Baseline Research for Appropriate Strategy Development: the Balochistan Safe Motherhood Initiative (BSMI)

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Period of Activity: October 1997 – September 1998

I. Background:

Khuzdar is a remote district in Balochistan, the least developed province of Pakistan. In this district, rural settlements are scattered, roads and communications systems are underdeveloped and health services are scanty. In the tribal and rural society, women are uneducated and isolated, are mostly confined to their homes, and have limited access to health services.

> **"Women mostly go to private hospitals. Our husbands are poor. The poor husbands themselves take care of the hospital expenses. We don't know (about the expenses). They bring the vehicle from Khuzdar. The vehicle expense is from 400-500 rupees."**
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> –A Pakistani woman on health services utilization

It is estimated that the maternal mortality ratio (MMR) is about 700 per 100,000 live births in Khuzdar (Maternal and Infant Mortality Survey, 1991), which is amongst the highest in the world. More than 90 percent of all deliveries are conducted by untrained traditional birth attendants (*dais*). Women seek medical care from a trained health professional only during life-threatening situations, but accessing emergency obstetric care proves difficult for a majority of rural women. This is attributed to the delays in decision-making to seek adequate medical care and in transporting women experiencing complications to the hospital. These delays too frequently result in maternal deaths.

II. Project Goal and Strategies:

The Balochistan Safe Motherhood Initiative (BSMI) is an operations research project that aims to develop and test community-based interventions to reduce maternal morbidity and mortality in Khuzdar. This initiative utilizes a quasi-experimental approach with non-equivalent control groups to test the following community-based intervention strategies in selected village clusters:

- Information, education and communication (IEC) strategies aimed at women, families and traditional birth attendants.

- Training, motivation and monitoring of local owners of private vehicles for the transport of women in need of emergency obstetric care. In addition, the existing system of transport will be streamlined and upgraded and a revolving fund will be introduced at the village level to provide financial assistance to needy families during medical emergencies.

- Introduction of reliable telecommunications systems to connect traditional birth attendants, primary health facilities and transporters.

In addition to the above-mentioned interventions, which will be specific to the village-clusters that are randomized into the "treatment" arm of the study, the following will be implemented throughout the project area:

- Upgrading and strengthening reproductive health services provided at the government's primary health facilities and at the divisional (Khuzdar) and district (Kalat) hospitals

- Training of health care providers, including Lady Health Workers, working at the primary health facilities in order to motivate, sensitize and prepare the providers to appropriately manage common reproductive health problems in their communities

- Continued training of traditional birth attendants (dais), which would also assist in developing mechanisms for their supervision and support

These project interventions are being implemented in close collaboration with the Government of Balochistan Health Department and UNICEF. The community-based interventions will be implemented for approximately 18-21 months, followed by a post-intervention survey to assess the impact of interventions by variations in selected outcome indicators.

III. Methods:

Funding from MotherCare assisted in the implementation of the research phase of the project. The activities of this phase, which lasted from October 1997 until September 1998 are listed below. The results were used to design the aforementioned activities of the implementation phase and will be used for comparison purposes in the follow-up survey in the third phase.

- The **Baseline Household Survey** consisted of approximately 6,500 households in the project area, in which 7,400 ever-married women of reproductive age were interviewed to calculate estimates of perinatal and maternal mortality rates, contraceptive prevalence rate, and health services utilization rates among women. Approximately 700 women of reproductive ages were given a supplementary questionnaire, in addition to the baseline survey, to elicit information about their knowledge, attitudes and practices (KAP) regarding family planning, common obstetric danger signs, health services utilization, desired family size and birth interval, etc.

- **Qualitative research**, including focus-group discussions and structured in-depth interviews (SIIs), was conducted with women of reproductive age and traditional birth attendants. The research focused on women's perceptions of and actions around three common obstetric complications (antepartum and postpartum bleeding and prolonged labor), health services utilization and family planning. A total of 24 focus groups and 47 structured interviews were conducted.

- The project carried out a **situation analysis** (SA) of existing government health services, comprising assessments of 25 primary health facilities and two secondary care hospitals in the project area. Standard SA procedures, such as patient and provider interviews, patient-flow studies, and inventory checklists, were used to examine the staffing, equipment and supplies, services and utilization of reproductive health services in these health facilities.

IV. Results from the Baseline Research

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A. Baseline Household Survey

In Khuzdar 97% of births are delivered at home and 91% are attended by untrained dais or family members

1. Fertility and Childbirth

The results from the household survey indicate that the fertility rates are still high and use of health care services is low. In Khuzdar, women are married at an early age, with ninety percent of women reporting that they were wed within three years after menarche. Childbearing also starts early and continues late into life. However, women with some schooling were more likely to start having children later and finish earlier. The total fertility rate (TFR) in the regions surveyed based on all live births within the last year of the survey was 5.5. Among women aged 40-49, the mean number of children 'ever-born' was 8 per woman.

Almost 97 percent of these births occur at home and 91 percent are attended by untrained *dais* or family members. Use of modern health care facilities and trained providers for childbirth is low. However, a woman's schooling, her husband's education level and her income have a bearing on the choice of trained birth attendant.

