities, skills; b) assess the level of knowledge and frequency of use of existing agencies/organizations by community members; c) determine reasons preventing citizens from using local services, and d) describe community members participating in the study on selected demographic characteristics

Materials & Methods

Setting

This study was carried out in zone 17, located in southwest of Tehran City. The area has high density of population, with an estimated population of 37500 people. Population structure is majority immigrants came from north and northwest provinces of Iran. Community identification is highly traditional and Islamic religious. Generally, the unequal distribution is based on gender, culture, social norm, tribes is different.

Research Design

Descriptive research was the design for this capacity assessment. The study was designed to determine the capacities and resources of community to prevent drug abuse.

Stakeholders' analysis were conducted to identify key stakeholders (refers to persons, groups or institutions who were high important, high influence or both). Firstly, we identified and list all potential stakeholders (primary, secondary) and draw out their interest in relation to the study. Secondly, we assess the influence and importance of stakeholders and finally, we use conflict and inter-

est matrix diagram. In this study, primary stakeholders are those individual or groups of people who are directly affected by drug issue or care about drug prevention and secondary stakeholders are those individual or groups of people who are indirectly affected and support drug abuse prevention project.

A theoretical framework highlighting Dimensions of community and partnership capacity was used to facilitate efforts to assessment capacity through CBPR.

Research team members conducted ten visits at local community. The methodology used to collect primary source data was interviewing of key informants and focus groups. The key informants were persons in charge of personnel planning and training and also other secondary stakeholders. Five focus group discussions averaging 6 to 8 participants were conducted with community members identified by the community partners for their knowledge base and involvement and included questions about the roles members had played and training received. Each interview with session lasted approximately one hour. At the start of each group, the moderator explained the purpose of the research. A semi-structure interview guide was designed to address topics including leadership, participation, skills, resources, type and level of participation.

Ethical approval for the research was obtained from the Tehran University of Medical Sciences Research Ethics Committee. Informed consent was obtained from all participants themselves. Anonymity was assured to the participants, and it was explained to them that tapes and transcripts would not have identifiable features and would be kept in a secure location.

Data analyze and coding

Transcripts of audio taped interviews and focus groups were coded independently by two research team members using a detailed , 14- item coding template with code categories corresponding to each major domain of interest included in the interview schedule. These included partnership formation and functioning, partnership roles, individual and community /organizational capacity, stakeholders' activities. The complete transcripts, domain codes, and reviewer notes were entered into the qualitative software package. Individual team members first identified similarities and differences within different domain categories. Then findings were written up to shared with the partners for member checking to help ensure the validity of data interpretation. Feedback from the key stakeholders was incorporated in a final round of analysis in which themes that emerged across at least three sites were identified and examined in relation to one another..

Research team examined the more recent literature and conducted an internet search. The interviews were supported by documentary research.

Results

All possible stakeholders and potential supporters that could affect or be affected by preventing drug abuse through participatory tools have been identified and listed.

Possible interest of all types of stakeholders emerged from interviews and focus group by asking about their expectations and benefits. Expected impacts on various stakeholders' interests classified into positive, negative, uncertain and unknown.

The expectations and benefits of stakeholders and their impact on prevention drug abuse presented in Table 1.

Some of stakeholders' interest and concerns were similar, but other stakes were different because of their capacities and level of participation.

Key stakeholders which can significantly influence, or were important to the success of the project of preventing drug abuse were identified. Interviews and direct observation were additional methods to triangulate and clarify variables affecting stakeholders' relative power / influence and importance.

In order to address the distribution of influence or the power which key stakeholders have over preventive drug abuse project and importance indicates the priority given to satisfying key stakeholders needs and interests we used weighting tool which presented in Table 2.

