INTRODUCTION

Community participation has been recognized as an important strategy in achieving ‘Health for All’ since the 1970s. It has been defined as ‘a process in which people take part in decision-making in the institutions, programs and environments that affect them’ (Heller et al., 1984). The benefits of community participation for health programs, including increased coverage, efficiency, effectiveness, equity and self-reliance, are widely accepted [World Health Organization (WHO, 1991)]. However, clear definitions of what is meant by community participation in health, and specific mechanisms for achieving and measuring community participation, are still evolving (Israel et al., 1994; Zakus and Lysack, 1998).

Projects with ‘community participation’ have varying degrees of community involvement. In her classic article, Arnstein described eight rungs on a ladder of community participation, ranging from manipulation to complete citizen control (Arnstein, 1969). Health projects with a participation component range from simply getting

SUMMARY

This study aimed to evaluate the success of a project in achieving community participation in efforts to improve perinatal health. A 10-step structured process was used to work with a community in Istanbul, Turkey. To evaluate the success of the project in achieving community participation, five key indicators were selected: (i) participation of the community group in decision making; (ii) gains in knowledge and skills of the community group; (iii) continuity of the community group; (iv) continuation of the health program by the community group; and (v) initiation of new support and advocacy activities. From the beginning, community members participated in all decisions regarding the group activities. In the early months, project staff had more of a guiding role, but, over time, the community members became active decision-makers. Over the course of the project they learned how to identify community health problems, and to design, implement and evaluate interventions to address those problems. Four years later, meetings and activities of the group are continuing. The antenatal education course developed by the group continues to be offered at a local community centre. Community members are now completely responsible for promoting the course, communication with participants, planning the courses, making preparations for the sessions, as well as teaching non-technical topics. Course participants have developed ongoing support networks and have begun to advocate for better perinatal health services in the community. Working with a community is an intensive, time-consuming process. The results of this project indicate that the benefits, both in terms of health outcomes and in terms of increases in community capacity, can be well worth the effort.

Key words: community participation; health education; perinatal health; Turkey
feedback from community members after a health intervention has been implemented by professionals, to complete community control of problem identification, program planning, implementation and evaluation (Howard-Grabman and Snetro, 2002). Because of this lack of clarity, evaluation of community participation programs has been particularly problematic. Evaluators are now encouraging the simultaneous measuring of health indicators and community capacity indicators to determine the full impact of health programs with community participation (Hawe, 1994; Shediac-Rizkallah and Bone, 1998).

In this article we describe the Healthy Beginnings Project (Sağlıklı Bașlangıçlar Projesi), a program implemented in Istanbul that enlisted the participation of the local community in efforts to improve perinatal health (family health during the pregnancy, birth, and newborn periods). After a description of the setting, we will describe the 10-step process used in working with the community and evaluate the process as used in this setting using specified indicators.

**Setting**

The Healthy Beginnings Project was conducted in Istanbul, the largest and most cosmopolitan city in Turkey, with a current population of ~10 million people. The city is growing rapidly, largely due to migration from other parts of the country. Maternal and child health services are provided by a variety of public and private providers in Istanbul. These include social security hospitals, government health centres and hospitals, university hospitals, private doctors’ offices, private clinics and private hospitals. The quality of care in both the public and the private sectors varies widely.

Despite Turkey’s moderate level of development, perinatal health indicators still show much need for improvement. According to the results of the 1998 Turkish Demographic and Health Survey (DHS), the infant mortality rate for Turkey is 43 infant deaths per 1000 live births (Ministry of Health et al., 1999). The most recent and reliable estimate of the maternal mortality ratio for Turkey was 132 maternal deaths per 100,000 live births in 1981 (State Institute of Statistics, 1991). The most recent national estimate of perinatal mortality was 41.2 per 1000 from the 1993 DHS data (Enünlü, 1999).

According to the 1998 DHS, for 32% of births occurring in the 5 years before the survey, the expectant mother received no antenatal care. This percentage fell to 14% in Western Turkey (Ministry of Health et al., 1999). For 58% of births, the total number of antenatal visits was less than four. For ~40% of births, the first antenatal visit occurred after the first 6 months of pregnancy. Although more women are receiving antenatal care than ever before, there are indications that the quality of this care is seriously lacking (Özvarış and Akın, 2002). In particular, women report that they do not receive the information and counselling they need during antenatal visits (Bulut and Turan, 1995).