2. Contraception

Women in Khuzdar generally know about modern methods of family planning, but contraceptive use rates are low. There are encouraging trends though that indicate that family planning use may be more common than in the past. Compared to the Maternal and Infant Mortality Survey conducted in the same district in 1991, when CPR was measured as .7 per 100 married women of reproductive age, the usage rates measured in this baseline are certainly higher, with an average of 6% of married women using contraception. The baseline results also illustrated a strong association between contraceptive use and women's age, parity, socioeconomic status, her own schooling and her husband's schooling. Moreover, contraceptive use rates are higher in the Municipal region where access to services is relatively better. These final findings indicate that, if family planning supplies and services are made available, a dramatic increase in the CPR and significant decline in fertility can be achieved.

B. Focus Group Discussions, Structured In-depth Interviews and KAP Survey Results

Analysis of the focus group discussions, structured in-depth interviews and the KAP survey confirms that obstetric complications are a common occurrence for women in Khuzdar. The facility and interest with which women spoke of these problems attests to the normalcy of this reality in women's lives, be they young or at a later stage in their reproductive ages. Analysis of the qualitative data also suggests that what women do when they have a given obstetric complication is not only dependent on women's perception of its severity. But it is also influenced by availability of appropriate health services and the real economic and social constraints faced by them. The key findings from this research are summarized below.

- While reproductive and obstetric complications are common in Khuzdar, women do not believe that all complications are normal or of equal severity.

- Misconceptions do exist about the significance of early signs of major obstetric complications, particularly bleeding and prolonged labor. Many women attribute postpartum bleeding to the evil eye, for which they seek help from religious persons. These beliefs have roots in tradition and culture, and they persist in this area where there is a lack of availability of modern health care services and information.

- Women prefer not to seek medical care from a hospital (or from a trained provider) unless there is a serious problem. Fortunately, "weakness" (perhaps associated with nutritional anemia) is considered by women a severe enough problem to warrant consulting a medical care provider.

- A majority of women prefer seeking care from a female health care provider for all of their reproductive health care needs. They would, however, seek care from a male medical care provider for treatment of minor illnesses.

- Some, but not all, women recognize the need to stop childbearing, which they associate with their own physical health. They also recognize the need for spacing between births which, again, they associate with their own physical health. However, few women communicate with spouses on the subject of family planning.

"If there is a 'lady' in the hospital, then we see her. If there is a lot of pain, then we [may also] see the male doctor. We don't tell the male doctor about [women's] problems. We only tell him about fever, etc." SSI with a woman over 35 years old

- The husband's permission is required for transporting a woman experiencing complications to the hospital. Most women also said that they would first inform their husband of any problem during pregnancy. A majority of women expect the traditional birth attendant to make a referral to the hospital if a complication occurs that they are not able to handle. Women also recognize the limitations in skills of traditional birth attendants in handling obstetric complications.

It is clear that, in this population, there is a need to improve women's knowledge and perception of reproductive health problems. Any such attempts must also incorporate husbands, who have the decision-making power.

C. Situation Analysis

Project staff were able to visit a total of 20 primary health facilities (PHFs) that were either rural health centers, basic health units, sub-health centers or civil dispensaries. There was little difference in the staffing, equipment or services provided by these facilities and none were able to provide emergency obstetric care (EmOC). The Divisional Hospital in Khuzdar does provide full EmOC services.

In general, the quality of reproductive health services at the PHFs was poor. Major problems encountered were staff absenteeism, lack of furniture, equipment, and supplies, lack of good record-keeping systems and a lack of enthusiasm or commitment on the part of the providers. The average time a facility opens is about 2-3 hours a day, six days a week. Most providers have their private practices and live more than five kilometers of the health facility of their posting. About 90 percent of them are male.

Voices from the community were critical of the government health facilities. While men's complaints tended to be general, women were more vocal and specific about the problems they faced at the facilities. Most community members (both men and women), however, were able to correctly describe the location of, name of he staff members working at and list the services provided at their health facility.

IV. Project Implications:

The Balochistan Safe Motherhood Initiative is actively in its implementation phase, but the results from the baseline research were used to inform the final strategy prior to its execution. Some of these areas included the identification of whom to train and the content of IEC materials.

The project has created curricula and trained the dais in the area in "life saving skills" (LSS) so that these women can recognize, stabilize and refer obstetric emergencies. Female heath care workers, whom the research revealed as the most desirable provider to visit at the health facility by women, were also given training to refresh their knowledge and improve their skills in primary level obstetric care. Family members who are frequently consulted to attend births, and LHWs and village-based family planning workers, who also have health-related contact with the woman, were also given a short course in LSS.

The data collected from the qualitative research was used to determine the content of the IEC materials. The results also mandated changes in some of the originally planned strategies. For example, the data showed that men and women had different perceptions of women's reproductive health problems and issues. So, while originally one information booklet and series of cassettes were going to be used for both audiences, two were developed for use in separate men's and women's community support groups discussions. The men's book has more information on pre-planning of obstetric emergencies and family planning.

V. Publications

Midhet, F. *Final Report Safe Motherhood Initiative in Rural Balochistan*. Karachi, Pakistan: The Asia Foundation (1998).

Traditional midwives (dais) at training

Dai during training drawing the woman's reproductive system

This project was made possible through support provided by the office of health and nutrition bureau for global programs, field support and research, U.S. Agency for International Development.