Table 1: Stakeholders' expectations, benefits and their impact on prevention drug abuse

	Type of stakeholder	Expectations and Benefits	Impact
Primary stakeholders	Trustees / informed citizens	-Increase Social capital and quality of social interactions -Opportunities for engagement, action to facilitate social change,	-/+ +
	Clergy	- religious influence	+
	Local NGOs Alanan & Naranan	-Increase Social capital and quality of social interactions -Quality of engagement, social and civic participation,	+ -/+
	Parent-teacher association Teachers	Involve local community members in decision –making	? + +
	Parents & Female headed households	-Access to knowledgeable people and research organizations, -Accessibility of information, consistency of information, quality and relevance of information, enhance local community members knowledge	+
	Adolescents & Youth	-Quality of networks and relationships -Transparency in decision-making	-/+
	Traders	-Trust in decision-making, -Prepare people for change, Leadership skills, make informed decisions ,	-/+
	Family friends & Neighbor	-Awareness about supporting organizations who can provide services, Identify local needs and priorities, Responsive to local needs	+ -/+
	Academics / Researcher	-Grants, promotion, access to new communities, Research skills -Enjoying heir role as both mentors and co-learners in the collaborative process	-/+ +
	Service providers NGOs Volunteers	-Disseminating data, information and research and sharing knowledge on drug prevention by: New program, Data for advocacy, Credibility, New source of research and service funding, learning new skills transferable	-/+
	Narcotics Anonymous (NA)	-Establishing a resources center on drug prevention and Conducting and publishing researches and reports on drug prevention.	+
	CBOs, Religious & Community leader	-Mobilizing and empowering community action groups to undertake prevention activities aimed at reducing the use of drugs	-/+
	Police	-Enhancing/strengthening protective factors and the reversing or reducing risk factors	+

Notes: positive (+), Negative (-), uncertain (-/+), unknown (?)

By combining influence and importance using a matrix diagram we assess stakeholders' level of participation in CBPR. Key stakeholders with high influence and importance were likely to provide support and were potential partners in planning and implementation.

A key objective of the study was to identify which stakeholder wants to involve at what level of participation and at what stage of the community-based participatory research. This was to be achieved by engaging in research process and also through "Participation Matrix" tool. Findings are shown in the Table 3.

Participants were asked to express their perceptions about different level of participation, range between passive to active participation by indicating how strongly they agreed or disagreed with 7 statements about aspects of level of participation. They were also given the opportunity to express any additional views. The proportions agreeing with each of statements are shown in Table 4.

Table 2: Stakeholders' importance and power/ influence

Key Stakeholders	Importance 1-Low, 2- Mediums, 3-High	Power / influence 1-Low, 2- Mediums, 3- High
Trustees/ inform citizen	3	3
Narcotics Anonymous (NA)/ local NGO (Alanan, Naranan)	3	2
Family /Friends/ Neighbors	3	1
Adolescents	3	1
Youth	3	1
Men/ parent	3	1
Women/Parent/ Female headed households	3	1
Academics/ Research center	1	2
Community- based Organization CBO	3	3
Police	2	3
Religious Leader/ Clergy	1	2
Teachers	2	2
Service providers	1	2
The Media	1	1

Table 3: Participation Matrix - level of participation based on stage of community-based participatory research

Stage	Inform	Consult	Partnership	Control
Needs assessment	youth, adolescents parent, clergy, school personnel	clergy, parent, school personnel, teacher, social worker, police,	Trustees. Inform citizen clergy, NGO,s , Academic /researcher, CBOs	NGO,s , Academic /researcher
Planning		social worker	Academic /researcher NGO police,	Academic /researcher NGO, Police
Implementation	Youth adolescent parent, clergy, school personnel	clergy, parent, teacher	Academic /researcher, CBO NGO's , police,	Academic /researcher NGO's , police,
Monitoring & evaluation			Academic /researcher, police	Academic /researcher police

In this study, institution refers to all formal and informal groups of secondary stakeholders which having a legal framework, an organizational structure, operating systems, staff, and resources and constituted to fulfill a set of related functions.

There was a large amount of agreement that primary and secondary stakeholders have different knowledge about the same things and they may organize their knowledge in different ways also may received and transmit their knowledge by different means.

