

Iranian J Publ Health, Vol. 43, No.3, Mar 2014, pp.323-330

# **Original Article**

# A Community Assessment Model Appropriate for the Iranian Community

# \*Kourosh HOLAKOUIE NAIENI<sup>1</sup>, Alireza AHMADVAND<sup>1</sup>, Elham AHMADNEZHAD<sup>2</sup>, Ali ALAMI<sup>3</sup>

1. Dept. of Epidemiology and Biostatistics, School of Public Health, Tehran University of Medical Sciences; Iranian Epidemiological

Association, Tehran, Iran

2. Dept. of Health in Emergencies & Disasters, National Institute of Health Research, Tehran University of Medical Sciences, Tehran, Iran

3. Public Health Dept., School of Health; Social Development and Health Promotion Research Center, Gonabad University of Medical Sciences, Gonabad, Iran

\*Corresponding Author: Email: holakoik@hotmail.com

#### (Received 12 Aug 2013; accepted 18 Jan 2014)

#### Abstract

**Background:** Community assessment is one of the core competencies for public health professionals; mainly because it gives them a better understanding of the strengths and drawbacks of their jurisdictions. We planned to recognize an appropriate model that provides a conceptual framework for the Iranian community.

**Methods:** This study was conducted in Tehran, during 2009-2010 and consisted of two parts: a review of the literature and qualitative interview with selected experts as well as focus group discussion with health field staff. These steps were done to develop a conceptual framework: planning for a steering committee, forming a working committee, reviewing community assessment models and projects, preparing the proposed model draft, in-depth interview and focused group discussions with national experts, finalizing the draft, and preparing the final model.

**Results:** Three different models published and applied routinely in different contexts. The 2008 North Carolina Community Assessment model was used as a reference. Ten national and 18 international projects were compared to the reference and one and six projects were completely compatible with this model, respectively.

**Conclusion:** Our final proposed model takes communities through eight steps to complete a collaborative community assessment: form a community assessment team, solicit community participation and gain inter-sectoral collaboration, establish a working committee, empower the community, collect and analyze community's primary and secondary statistics, solicit community input to select health priorities, evaluate the community assessment and develop the community assessment document, an develop the community action plans.

Keywords: Community assessment, Model development, North Carolina Community Health Assessment, Iran

#### Introduction

The concept of health is related with almost every moment of individuals' lives. It heads the list of the factors which affect the social welfare (1). Within this framework, existence of health problems is inevitable in any country and at any time (2). Therefore, embracing an approach which identifies and prioritizes the problems which should not exist at the present development level can be a more beneficiary and efficient approach. Identification of problems within this scope defining the performance objectives and identifying the current situation of the health of the population is

Available at: <u>http://ijph.tums.ac.ir</u>

a realistic and sustainable way in order to improve strong policies (3-4).

The role of community assessment is gathering data related to health issues, analyzing the data and making conclusions about the capacity to provide necessary resources to address the concerns (2, 5). Community assessment is a foundation for policy development and assurance. Community assessment is one of the core competencies for Public Health Professionals and it gives them a better understanding about the strengths and drawbacks of their jurisdiction (5-6). Community assessment provides the opportunity to engage multiple agencies and organizations as well as community members in identifying and evaluating health issues (6).

There is decades of experience on assessing the heath status of community in Iran, but no guideline has been developed so far. This project aims to develop the community assessment Guide Book (model) adapted for Iranian community and to establish step-by step guidelines for the Islamic Republic of Iran's health system to carry out a community-based assessment by community healthcare providers (family physicians and urban and rural health centers).

In this framework, the assessment process (to identify community problems) starts with the people who live in the community and gives the community primary responsibility for determining the focus of assessment activities at every level, including collection and interpretation of data, evaluation of health resources, identification of health problems, and development of strategies for addressing these problems. This way, community assessment is done by the community rather than on the community.

The aim of study was to recognize an appropriate community assessment model that would provide a conceptual framework for the Iranian community.