The project was based in a lower-middle socioeconomic status neighbourhood in the Fatih District of Istanbul. Fatih is one of the oldest districts of the city and has the highest population density of any district in the city (Sönmez, 1991). Most of the project activities took place at the Fındıkzade Education Park, a community centre established by the Türkiye Education Volunteers Foundation in 1996.

A multi-disciplinary research team based at the İstanbul University Institute of Child Health has been developing and testing strategies to support perinatal health for several years. A hospital-based antenatal education program was initiated in 1994. Based on the limitations of this initial program, the team felt that there was a need to develop community-based programs that would be locally appropriate and accessible. Thus, the Healthy Beginnings Project was initiated with the goal of testing the feasibility of an alternative approach to the delivery of a health program in a neighbourhood non-health institution setting. From the beginning the team felt that it was essential that this program be planned, implemented and evaluated with the participation of the local community.

**METHODS**

With the help of a community participation consultant especially hired for this project, the team decided to use a 10-step community participation process (US Centers for Disease Control and Prevention and the Academy for Educational Development, 1993). Detailed information regarding activities carried out for each step is given below.

**Ten-step community participation process:**

1. Situation analysis in local community
2. Establishment of the Community Design Team (CDT)
3. Review of data on maternal and child health
4. Identify priority needs and audience
5. Define and understand the target audience
6. Develop educational and behavioural objectives
7. Develop messages and strategies
8. Construct program plan
9. Implement plan
10. Evaluate and refine program

To evaluate the success of the project in achieving community participation, five key indicators were selected based on review of the literature: (i) participation of the community group in decision making; (ii) gains in knowledge and skills of the community group; (iii) continuity of the community group; (iv) continuation of the health program by the community group; and (v) initiation of new support and advocacy activities by the target group.

Step 1: situation analysis
A situation analysis in the local community was conducted during the spring of 1997. The purpose of this analysis was to determine needs and resources in the project community, as well as to provide baseline data on health behaviours. Qualitative data were collected using focus groups and in-depth interviews with key groups involved in maternal and child health in the community. Focus groups were conducted with pregnant women, husbands of pregnant women, new mothers, new fathers, female relatives of pregnant/new mothers, and pharmacists. One-to-one interviews were conducted with doctors, nurses, pharmacists and a local leader. During this phase, local people shared their views about the pregnancy, birth and newborn periods in their community.

Step 2: establishment of the community team
The next step in the project involved spreading awareness of the Healthy Beginnings Project in the local community. This step was needed in order to gain local support for the project and to recruit community members to participate in the community group (the CDT). The project staff decided to hold an open community meeting to announce and give information about the Healthy Beginnings Project. With the support of a private company, posters and invitation cards to advertise the meeting were developed and printed. These materials were distributed to pharmacies, clinics, stores and local government representatives in the project community. Forty community members, including the district mayor, attended the first community meeting held in June 1997 at the Fındıkzade Education Park.

Community members who expressed an interest in working on the Healthy Beginnings Project were invited to participate in the CDT. The team started in June 1997 with a core group of eight women (including a nurse, a pharmacist, a retired teacher and several home makers). When asked why they wanted to participate, it was discovered that many of these women had had bad experiences during their own pregnancies or births. Several pregnant women were also invited to join the team during the early months of the project, but their participation was usually limited to 2–3 months. Their own lives were continually changing due to the pregnancy and the birth, and they found it difficult to be regular team participants.

During the project period, meetings were generally held every 2 weeks. In addition to meetings, team members participated in site visits, small working groups and social events.

Step 3: review of the data on maternal and child health
In the first weeks, the team was given a general orientation regarding reproductive health and participated in various exercises to help them with the tasks to be accomplished in the future (such as priority setting and listening). The team discussed their perceptions regarding maternal and child health problems in the community. In addition, team members mapped their community, indicating the locations of various resources important for health (pharmacies, clinics, hospitals, schools, etc.). The team then reviewed local data on maternal and child health from the situation analysis.