Result also indicated that some of stakeholders' interests and concerns might be different because of power imbalances between different stakeholders. By combining using a matrix diagram we assess stakeholders' conflict and partnership. These finding presented in matrix 1.

Table 4: Percentage of participants agreeing with 7 statements about level of participatory on drug prevention

statement	Percentage agreeing
Passive participation: People are told what is going to happen	90
Nominal Participation: Participation by giving information, Questions asked by outsiders are answered	70
Participation by consultation: People are consulted but have no part in decision-making.	70
Instrumental Participation: People provide resources such as labour in exchange for material incentives.	30
Representative participation: Functional participation, People participate in groups to meet their priority needs.	40
Empowering participation: Interactive participation**,** Local people and outsiders participate in joint analysis, project design, implementation and monitoring and evaluation.	10
Active participation: People take initiative independently from external institutions.	10

Matrix 1: Stakeholders Conflict & Partnership Matrix

Academics Researcher									
Clergy	•❑								
Teachers	●								
Parents/ family	●	□	□						
Police	·❑	•❑	❑	●					
Youth	❑	•❑	□	•❑	●				
CBO	●	●	•❑	□	•❑	❑			
Local NGO	•❑	●	•	•❑	•❑	❑	·□		
Service providers	•❑	•❑	•	❑	❑	·❑	•❑	• ❑	
	Academic Researcher	Clergy	Teachers	Parents/ family	Police	Youth	CBOs	Local NGO	Service providers

Note: The symbol ● represents the existence of Conflict/ or support The symbol ❑ represents the existence of Partnership

Based on the result of the Stakeholders Conflict & Partnership Matrix, we realized that how individuals and group allocate and use resources to manage risks, minimize constrains and maximize opportunities.

We also identified socio- cultural, economic and political constraints influence the situation of all stakeholders for their participation. Demographic conditions like internal migration patterns; political events at national and local level; training and educational levels of the population and education and training facilities have influence on their participation.

Dimensions of institutional capacity assessed through interviews. Themes emerged from interviews were divided into three categories: institutional formation capacity, with three subcategories of legal framework, human and financial resources,

institutional function with two subcategories of management and program delivery, and institutional condition with subcategories of leadership.
Dimensions of institutional capacity were scored by participants. For instance, institution's legal framework, policies, rules, & procedures provide a consistent referent for operations. They have access to logistical and communications needs. The institutions have financial resources, so they have access to resources and control over their own budget. They also have human resources, with adequate staff in all key positions. Themes emerged from interviews about dimensions of individual capacity were leadership, participation, partnership, skills, resources, social and organizational networks.

Discussion

The goal of this study was to access participatory capacity that are directly related to community participation and related to a partnership's ability to create a collaborative process for preventing drug abuse.
Our result shows that stakeholders' capacity and interest are varied and related to their level of participation. This finding is consistent with Thomson and Pepperdine (2003) study. They identified the need to understand the relative importance of different capacities. They pointed that stakeholders' capacity may be very strong, but it may not be important for adopting or delivering program in community.
Finding demonstrated that achieving high levels of participation is associated with leadership that effectively facilitates interactions among partners by sharing power. The finding is consistent with other research that has documented the importance of leadership and the effectiveness of partnership (10, 14).
The identification of leadership capacities helps us better understand why others have found that partnerships need leaders who appreciate partners' different perspectives and empower partners.
Cavaye's study (2005) have indicated that Capital is the ability of communities of people to take action to achieve an outcome, based on Social capital theory; which considered in this project to assess community capacity. However, other research has indicated that Social capital can improve the function of society include trust, norms, and networks, group interactions, shared values and leadership (15-17).
Participants were generally optimistic about the potential impact of participation on prevention drugs. However, the majority of them stated that in participatory process by combining the perspectives, knowledge, and skills of divers stakeholders in a way that enables their partnership to think in a better ways and plan more comprehensive prevention program, the synergy of partnership those who can significantly influence or are most important is more than an exchange of resources among key stakeholders. As the level of interaction and involvement increases, there is a decline in the total number of stakeholders who are able to participate.
Community drug abuse programs cooperate and contend with a remarkable number and variety of stakeholder organizations, institutions, and individuals. By developing community capacities, partnership leaders and coordinators may be better positioned to maximize level of participation and overcome some of the challenges associated with collaboration.
The main finding noted that key stakeholders refers to high importance, high influence, or both should have more individual or institutional capacities.