### Materials & Methods

This two-part qualitative study was conducted in Tehran, Iran, in 2009-2010. The first part, a re-

view of the pertinent literature was conducted to support conceptual frameworks and find the relevant practical projects. For English biomedical databases, we started searching PubMed with this search strategy: ("Community-Based Participatory "Community Research"[Mesh] OR Networks"[Mesh] OR "Community Health Planning"[Mesh] OR "Social Participation"[Mesh] OR "Consumer Participation" [Mesh] OR "Patient Participation"[Mesh] AND "Models, Theoretical"[Mesh]). Then, we customized it to be used for ISI web of Science and Scopus too. For Persian biomedical databases, we searched SID and IranMedex with the Farsi equivalents of the abovementioned keywords in single or in combination. In the second part, we conducted 5 indepth interviews with selected high-level policymakers who worked in Iran's Ministry of Health and Medical Education. We also held 5 Focus Group Discussions (FGD) with those health staff employed in the Iran's health field. Each FGD were held in the presence of a facilitator and a note taker, approximately 45 minutes in duration. These steps were done sequentially in order to develop a conceptual model: planning for a steering committee, forming a working committee, literature review on community assessment models and also national and international community assessment projects and experiences, preparing the proposed model draft, in-depth interview and FGD with selected panel of national experts on the proposed model, correcting and finalizing the draft, and preparing the final model.

#### Community Assessment Models

In our review of the relevant literature, we managed to find 3 different models published and used routinely in different contexts.

One of them was the community assessment wheel from the book "Community as Partner" which classified the community assessment according to sectors of the community, namely: physical environment, education, safety and transportation, politics and government, health and social services, communication, economics, and recreation (21).

The second one was the process-based community assessment model from the 'Practical Tools for Qualitative Community-oriented Primary Care Community Assessment" article. In this process, community assessment starts with needs assessment, and then is followed through other serial phases such as: needs definition, prioritization and resource identification, practice and/or community intervention, and finally, evaluation. Input from community and providers strengthen the whole process (22).

The third one was the community health assessment (CHA) process from the North Carolina Department of Health. This process consists of 8 phases: establishing the CHA team, collecting primary data, collecting secondary data, analyzing and interpreting health data, determining health priorities, creating CHA document, disseminating CHA document, and finally, developing community action plan (20).

After scoring these different models on some criteria such as simplicity, process-based approach, comprehensiveness, conformity with our national processes, validity, and also their application in different projects, the group concluded that the North Carolina Community Assessment process can be used as a reference for comparing and evaluating different projects and experiences.

The literature review guided us to develop a model with more practical and context-oriented model for our country.

# National and International Community Assessment Projects and Experiences

In our review of the literature, national and international projects were compared to the North Carolina Community Assessment process.

### Model Development

In order to develop the step-by-step manual of community-based assessment for Iranian community, we planned to develop a model that provides:

- Worksheets for community assessment resources and budget
- Tools for collecting community data
- Data interpretation instructions
- Guidelines for prioritizing local health issues
- Guidelines for creating a community assessment document
- Guideline for developing the community health action plan.

These steps were done sequentially in order to develop a conceptual model for conducting the project:

- Planning for a steering committee
- Forming a working committee
- Literature Review on community assessment models and also national and international community assessment projects and experiences
- Preparing the first draft
- Preparing the first step-by-step implementation guide
- Discussion and focused group sessions with the steering committee and the panel of experts
- Correcting and finalizing the draft
- Preparing the final report

### Results

Of the 18 international projects (7-19, 22-24), six projects were completely compatible with to the North Carolina Community Assessment process, respectively (7-14). Also, 10 national projects have just completed steps one to seven (25-34).

The proposed community assessment process takes communities through eight steps to complete a collaborative community assessment. In order to draw the picture of the current situation objectively, this model is proposed. The following chart briefly demonstrates the activities involved in each step (Fig. 1).

Then, the following steps are described separately in concise format using adopted description form the North Carolina CHA model as a benchmark model, with references to it as appropriate.

# Step one: Form a Community Assessment Team

The first step is to form "a community assessment team who will lead the community assessment process". This group should consist of "motivated individuals who can act as advocates for a broad range of community members and can represent appropriately the concerns of various populations within your community" (21). Community assessment team includes an advisory group, a working committee, and a facilitator group.

# Step two: Solicit Community Participation and Gain Inter-sectoral Collaboration

In this step, "the community assessment team will collect local data (from people and organizations)

to discover the community's viewpoint and concerns about life in the community, health concerns, and other issues important to the people". Community interest is "important in assessing the status of the community according to the people" (21). Community data can also include local data that other agencies or institutions in the region.

