

CHILD SURVIVAL IN URBAN AND RURAL JORDAN PROGRAM
(278-0270)

MID-TERM EVALUATION

The Save the Children Federation (SCF) began its involvement in maternal and child health in 1985 when it established a Jordan field office. Their original health project was in coordination with UNICEF to promote UNICEF's GOBI (Growth monitoring, Oral Rehydration, Breast-feeding, Immunization) and SCF's child survival strategies in ten villages in the Jabal Bani Hamida (JBH) area. With a renewed interest on the part of the Ministry of Health (MOH) to upgrade its present primary health care system and activities throughout Jordan, SCF proposed to establish two model primary health care systems - one urban, one rural, based on documented community needs.

The rural impact area has continued to be the ten villages of Jabal Bani Hamida as selected in conjunction with the Ministry of Social Development (MOSD) and UNICEF. Three urban communities in Amman have also been chosen, identified as the most needy based on statistics from the Urban Development Department (UDD). These areas are: Mahatta, Natheef, and Musdar.

The goals and objectives of the rural and urban areas are basically the same but some variation in implementation and outcome may be expected as the urban area becomes more involved. These differences should be handled and analyzed as they become evident. For instance, one difference already evident, is the difference between the rural and urban Community Health Workers (CHWs). The rural CHWs are generally not learning the material as fast, seem more shy to run mothers' group meetings and lack the self-confidence exuded by the urban CHWs. However, it should be noted here that the training staff feels the combined urban and rural training has definitely boosted the self-confidence of the rural workers. If it is shown that it does indeed enhance their ability to work with the mothers and to liaise between the MOH clinic and the community, combined training needs to be considered. This could take the form of monthly or bi-monthly combined rural and urban in-service programs.

The overall goal of the project is to develop and implement a comprehensive, community based primary health care system in a remote rural area and in 3 urban squatter settlements. This is to be done by: (1) increasing utilization of existing health services and increasing outreach in response to community needs, (2) extending basic health services to 100% of homes within the project area and (3) improving the health standards of women and children by formal and informal training sessions.

The overall impact of the program is to be measured by the Infant Mortality Rate (IMR) both urban and rural. The JBH baseline statistics show for 1981-1985 an IMR of 90 per one thousand live births with updated statistics from July 1986 to June 1987 of an IMR of 28.6 per one thousand live births! The UDD survey of 1980-1981 showed the poor urban areas with an IMR of 86.1 per one thousand live births. But the SCF baseline survey of 1987 sets the project urban impact area IMR at 21 per one thousand live births. The 1987 statistics are dramatically reduced from those for 1981-85 in JBH and those for 1980-81 for the urban poor areas. The change in JBH must be at least partially attributed to the SCF activities in home visiting every pregnant women, postnatal visits after every delivery, urging at-risk cases into the MOH clinic and growth monitoring by CHWs.

The urban area will also be closely monitored as to every pregnancy and outcome compared to that SCF baseline survey. It will be important to compare these latest statistics with a year from now as they will relate very specifically to the project impact areas, both rural and urban.

Regarding increasing utilization of existing health services, statistics show that utilization of the MOH clinic in Arid went from 2,012 visits between January and May, 1987, to 2,559 visits between January and May, 1988, an increase of 27%. The SCF health staff are also encouraging more outreach activities by the MOH clinic personnel, both rural and urban. A nurse from the Arid clinic and a practical nurse from Natheef have both attended a CHW ten day workshop.

The CHWs have become a pivotal component of the project. They are the link between the community and the MOH through the MOH clinics. The SCF health team was initially establishing this link by making home visits and conducting mothers meetings themselves, whereas now the health team is training and supervising a larger number of CHWs both in the rural and urban areas. However, the SCF health team was and is continuing to coordinate this linkage by establishing

a good working rapport with the various MOH clinic staff and the CHWs.

Home visits have been made to every family in the JBH area making them at least aware of existing health services. The repetition with each successive visit by the CHW and/or SCF health team member will hopefully see gradual behavioral changes as families become more aware of how they and their children can live more healthy and longer lives.