Step 4: identify priority needs and target audience
This next step involved selection of priority topics for the program. Using group discussions and a ranking exercise, the team identified the important areas that the program needed to address during the pregnancy, birth and post-partum periods. For the pregnancy period, the
group decided that it was most important to focus on nutrition, common discomforts, use of medicines and bleeding/miscarriage. Regarding childbirth, the group felt that women needed support regarding their fears, deciding between a cesarean or a vaginal birth, choosing a birth hospital, and getting psychological support during labour and delivery. For after the birth, the team wanted to focus on infant health and development, maternal health and protection from unwanted pregnancy. Although the team also recognized the need to improve health services related to these topics, they felt that they would be able to make more of an impact through providing information and counselling to families. However, they also agreed that the program should provide information about how to use available health services and the type of things that families should demand from these services during the pregnancy, birth and postpartum periods. The team members then set to work identifying the target audience for the program. The initial target population selected by the group was pregnant women and their partners (expectant parents).

Step 5: define and understand the target audience

Once the primary target audience had been identified, the group proceeded to define that audience more narrowly. The group considered various variables that might be important in defining the target audience (age, education, parity, economic situation, etc.). The group decided to focus the program on young women who were pregnant with their first child and who did not work outside the home. The selected target group theoretically included both married and unmarried women, although the incidence of childbearing outside of marriage is still very low in Istanbul. The final selection was achieved by considering who was most in need, most motivated, and easiest to reach first. In order to understand better the selected target group, CDT members conducted interviews with young pregnant women in the community to learn their information needs and how they would like to receive such information.

Step 6: develop educational and behavioural objectives

After the target group had been defined, the group focused on developing behavioural objectives for each of selected priority topics listed above. This process included identifying the desired action for each topic, followed by detailed discussions on what pregnant women are currently doing in those areas. A small working group, comprising three members of the CDT and the project staff, worked together to draft specific knowledge and skills objectives for the educational program. The team decided to develop not only an educational program including all of the topics identified, but to also develop activities and materials to facilitate behavior change for one or two special topics.

Step 7: develop messages and strategies

The team started its work on message development by reviewing existing health educational materials for pregnancy, birth and the postpartum period. Materials such as brochures, pamphlets and videos were reviewed using a checklist of key elements, including appropriateness for target group, use of clear and understandable language, attractiveness, appropriate use of illustrations, emphasis on important messages, etc. After general discussion of messages and message development, the team started brainstorming on messages to promote the health education program in their community. Exercises were used to learn how to develop a message, select channels and select formats. The team then developed and pre-tested materials to be used to promote the pregnancy education program (an informational hand-out and a colourful poster).

Step 8: construct program plan

The CDT decided to offer a package program of eight, daytime, 2-hour educational sessions for first-time pregnant women, to be completed over a period of 1 month (two sessions per week) and located at the community centre. The sessions would be led by a nurse, a facilitator and a trained CDT member. They decided that those who completed the whole series should get a certificate and/or special gift. Modules for the series of eight educational sessions (introduction to pregnancy, health during pregnancy, preparing for childbirth, childbirth, infant feeding, infant care and health, women’s health after the birth, and protection from pregnancy after the birth) were developed by a working group composed of project staff and one CDT member, who is a maternity nurse.
Step 9: implement plan

After ~6 months of work, the community team was ready to implement their plan in December 1997. The first course for women expecting their first child at the Findikzade Education Park was attended by 23 women. After this initial course and up until the present day, the program has been continued at the park at least seven times a year. At the time this article was written, ~350 pregnant women had participated in the program. CDT members are active as promoters, organizers and educators for the antenatal education course. In the spring of 1999, CDT members participated in a 7-day course in participatory education techniques in order to enhance their contributions as course educators. In response to demand from the women participating in the antenatal education program, a special program for expectant fathers was also developed (Turan et al., 2001).

Step 10: evaluate and refine program

The antenatal education course for first-time expectant mothers was evaluated using two different methods: (i) pre- and post-tests with program participants; and (ii) home interviews conducted with course participants ($n = 100$) and a control group ($n = 157$) 2–3 months after the baby’s birth. Control group members were recruited from women giving birth to their first child at the same hospitals used by women who attended the antenatal education program. The pre- and post-test data indicate that, in general, participants gained knowledge about pregnancy, birth and postpartum health over the course period. In some cases the results indicated that a message being given in the education program was not clear and that it needed to be revised. Analyses of the home interview data revealed that the antenatal education group had better infant feeding, infant health and pregnancy prevention practices than the control group, even after controlling for differences in some background characteristics (J. M. Turan and L. Say, manuscript submitted).