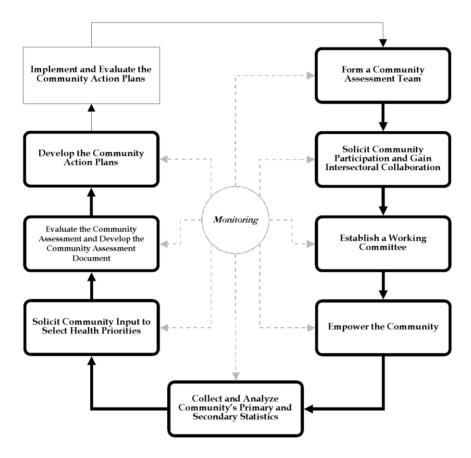


Fig. 1: The proposed community assessment model for the Iranian Community

#### Step three: Establish a Working Committee

The Working Committee must have available "support" staff in order to carry out these tasks: lead the process, become the community "experts" in the assessment process and receive training, establish and meet with subcommittees as needed, perform or delegate data collection work, interpret findings, develop the community action plans with the help of the advisory group and other community members, and ensure that interventions are implemented and evaluated.

#### Step four: Empower the Community

As mentioned earlier, the concept of health is related with almost every moment of individuals' lives. It heads the list of the factors which affect the social welfare. To be successful then, in empowering the community, it is necessary for to understand the nature of social organizations, of the social level, of society and also the important values of the community. It is also necessary to know something about the relationship between an individual, or individuals, and community, and society. In this section of the report, the discussion is about the Social Determinants of Health (SDHs) and their role in community empowerment. Also, there will be a brief introduction of the community mobilization cycle ad a tool to help empower the communities.

# Step five: Collect and Analyze Community's Primary and Secondary Statistics

In this step, the community assessment team will "review the data from the previous steps in detail" (21). Various data are gathered, compared to the local and regional data, interpreted and fitted together to show a snapshot of the community's statistics. By the end of this step, the team will have a basic understanding of the community's major health issues.

#### Step six: Solicit Community Input to Select Health Priorities

The "community assessment team will report the results of the assessment to the community and seek their input and feedback on it". This step includes practical methods and suggestions on how to approach the community. Then, the "community assessment team will determine the priority health issues to be addressed" (21).

#### Step seven: Evaluate the Community Assessment and Develop the Community Assessment Document

In this step, the team will evaluate all the actions done in the community assessment process and gets community's feedback. After ensuring that the steps are taken as completely as desired, the team will let the community know what has been done and what the team has found in the community assessment. This section includes several ideas and examples about how to reach out and publicize this information throughout the community.

# Step eight: Develop the Community Action Plans

In this step, the community assessment team will develop strategies and plan of actions for addressing the issues deemed as priorities. It includes tools that show how to develop interventions.

### Discussion

Our final proposed community assessment model takes communities through eight steps to complete a collaborative community assessment: form a community assessment team, solicit community participation and gain inter-sectoral collaboration, establish a working committee, empower the community, collect and analyze community's primary and secondary statistics, solicit community input to select health priorities, evaluate the community assessment and develop the community assessment document, an develop the community action plans.

In comparison, a few countries have developed and customized their own community assessment models (20). Our study, tried to shed light, for the first time, on a somewhat overlooked need in the public health system of Iran.

#### Community Assessment Values

These values and ethical principles should be considered in every community-oriented partic-ipatory research:

- Gaining community participation in all steps (and preparing the infrastructure)
- Patience in implementing all steps
- Clarity in planning, implementation, and evaluation
- Accountability to the community's needs
- Mutual respect to all members and collaboration
- Community empowerment (learning by doing)
- Documentation and result communication
- Protecting members' intellectual rights

Our study goal was finding a relevant community assessment model for Iranian community. So, we did not run the proposed model. Recognizing potential strengths and weaknesses of the model, we suggest future studies using the model.

### Conclusion

Eight steps have been finalized in our study with holistic approaches for I.R.Iran community. The most relevant model was the North Carolina. Health assessment was not different from other assessment but in further studies, it may be considered.

# 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.

# Acknowledgements

The authors would like to thank Dr. Malek Afzali, the deceased Dr. Shadpour, Dr. Delavari, Dr. Damari and expert panel for the valuable comments. This project was founded by World Health organization as the JPRM (Joint Program Planning and Review Mission). The authors declare that there is no conflict of interests.