Ethical considerations

Ethical issues (Including plagiarism, Informed Consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc) have been completely observed by the authors.

Acknowledgments

The author wishes to express thanks to all of the participants in this study. This research has been supported by Tehran University of Medical Sciences

& health Services grant No 4283-62-03-86. The authors declare that there is no conflict of interest.

References

1. Mitchell SM, Shortell SM (2000). The governance and management of effective community health partnerships: A typology for research, policy and practice. *Milbank Q,* 78:241-289.
2. Kreuter MW, Lezin NA, Young LA (2000). Evaluating community-based collaborative mechanisms: Implications for practitioners. *Health Promotion Practice,* 1:49-63.
3. The Thai Ministry of Health (2005). Bangkok charter for health promotion in a globalized world. Sixth Global Conference on Health Promotion. Policy and partnership for action: addressing the determinants of health. Bangkok, Thailand.
4. Israel BA, Schulz AJ, Parker EA, Becker AB (1998). Review of community-based research: Assessing partnership approaches to improve public health. *Annu Rev Public Health,* 19:173-202.
5. Chambers R (1994). Participatory Rural Appraisal: analysis of experience. *World Development*, 22 (9): 1253-68.
6. Bopp M, Bopp J (2004). Welcome to the swamp. Addressing Community Capacity in Ecohealth research and intervention. *Eco Health*, 1: 24–34.
7. Markey S, Vodden K (2000). *Success Factors in Community Economic Development: Indicators of Community Capacity*. Community Economic Development Centre, Simon Fraser University, Burnaby, British Columbia.
8. Cheers B, Cock G, Keele L, Kruger M, Trigg T (2005). Measuring Community Capacity: An Electronic Audit Tool. Paper presented to the Second Conference on the Future of Australia's Country Towns, Bendigo, Victoria.
9. Fenton M (2004). *Socio-Economic Indicators for NRM (Project A1.1) Indicators of Capacity, Performance and Change in Regional NRM Bodies*. National Land and Water Resources Audit, Canberra.
10. Cavaye J (2005). *Capacity Assessment Methodology for NRM Regional Arrangements: A Guide to Using the Capacity Assessment Tool*, Cavaye Community Development, Toowoomba.
11. Taylor B, Lockie S, Dale A, Bischof R, Lawrence G, Fenton M , Coakes S (2000). Capacity of Farmers and Other Land Managers to Implement Change. Technical Report, National Land and Water Resources Audit. Natural Heritage Trust.
12. Thomson D , Pepperdine S (2003). Assessing Community Capacity for Riparian Restoration Land and Water Australia, Canberra.
13. Webb TJ , Curtis A (2002). *Mapping Regional Capacity, Bureau of Rural Science, The Community in Rural America*, Greenwood Press, New York.
14. Kumpfer K, Turner C, Hopkins R, Librett J (1993). Leadership and team effectiveness in community coalitions for the prevention of alcohol and other drug abuse. *Health Education Research,* 8 (3): 359-74.
15. Proust K, Newell B, Brown H, Capon A, Browne C, Burton A, Dixon J, Mu L, Zarafu M.(2012). Human health and climate change: leverage points for adaptation in urban environments. *Int J Environ Res Public Health*, Jun;9(6):2134-58.
16. Spoth R, Redmond C (2004). Research on Family Engagement in Preventive Interventions roved Use of Scientific Findings in Primary Prevention Practice. *J Pprimary Prevention*, 21(2): 267-84.
17. UNDP (2008). *The UN Development System: A Collective Response to Supporting Capacity Development*, Workshop report , New York.