PROGRAMATIC AND IMPLEMENTATION ISSUES:

1. Has a model primary health care center been established in Jabal Bani Hamida whose personnel are trained in carrying out outreach community activities?

The MOH clinic in Arid is a provider of primary health care of which outreach is a valuable and essential component. The SCF health team, in cooperation with the MOH, has the significant responsibility to encourage and coordinate outreach activities according to the needs of the community.

A MOH nurse from the Arid clinic has been trained in one of the SCF CHW training programs. She now knows what is expected of the CHWs and the level to which they have been trained. Emphasis has also been placed on outreach and the fact that the MOH staff needs also to be involved in said outreach. For example, the SCF health team has been working with the MOH clinic nurse on follow-up for immunization defaulters. Records of these defaulters are provided by the CHWs/SCF team and the MOH nurse in turn is to make home visits.

The clinic mid-wife is also strongly encouraged to visit at-risk pregnant women. The CHWs, under supervision of the SCF health team, make visits to all the pregnant women in the JBH impact area and furnish a list of the at-risk women for the MOH mid-wife. At this point the SCF mid-wife accompanies the clinic mid-wife on home visits, encouraging the mothers to come in to the MOH clinic for regular check-ups. According to the baseline survey of 1985, 47% of pregnant women were registered at the MOH clinic or a private clinic or hospital (meaning at least one antenatal check-up visit). According to the 7th Progress Report, 1 July-30 September, 1988, 68% of the pregnant women were registered.

2. What is the increase in percentage of mothers, in comparison to the 1985 SCF - UNICEF baseline statistics who are:

- a. - aware of the existence of ORS salts and use it during episodes of diarrhea.
- b. - receiving home postnatal care and are being immunized against tetanus.
- c. - receiving counseling on available birthspacing methods.
- d - being assessed nutritionally to determine their nutritional status.

a. Awareness of ORT and ORS use:

The SCF rural baseline survey shows 51.5% of 299 women interviewed were acquainted with oral rehydration salts (ORS). Of those, 54% had used them at some time. The CHW, on regular every two month home visits, discusses and promotes oral rehydration therapy (ORT), encourages continuous feeding during diarrhea attacks and has oral rehydration salts (ORS) packets (Aqusal) for distribution from the MOH along with education on how to use them. This has been a problem on occasion when the Aqusal packets have not been available from the MOH clinic. The MOH staff is urged to home visit those at risk or already ill with diarrhea (two or more diarrheal episodes a day). At present, 63% of mothers are aware of ORT and how to administer it.

The summer months (June, through September) require the special attention of the SCF and MOH teams as 65% of all diarrhea cases occur in children under 5 years of age during this time period.

b. Post-natal care:

Concerning postnatal care in the rural area, the 1985 baseline survey did not show postnatal home visits as this was not done by the MOH clinic mid-wife before the advent of the SCF project. But the present statistics show that 67% of women delivering in the area received a postnatal home visit within 10 days of delivery and that 33% received a postnatal visit after the 10 days. These visits are done by the SCF mid-wife with special emphasis on the at-risk group, perhaps accompanied by the clinic mid-wife when visiting clinic-registered

cases. The CHWs and SCF health team work together to encourage postnatal visits to the clinic for check-ups of normal and at-risk deliveries and for registration of the newborns.

In November 1987, in the urban area, there were 57.5% of women who had at least one postnatal check-up. The proximity of the health clinics and the availability of private facilities makes this statistic much more impressive than for the rural group. However, statistics on home visits by MOH clinic staff are unavailable. The SCF team's goal is to provide home visits to all pregnant and newly delivered mothers. This will be done by the CHWs and gradually by the MOH clinic mid-wives or nurses.

Tetanus vaccination coverage according to the 1985 baseline survey for mothers in the rural area shows that only 30.8% of ever-married women in JBH had records of having ever been vaccinated. Of that 30.8%, 47% had taken only the first injection or the first and second injections. In November, 1988, the emphasis was put on tetanus vaccinations and the first group of statistics showed that out of 524 women between 15-49 years of age, 57% had the first injection, 49% had both the first and second, and 31% had all three.

c. Birthspacing counseling:

As regards birth spacing the JBH baseline revealed that 92% of child-bearing age women would like the space between their children to be longer - they want the rest! Despite this interest only 15% admitted to using any means of avoiding pregnancy. The national IMR, according to the 1983 Jordan Fertility Survey was 92/1000 with a birth interval of less than 24 months and 38/1000 with a birth interval of more than 24 months.