Using the process again to encourage behaviour change

In addition to the antenatal education courses, the CDT wanted to do something that would reach a wider audience and encourage health behaviour change. The team used the same 10-step process for this component of the project. The group identified pregnancy nutrition as the general topic of this initiative. In an initial information-gathering stage, the CDT conducted questionnaires and focus groups with pregnant women, carried out in-depth interviews with people concerned with pregnancy nutrition, and attended presentations given by nutrition experts. Based on the results, the team decided to focus the campaign on the role of folic acid in preventing neural tube defects (NTDs). The CDT identified three main target groups for the campaign: doctors, pharmacists and newly married couples. Campaign activities included development and distribution of brochures for each of the three target groups, organization of an informative meeting for doctors, and submission of articles to medical and pharmaceutical journals. Local sponsors found to support various aspects of the campaign included a pharmaceutical company, professional organizations for physicians and pharmacists, a pharmaceutical depot and local municipalities. Currently the CDT is conducting a series of seminars for the general public on the importance of folic acid in preventing NTDs.

Project replication

One of the objectives of the Healthy Beginnings Project was to develop and produce materials to assist organizations that wish to conduct similar programs in their own communities. To this end, five Turkish publications were produced by the project. These included an antenatal education guide, a booklet on pregnancy and postpartum exercises, two booklets for expectant parents (preparing for childbirth and bringing up your baby), and a community participation guide that presents the Healthy Beginnings Project experience. These publications were distributed to representatives from the Ministry of Health, the Istanbul Health Directorate, maternity hospitals, nursing schools, medical schools, health centres, non-governmental organizations (NGOs) working in reproductive health, and other interested persons at a 1-day dissemination meeting in September 2000.

To reinforce the use of project publications, training of trainers courses are also being organized by the Institute of Child Health. These 1-week courses provide training in adult education principles, interactive teaching methods, and specific knowledge and skills needed for
antenatal education. Special sessions deal with the importance of community participation and how local people can participate in health programs. At the time this article was written, the course had been held twice: once for health professionals working in Western and Central Turkey, and once for a mixed group of health professionals and community workers from Eastern Turkey. Free antenatal education programs with community participation have been started in at least four new sites (two community centres, a government health centre and a child protection agency) in Turkey following these training of trainers courses.

RESULTS

Evaluation of community participation

As was mentioned above, five basic indicators were used to evaluate the success of community participation in this project.

Gains in knowledge and skills of the community group

Members of the CDT learned how to identify community health problems and to design, implement and evaluate interventions to address those problems. After learning this process initially while developing the antenatal education course, they used the skills gained again to develop the folic acid campaign. They now can use a similar process to tackle other problems in their community. The team members have also gained extensive knowledge about maternal and child health during the pregnancy, birth and newborn periods. As a result, they are able to teach topics such as infant care, maternal health after a birth, and pregnancy nutrition as a part of the antenatal course. In addition, team members gained skills in participatory education techniques and organization of an education program.

Participation of the community group in decision making

From the beginning the CDT members participated in all decisions regarding the activities to be undertaken by the group. In the early months, project staff had more of a guiding role. However, with time, the CDT members started to take a more active role in leading the group. By the end of the project, the team members had begun to take charge of the antenatal education course and the folic acid campaign. They were able to come up with solutions to problems that occurred and implement those solutions without assistance from project staff. Although the Project Director still meets with the group from time to time to give support, she no longer has any direct role in running the antenatal course. All the day-to-day decisions and activities are undertaken by the volunteer CDT members.

Continuity of the community group

The first meeting of the CDT was in June 1997, and as of June 2001 the meetings and activities of the team continue. A total of 14 women played an active role in the team at some time during this period. Currently, six members are active in running the antenatal course and the folic acid campaign. Three members have been on the team since the very beginning.

