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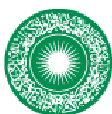

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Utility of Participatory rural appraisal for Health Needs Assessment and Planning

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Abstract

Background: While poverty and lack of life opportunities are root causes of a high burden of disease and infant and maternal mortality, inadequate health care contributes heavily. Often those who are left without care are those who need it most. Existing health services are managed without taking into account acceptance and need perspectives. This further reduces the effectiveness of and equity in health care. In order to guide the planning of reproductive health services by a national NGO, health needs were assessed in a district in Sindh using a combination of participatory rural appraisal (PRA) and qualitative and quantitative research methods. PRA is considered as a better framework to assess, analyse and develop programs with communities.
Objective: The objective of PRA was to initiate community involvement and to understand the needs of health care from a community perspective.
Methodology: PRA was conducted with groups of men and women from three rural areas in a district of Sindh, Pakistan using a life cycle framework. The community members identified various stages of their life with the associated health issues.
Results: This research was empowering to community members as it facilitated community involvement. The respondents took charge of the process of identification of health needs at PRA sessions. PRA helped identify health problems considered prevalent and important by the community. More importantly, it helped potential service providers and the community to initiate community involvement in planning.
Conclusion: PRA is not only an effective tool for assessment and analysis of health issues but also a vehicle to promote community involvement. Additionally, participatory methods contribute to understand the context of quantitative data generated for planning purposes (JPMA 52:296;2002).

Introduction

People in Pakistan suffer from a high burden of both infections and chronic diseases. Health and social indicators of Pakistan are among the poorest. About one third Pakistanis live in abject poverty[1]. Only 24% women and 54% men are literate[2]. Poor nutrition and repeated infections have led to a situation where 30-40% of children in Pakistan suffer from stunting[3]. At the same time, chronic diseases such as hypertension have become prevalent; about 11 million people suffer from hypertension[3]. While all population groups are affected, children and women in their reproductive years have suffered most. Maternal mortality ratio ranges between 350-700 for every 100,000 livebirths, and perinatal mortality rate 54-92 per 1,000 births[4].
In addition to focusing energies on social and economic development, this situation requires an optimally functional and fair health system. The majority of people who live in poverty and cannot

afford private health care depends on the public sector. However, currently the public sector spending in health is at an extremely insufficient level of 0.9% of Gross Domestic Product in 20001.
Whatever health services are in place, are planned and run without needed community input. Primary Health Care (PHC) is reduced to some extension services with little emphasis on the PHC spirit to provide care according to need and to promote community participation. Less than optimum attention to these aspects causes health systems to suffer from inefficiency, inequity and poor utilisation. Similarly, in such a case burden of paying for health care is not fairly distributed and causes fmancial and nonfmancial barriers to access[5].
Participatory Rural Appraisal (PRA) has been documented as a powerful means of involving community in identification and analysis of problems, planning and implementation of programs. Robert Chambers defines PR.A as a semi-structured process of learning from, with and by rural people. It is a community empowering method that generates information on health and social issues for utilisation by the communities and service providers for planning, development, implementation and evaluation of the programs[6]. PRA involves visual methods and is considered as one of the best frameworks to understand, analyse and develop programs with communities[7]. In the last two decades, many PRA methods have been developed to inform various aspects of health and social development. The list of reliable and valid methods includes: social maps to identify social and health assets and vulnerable individuals and groups; transact walks for topological or social features; service maps describing design and services available at a facility; and body maps describing illness. Other methods include matrix scoring, pair wise ranking, seasonal calendars, problems walls, solutions trees and impact diagrams[8]. Use of combination of many of these methods for program planning, implementation and evaluation cycle has also been successfully tested[9]. Robert Chambers analysed the 20-year history of the development of PRA and concluded that with appropriate attitude of respect for rural people and interest in what they know and say, professionals could find innovative methods as highly useful for analysing the health context and for developing programs[6].
This study was conducted, in 3 rural areas of district Khairpur of Sindh Province of Pakistan in the year 2000 on behalf of a non government organisation as it is planning to provide reproductive health services in that district. The research objectives were to identify the health needs and health care accessibility, as well as initiate participation of communities in the planning process. The needs assessment utilised three research paradigms - quantitative, qualitative and participatory - jointly to understand the needs with maximum clarity and from the perspective of communities. This paper points to the utility of PRA for comunity involvement in assessment and planning and for generating cotextual information that is often difficult to gather using other methods.

Subjects and Methods

Considering the promise of PRA for analysis using innovative methods, sessions were conducted with the community using a life cycle framework. Six PRA sessions were conducted with the community members from three rural areas located in different parts of district Khairpur. These were Thai Mir Wah, Sobo Dero and Kot Deji. These areas were selected as the in-depth interviews and focus group discussions pointed to the need to prioritise service provision in these deprived areas. Relative to other areas of the district, health care services are more inaccessible to people in these areas. In each of these three areas one PRA session was held with women and another with men. Two facilitators participated in each session. One of the facilitators took notes and copied diagrams developed by the participants. Number of participants at these sessions was 26, 25 and 20 for women and 11, 15 and 20 for men. Each session was attended by community members of various ages including teenagers and the elderly.
At the start of the session the facilitator introduced the participatory rural appraisal to initiate

participation and the life cycle framework to view the health issues and health care needs in relation to various stages of life. The community members selected various stages of life by pointing to the importance of each stage. At each session, the participants drew one line on the ground representing life from birth to death. Some discussion among the community members about the length of the line preceded the segmentation of the line into various stages. Suggestions by individuals to include a particular stage were contested by others before accepting or rejecting these suggestions to consider a role, function or attribute as a separate stage of life. Later, the participants detailed on what factors affect their health at the various stages of their life.