The postnatal visit is used to inform and discuss birth spacing by the CHW, supervised now by the SCF health team, but who will gradually take over the responsibility on her own along with the MOH mid-wife, who is especially concerned with at-risk mothers. She also has the backing of the MOH clinic where she encourages the mother to go and register her child. But the mothers' group meetings are probably the greatest means of spreading information about birth spacing. Of course, the sophistication of the meetings varies greatly according to who runs them - the CHW or SCF team

member. Statistics on births will gradually begin to show what, if any impact is evident on increasing the space between births.

The SCF team is, by supervision and training, giving the CHWs valuable experience and also confidence that they too can run a successful mothers' meeting. Records must be kept on mothers' group meeting participation, such as members attending and how frequently.

d. Nutritional assessment:

The nutritional emphasis of the program is on the infants and children (0-5 years). But there is a strategy in the project proposal to examine women's nutritional status - in particular to look at iron status and at body weights in relation to age. To date this has not been done for several reasons. First, the mother's body weight in relation to age rarely has any significance. Second, to look at the iron status of mothers is not possible since the CHWs are not trained to do hemoglobins and the portable equipment is not available. However, the project will encourage mothers who exhibit any symptoms of anemia to go to the health center for a check-up.

The nutritional emphasis is towards the education of the mothers on feeding a nutritionally sound diet to their children, weaning properly, keeping growth records, and increasing feeding immediately following an acute illness. However, the nutritional status of women might become an added subject for mothers' group meetings.

3. How many of the children in our target areas:
 - a. - are being monitored regularly for growth and what are the conditions that affect failure to do so.
 - b. - are being vaccinated against DPT, polio and measles.
 - c. - are being registered at the local health clinic within the first two months of age.

How does all this compare with original project targets?

a. - Growth monitoring:

In JBH in 1985, 3.07% of children under 5 years were below the 70th percentile, weight-for-age according to WHO set standards. The moderately malnourished group is identified as between 60-79% of the standard, as opposed to the severely malnourished group (below 60%, weight-for-age).

In November of 1988 there had been more than 95% coverage of growth monitoring below 5 years, showing 2.3% of children below 70% weight-for-age. This monitoring is done by the CHWs under the supervision of the SCF team. The CHWs are to visit every household with children under 5 to weigh and record that weight once every two months. Any child falling in the moderately (60%-79%) or severely (below 60%) malnourished group is strongly urged to visit the MOH clinic for follow-up. With additional experience the CHWs should be able to better provide some health education on this problem to reinforce the clinic follow-up.

The clinic nurse may be asked to home visit at-risk cases, or cases not coming into the clinic after referral. The CHWs urge the mothers to bring their children into the clinic for routine weighing, especially at-risk children. It has been observed by the SCF team that the rural CHWs often record inaccurate results. Therefore, weight monitoring in the clinic should produce a truer picture. But at this point these rural CHWs are weighing children under 5 in the homes every two months and are hopefully gaining experience and improving their weighing skills.

The urban CHWs have begun growth monitoring in the homes every two months, filling out the rainbow charts which the mother keeps for each child. In November, 1988, the statistics in the urban area show only 0.7% of children below 3 years exhibiting any malnutrition.