Continuation of the health program by the community group

While external funding for the Healthy Beginnings Project ended in February 2000, the antenatal education course continues at Fındıkzade Education Park. CDT members are now completely responsible for promoting the course in the community, communication with participants, planning the courses, making preparations for the sessions, as well as teaching non-technical topics. Nurses from the Woman and Child Health Research and Training Unit of the İstanbul Medical School continue to work together with CDT members as educators for the group sessions. Around 400 families have benefited from the courses (expectant mothers and fathers) thus far. The establishment of similar programs at other sites in Turkey should extend the impact of the program.

Initiation of support and advocacy activities

As a result of their participation in the antenatal course, pregnant women have increased their support networks and in some cases advocated for better health and education services. In many cases, pregnant women who have attended the course together continue to meet and give each other support throughout their pregnancies and after the birth. Many pregnant women requested a similar program for their husbands and their requests resulted in the development of a special program for expectant fathers. One group of pregnant women got together and petitioned the İstanbul Medical School Hospital to allow them to have a companion of their choice with them.
during the birth. Health workers at the Well Baby Clinic of the Istanbul Medical School report that parents who have attended the course are better informed about available services, and regularly exercise their rights to obtain complete information and counselling about family health topics.

**DISCUSSION AND CONCLUSIONS**

As we see it, the Healthy Beginnings Project is somewhere in the middle of the community participation continuum. Project staff certainly played a guiding role in identifying the general problem area (maternal and child health in the perinatal period) and in identifying potential methods that could be used to address it. However, the CDT members were involved in the project every step of the way, and their decision-making power and control increased gradually over the life of the project. Projects with community participation are relatively new in Turkey and it seemed that this level of community involvement was realistic at this point. The extent to which true community participation can be achieved has a great deal to do with the cultural, political and economic situation of the community (Brownlea, 1987; Morgan, 2001).

One shortcoming of the project in terms of community participation was the limited participation of members of the target group (expectant parents) on the CDT. Those who were meant to benefit directly from the programs developed were not able to participate in the team on a continuous and long-term basis. The team tried to make up for this lack of representation by conducting focus groups, in-depth interviews and questionnaires with expectant parents during the program development phase. After the antenatal education programs were up and running, the team members maintained regular and close communication with expectant parents attending the courses.

The CDT continues to work together with health professionals (nurses) to offer the antenatal courses. This could be seen as continued ‘dependence’ on project staff or it could be seen as an appropriate example of ‘collaboration’. Given the medical and technical nature of some components of antenatal education, it seems unrealistic to think that people with no medical training could handle the course completely without support from health professionals.

Educational levels are increasing in Turkey, and young women and men attending antenatal courses have high expectations for technical information. Thus, it seems appropriate for community members to collaborate with health professionals to offer these courses. The problem for replication in other sites is finding health institutions that are willing to commit staff time to such endeavors without any extra financial support. In one new program starting in Istanbul, nurses from a local nursing school are donating 1 day a week to an antenatal education program at a community centre. At another community centre, a retired nurse has volunteered to support the program. In a small town outside of Istanbul, nurses will run an antenatal course at a local health centre, with the support of community members, as part of their regular duties. Thus, it does seem possible to find different solutions to this need for collaboration.

In addition to the collaboration of health professionals and community members, this project involved the collaboration of many public and private organizations. The team that initiated the project was based at a government university. The funding for the project came from a local NGO, an international donor, an international NGO and a foreign consulate. The project site was a community centre run by a local NGO and the majority of the CDT members were volunteers trained by this NGO. Other supporters included local municipalities, professional chambers and private companies. Although it was sometimes difficult to deal with this myriad of partners, in the end they enriched and strengthened the project.

Experiences from the field indicate that there are several factors that contribute to the success of community participation projects, including: (i) an accurate understanding of the community, including needs, resources, social structure and values; (ii) early involvement of community members; (iii) establishment of a suitable formal organization/team; (vi) participation of community members that are legitimate in the eyes of the population served; (v) an investment in training of the team members in skills vital to the project; and (vi) ongoing education and support (Zakus and Lysack, 1998). The 10-step process used in the Healthy Beginnings Project helps to ensure that most of these crucial factors will be included. As can be seen from the experience of this and many other projects, working with a community is an intensive, time-consuming
process. The results of this project indicate that the benefits, both in terms of health outcomes and increases in community capacity, can be well worth the effort.

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