# References

- United Way of Southwestern Indiana, United Ways of Gibson and Posey Counties (2007). United Way of Southwestern Indiana Comprehensive Community Assessment. (http:// www. unitedwayswi.org/pdf/2006-2009/1.Uwreport\_Opening\_Executivesummary\_June62008.pdf, Last accessed: May 25, 2013).
- Plescia M, Knootz S, Lurant S (2001). Community assessment in a vertically integrated health care system. *Am J Public Health*, 91(5): 811-4.
- Zahner S, Kaiser B, Kapelke-Dale J (2005). Local partnerships for community assessment and planning. J Public Health Manag Pract, 11 (5): 460-4.
- Boyce J, Brennan R, Reilly J (2000). A Rural Health Nursing Practicum: A Graduate Student Perspective on Learning to Appreciate the Importance of Using a Community Assessment Model to Identify the Strengths and Needs of a Rural Community. https: //apha.confex.com/ apha/128am/techprogram/paper\_16312.htm, (Last accessed: May 25, 2013).
- Clark MJ, Cary S ,Diemert G, Ceballos R, Sifuentes M, Atteberry I, et al. (2003). Involving communities in community assessment. *Public Health Nurs*, 20 (6): 456-63.

- 6. Catawba County Public Health (2011). Catawba County Community Health Assessment. http://www.catawbacountyhealthpartners.org/2 011CHA.pdf, (Last accessed: September 19, 2013).
- CHA Guidance and Format. http://www. health.ny.gov/statistics/chac/2010-2013\_guidance.htm, (Last accessed: September 19, 2013).
- United Way (2009). Windham County Community Assessment Project. http:// www. unitedwaywindham.org/pdf/ CNA2009/ UWWC\_ Data\_Report\_MAIN.pdf (Gast accessed: September 19, 2013).
- Garrick E, Bouabid A (2005). Community Assessment Model for Sustainable Municipal Sanitation Services in low income communities. University of Virginia Department of Systems and Information Engineering's Way, Box 400747, Charlottesville, VA 22904.
- The Healthy Community Collaborative of San Mateo County (2008). Community Assessment Health & Quality of Life in San Mateo County. http://www.co.sanmateo.ca.us/Attachments/S MC/pdfs/Articles/Reports/2008FullReport\_Co mmunityAssessment.pdf (Last accessed: September 19.2013)
- 11. The Greater Portland Partners for Health (2004). Greater Portland Community Health Assessment and Source Book. http: // www.portlandmaine.gov/hhs/hhssourcebook.p df (Last accessed September 19, 2013).
- Community needs assessment (2011). Jackson County Oregon, http://www.accesshelps.org /Files/2011%20Community%20Needs%20Ass essment.pdf, (Last accessed September 19, 2013).
- Davis W, Nielsen C, Kravitz A, Squillace C, Ziarnowski K, Mason D et al. (2007). An Action-Oriented Community Diagnosis: Findings and Next Steps of Action. Department of Health Behavior and Health Education, School of Public Health, University of North Carolina at Chapel Hill, http: // archives.hsl.unc.edu /cdpapers/ Rockingham\_2007.pdf (Last accessed: September 19, 2013)
- Inneval LLC (2005). Community Health Infrastructure Assessment for St. Louis City and County: A Research Report Prepared for the St. Louis Regional Health Commission. http://www.stlrhc.org/wp-content/uploads/2013/07/Community-Health-

Infrastructure-Assessment-for-St.-Louis-Cityand-County.pdf (Last accessed: September 19, 2013).

15. Munson Community Health Department (2008). An Assessment of Community Health Status within the 11-County Munson Healthcare System Service Area (Antrim, Benzie, Crawford, Grand Traverse, Kalkaska, Leelanau, Manistee, Missaukee, Otsego, Roscommon, and Wexford). 2008 Community Health Assessment Project Final Report. http: //www. northskynonprofitnetwork.org/sites/default/files/documents/08+Community+Health ± Assessment pdf (Last assessed: Sontember 10)

+Assessment.pdf (Last accessed: September 19, 2013).

- Forsyth County Department of Public Health: Epidemiology & Health Surveillance Division (2012).
  2011 Forsyth County Community Health Assessment Report. http: //www. co.forsyth.nc.us/ publichealth/Documents/CHA\_Report.pdf (Last accessed: September 19, 2013).
- Davis D (2003). New Brunswick Community Health Assessment Background Report. Rutgers Center for State Health Policy: The Institute for Health, Health Care Policy, and Aging Research. http://web.rwjms.rutgers.edu/hnbweb/docume nts/NBCHAbackgroundReport.pdf (Last accessed: September 19, 2013).
- Philadelphia Health Management Corporation (2006). The Philadelphia LGBT Community Assessment: Final Report. http://www. scribd.com/doc/2152986/Philadelphia-LGBT-Assessment (Last accessed: September 19, 2013).
- MACTEC, Inc. Planning & Design Group Atlanta, Georgia (2008). Whitfield County Comprehensive Plan 2008-2018: COMMUNITY ASSESSMENT.

http://www.whitfieldcountyga.com/CompPlan /CA\_6151070052\_02-28-08.pdf (Last accessed: September 19, 2013).