The participants used ground surface and materials such as leaves, mud, match-sticks, pens, pebbles, key chains, books, dates, sticks, paper, mango seeds and soft drink caps to represent various stages of life, and the health issues associated with these. Each session lasted for about 2 to 3 hours.

In addition to PRA, needs assessment research included a quantitative survey of 420 households selected through cluster sampling from the whole district, 30 in depth interviews and 6 focus group discussions with the community and health care providers. The quantitative survey was conducted to identify the prevalence of illnesses and reproductive health problems, the number of people using various centre based services available in the area, contraceptive prevalence, and number of households visited regularly by the outreach community health workers. The interviews and focus groups were conducted to develop an in-depth understanding of interactions between clients and health care services, interaction between service providers, referral mechanisms and patterns and provider perspectives, on local health and health care availability. Twenty-two general practitioners from all areas of that district were also interviewed with the help of a structured questionnaire to identify the local health issues for which the community members consult them. Quantitative, qualitative and participatory methods of the research were used for triangulation purposes as together these methods increased the validity of the information generated.

Results

Results of PRA relate to two objectives: (i) utility of PRA for community involvement; and (ii) utility of PRA for health and health care needs assessment.

PRA for Community Involvement

At all PRA sessions in this study, the community members were able to take control of the appraisal at the very outset. They found visualising various stages of their life and associated health and social concerns as interesting. The participants recalled their experiences relevant to various stages of life, which helped them take an active part in developing a chart of the stages. They actively discussed and agreed upon various stages of life and the extent and significance of health and social issues. For example, to signify the importance of adolescence years, and the associated health and health care issues in past and present, while elderly pointed to their past adolescence experiences and their perception of issues faced by the adolescents at present, the younger age participants shared the current experiences. Everyone at the sessions participated. Consensus among the participants to include various stages of life and their associated health issues was reached through a consultative process. Similarly, the participants of different age groups consulted each other if a particular concern was of recent origin or if it had been present for long time affecting various age cohorts.

Soon after the introduction of PRA and the life cycle framework, the facilitators became participant observers and the lead was taken by the community members who started acting as facilitators without any prompts - in other words, ‘handing over the baton’ took place. Rather than the research facilitators taking charge of the proceeding, the community members took charge of the proceedings and that increased their participation and analysis of health issues. In addition to active verbal input, the participants took turns in developing the emerging line and tables on the ground. Other indicators

pointing to the empowering nature of these sessions include: active contribution of young participants in the presence of their elders; the enthusiasm of the participants: frank discussion of issues usually considered taboo subjects; the anecdotes shared to illustrate the significance of life stages, and the general lively mood of the participants during the sessions.

Health and Health Care Needs

The community members identified life stages not only in terms of age categories but also in terms of roles, functions and attributes that characterise different people of different age groups. Stages of life discussed by the participants included conception, birth, growing up period, childhood, adolescent, youth, marriage, childbearing, rearing children, old age, and death. Salient issues highlighted by the community are narrated below.

Birth and Growing-Up Period: Participants pointed to

nutritional deficiencies and anaemia of mothers as important reasons for birth of weak children who are prone to diseases. Severely inadequate services, particularly in terms of non-availability of drugs, supplies and specialist care in the public sector that are easily accessible, and poor quality care provided by traditional birth attendants were considered as the major contributing factors for maternal and neonatal morbidity. These conditions lead to a high mortality.

Both women and men viewed taking care of children as a responsibility mainly of the women. Women are also responsible for most household work and they support the men for income related work. The participants pointed out that in addition to the lack of adequate nutrition heavy workload adversely affects women's health. Community members considered family planning, provision of adequate health care, particularly for women, as essential strategies to improve the health status.

Adolescence and Youth: The participants discussed that within the present cultural norms parents restrict girls' interaction outside family as they do not trust the community atound. Participants were of the view that this causes girls to develop a lack of confidence. For boys, in contrast, adolescence brings liberation. Some of the community members argued that this period of desires and hopes causes stress, and if boys do not have adequate social support they get into drugs and violence.

Community was of the view that at least a few boys practice homosexuality, develop some sexually transmitted infections and turn to hakims or quacks for treatment. This is because of the perception that mainstream health services do not provide care for sexual health problems, and for reason of privacy. Marriage at an early age was considered as a way to prevent boys getting involved in unacceptable social and sexual behaviours.

With regard to physical health, community members said that the main health problem of young girls is irregular menstruation that leads to anxiety and in some cases to improper treatment.