- Perdue BE, Cansler LM, Engel GP, Nelso D (2011). Community Health Assessment Guide Book. NC Division of Public Health, North Carolina Department of Health and Human Services. http://publichealth.nc.gov/lhd/cha/docs/CHA -GuideBookUpdatedDecember15-2011.pdf (Last accessed: September 19, 2013).
- Anderson ET, McFarlane J (2008). Community as Partner: Theory and Practice in Nursing. 5th ed. Lippincott Williams & Wilkins.

- 22. Williams RL, Crabtree BF, O'Brien C, Zyzanski SJ, Gilchrist VJ (1999). Practical tools for qualitative community-oriented primary care community assessment. *Fam Med*, 31 (7): 488-494.
- 23. Gopal G, Marc A (1994). World Bank-financed projects with community participation : procurement and disbursement issues. World Bank discussion papers; no. WDP 265. Africa Technical Department series. Washington, D.C.: The World Bank. http://documents.worldbank.org/curated/en/1 994/11/697892/world-bank-financed-projects-community-participation-procurement-disbursement-issues (Last accessed: September 19, 2013)
- 24. Parry j, Wright J (2003). Community participation in health impact assessments: intuitively appealing but practically difficult. *Bull World Health Organ*, 2003; 81 (6): 388.
- Zaeri S, Asgharzadeh S, Khoshnevis S, Mohammadi M, Holakouie Naeini K (2011). Identification of community needs and prioritization of problems based on community assessment in Azerbaijan Borough, Tehran, Iran. *Journal of School of Public Health and Institute of Public Health Research*, 9(2):69-78.
- Tarrahi MJ, Ansari H, Heydari K, Sharhani A, Akrami R, Holakouie Naeini K (2013). Viewpoint of Care Providers and Self-Reported Substance Drug Addicts Referring to Withdrawal Centers About Etiology of Re-Addiction in Khoramabad, 2010. J Rafsanjan Univ Med Scie, 12(4):299-308.
- Mokhtari M, Banaye Jeddi M, Majidi A, Jafari Khoinagh A, Holakouie Naieni K (2013). Community assessment for identification and prioritization of problems to establish health promotion operational plans. *Journal of Research & Health*, 3(1):295-302.
- Mohamady Y, Javaheri M, Monesan L, Rahmani K, Holakouie Naeini K, Madani A, et al. (2010). Community assessment for identification of problems in Chahestani Region of Bandar-Abbas city. *Journal of School of Public Health and Institute of Public Health Research*, 8(1):21-30.
- Khosravi A, Sepidar kish M, Khalili M, Ghofrani M, Ashrafi E, Sharifi N, et al (2013). Community Assessment for Diagnosis and Determination of Health-related Problems. *Knowledge & Health Journal*,8(1):41-5.
- 30. Karimi J, Holakouie Naieni K, Ahmadnezhad E (2012). Community Assessment of Shahin-Shar,

Isfahan, I. R. Iran to Develop Community Health Action Plan. *Iranian Journal of Epidemiology*, 8(1):21-30.

- Jahangiri K, Fatta pour M, Holakouie naeini K, Azin A, Samavat T, Nikfar S, et al. (2003). Community Assessment for identifying existing problems of region 17 of Tehran. *Social Welfare Quarterly*, 3(9):133-41.
- Ghotbi M, Holakouie Naeini K, Jazaieri A, Rahimi A (2004). Divorce status and other factors that affect the people living in Dawlatabad. *Social Welfare Quarterly*, 3(12):272-87.
- 33. Mohammadpour asl A, Akbari H, Shamsipour M, Mansouri A, Rashidian H, Holakooei Naeini K (2010). Community assessment for identification of the problems and developing action plans to improving public health of Hashtroud town, summer 2009. *Description of Health*, 1(1): 22-27
- 34. Ardalan A, Holakouie Naieni K, Aflatounian MR, Nekouie M, LaPorte R, Noji E (2005). Experience of a population- based study on needs and health status of affected people in Barn earth Quake. *Iranian Journal of Epidemiology*, 1(1):33-45.