Child Bearing: The participants mentioned that many

women become pregnant within the first few months of marriage when newly wed women are stressed as they try to adjust to the new setting. Women suffer from weakness and other health problems because of repeated pregnancies and inadequate food intake. Many women suffer from complications of pregnancies such as abnormal lie and prolonged and difficult labour. The PRA participants pointed out that within this context a majority are now receptive to family planning.

Old Age: In addition to loneliness, increasing family and social isolation and decreasing input in decision making, the problems of old age include reproductive health issues related to menopause and chronic diseases such as diabetes. Health services for elderly are highly inaccessible, particularly for the poor.

Results of Community and General Practitioners

Surveys: Key findings of PRA were supported by results of quantitative surveys of community and general medical practitioners of the area. The community members' perception during PRA of inadequate food intake and malnutrition as major problems were confirmed by the medical practitioners from the district as the most prevalent issues. Similarly, in congruence with the community 17 out of 22 medical practitioners pointed to menstrual irregularities as one of the three

most prevalent reproductive health issues for which women consult them.
The community was well aware of the fact that women's health suffers because of repeated pregnancies. The quantitative survey revealed that mean total number of pregnancies is 5.5 (Table 1)

Table 1. Pregnancies

Married women 15-49 years	Rural Areas	Urban Areas
	n=210	n=210
Currently pregnant	15.7 %	13.3 %
Mean total pregnancies	5.6	5.5
Mean number of children born alive	5.2	4.9
Mean number of child death	0.7	0.6
Mean number of children alive	4.4	4.3

and about 48% women had six or more pregnancies and 9% abortions.
The quantitative survey also pointed out that 37.6% married women from the rural areas did not want more children (Table 2).

Table 2. Unplanned Pregnancies.

Married women 15-49 years	Rural (%)	Urban (%)
	n=210	n=210
% of women who did not want more children	37.6	40.0
% of women who wanted to delay previous pregnancy	24.8	21.4

PRA participants discussed cost, transport difficulties, unavailability of adequate care in rural settings, and restriction on mobility as they affect access to health care. These issues were also brought to light by the quantitative survey (Table 3).

Table 3. Health Care Access Factors.

Health Care Access Factors	Rural n=210 %		Urban n=210 %
Fell ill during past 15 days	54.3	respondents	60.5
Visited government health facility	27.2	of who fell ill	23.6
Visited private doctor	57.0	of who fell ill	64.6
Used public transport to get health care	46.4	respondents	26.2
Women who cannot visit health centre alone	66.7	respondents	59.5
Drug expense per episode (median)	Rs.200		Rs.150
% households visited by LHW every month	30.0		22.9

Discussion

PRA provided a vehicle to initiate a collegial level interaction and planning with the community. The community was able to focus on issues that they considered important and relevant in their settings. This situation in PRA is different from methodologies where researchers ask a predetermined set of questions or conduct an interview or focus group discussion along a predefined guideline. As pointed out in the result section, this methodology created a community empowering environment where these needs assessment sessions were controlled by the community and where a learning environment for both the outsiders and the insiders was created that Carl Rogers would call an environment where people experience the 'freedom to learn'[10].

As obvious from quantitative survey information presented in the tables in the result section that participants at PRA sessions pointed to the same issues. However, PRA results helped understand the context and reasons to various issues that were highlighted by the quantitative research. For example, the need for transport becomes more acute during evening and night hours and that private operators charge more than double the fare at night. Similarly, PRA participants discussed that while lady health workers (LHW) of the National Program for Primary Health Care visit about 30% households every month, the community does not perceives them as a major health care provider as they cannot provide care for major illnesses or for complications of pregnancy or delivery.

The community members initiated discussion on what practical measures could improve the situation. For example, the need to include transportation component in the health program was emphasised. Another fact that points to the utility of PRA for planning health care is that the community members identified life stages not only in terms of age categories but also in terms of roles, functions and attributes. This community perspective could well be used in conjunction with action plans proposed in some national level guidelines such as the National Reproductive Health Package[11]. For example, the information on age associated roles is required to guide the development of effective health promotion programs and for improving utilisation of centre based care.

PRA initiated a process and provided insight into issues that are helpful in planning and implementing health services with the community. PRA did the groundwork for a sustained community involvement. That community involvement and analysis of prevalent health problems within the local health system and social contexts, for example, would help plan the services that fit the definition of reproductive health as 'a state of complete physical, mental, and social well-being and not merely absence of disease or infirmity, in all matters relating to reproductive system and to its functions and processes…'[12], This can be highlighted by one example. The community's emphasis on marriage, need to strive for good upbringing of children, and need to address the issues associated with old age point to the importance of family for people. This insight point to the necessity of working with the whole family rather than targeting only a particular family member as that strategy would run the risk of falling short of fulfilling community needs.
Within the context of overall health care for families, health needs of certain individuals might require additional focus. Discussion by the community members of factors affecting a particular group of people is also of importance for planning services. For example, the community highlighted the concerns with regard to mental health and reproductive health of newly wed women. This concern and information is of use to plan community based care focussing on these women. Similarly, the discussion and analysis of issues affecting adolescent boys in terms of lack of awareness about reproductive health is of help in planning services for this group.

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