The malnutrition problems with the age group 3 to 5 years reduce significantly, as the increasing weight-for-age deficit suggests a chronic malnutrition problem by this time. Therefore the project might widen the time between weighings of those ages (i.e.: every six months or every year). This will be considered after input from the SCF staff nutritionist as to the feasibility of lengthening the time between weighings. This would appear not to affect other activities. For example, the immunization component for the 3-5 year age

group is only follow-through on boosters by that time. This could be done during a yearly or bi-yearly weighing visit.

b. Immunizations:

Concerning immunizations, the 1985 JBH baseline survey revealed 70.5% of children aged 12-23 months and 69% of children aged 24-35 months had been fully immunized. This means 3 OPV and 3 DPT and measles. 70.6% of 31-35 month olds had received boosters. As of November 1988 the percentage of children aged 12-59 months who have received 3 doses of OPV and DPT plus 1 dose of measles has risen to 99% in JBH area. 98% have been vaccinated with the first booster. The CHWs continue to urge mothers to come in to the clinic for immunizations and also prepare rosters for outreach by the MOH clinic nurse of those ready for the next injection and to refer defaulters for follow-up to the clinic.

The urban statistics from November 1987 show 96% immunized against OPV and DPT and 86% immunized against measles by 12 months of age. 65% received the first booster at 18 months of age.

c. Newborn registration:

Registration of newborns is being done in the rural area because it can be done on the postnatal visit to the home by the SCF mid-wife, with or without the MOH clinic mid-wife. Postnatal clinic visits, both urban and rural, are low. Gradually, the CHWs should become more effective as they gain knowledge and experience. This would be reflected in the statistics of postnatal clinic visits this next year.

In the urban 1987 baseline survey postnatal checkups were done by only 26.8% and 33.9% of the women in Mahatta and Natheef respectively. The trend will be observed as the project progresses.

In the JBH area, home visits are made to 100% of newborns. In the autumn of 1988, 67% received a postnatal visit within 10 days of birth while 33% were visited after the 10 days. These visits are done by the SCF mid-wife sometimes accompanied by the MOH clinic mid-wife. Registration of the newborn is done at this time. The strengthening of the linkage between the SCF mid-wife, the MOH mid-wife and the CHW is essential to the eventual phasing out of SCF and the take-over of responsibility by the community. Some of the MOH staff are not yet completely committed to some components of

the project (i.e.: outreach responsibilities and the keeping of complete and accurate records). It is difficult to change one's routine pattern of work. To change or reinforce a job description that adds responsibility, like outreach, may not be readily accepted. The CHWs and the SCF team work side by side with the MOH clinic staff to reinforce this needed change.

4. What is the percentage of pregnant mothers registered in the government health center and whose condition is being monitored continuously?

In JBH area, the SCF team has registered more than 98% of the pregnant women and 98% of the outcomes. These women are followed up by the CHW, SCF mid-wife, and through mothers' group meetings to encourage registration at the MOH clinic. The baseline in 1985 shows 47% of pregnant women had at least one antenatal check-up. Before the start of the SCF project there were an estimated 35-40 women registered in the MOH's antenatal clinic. Now the number is up to 65-70. The CHWs are learning to identify at-risk mothers and urging them to go to the MOH clinic for closer follow-up.

In the urban area, 80% of pregnant women had an antenatal check-up at least once, according to the 1987 baseline survey. The continuous monitoring of at-risk pregnant women is done by the SCF health team along with the CHWs. As the aforementioned linkage is strengthened, much more involvement of MOH clinic staff may be anticipated. In the urban MOH clinics, pre and post-natal care are offered, but without any outreach component.

5. Has the project been coordinating closely with MOH services in the area?

The MOH clinic in Arid has been a focal point for the JBH part of the project. Many training sessions have been organized there. The clinic staff has been involved with training. The clinic nurse attended a SCF training of CHWs. However, most of the responsibility of the CHWs has fallen on the SCF staff as they have worked so closely with the CHWs and continue to supervise them. It is hoped that the organizing and preparing of on-going training will involve more and more the MOH clinic staff so that eventually the CHWs will feel and be regarded as a valuable part of the primary health care team - both by the clinic personnel and by the families entrusted to their care.

The urban component of the project, having been delayed, has little experience in working with the MOH clinics. The SCF team has met with the MOH staff in Natheef and Mahatta and the beginnings of a good rapport have been established. The Natheef MOH clinic doctor has requested a form from SCF on which they can record monthly numbers of referrals, antenatal visits, immunizations, etc. to turn into the SCF team. This sort of form should be developed by SCF and MOH staff together so it continues to be used after the SCF project ends for compilation of statistics.

SCF has asked for one week of training in the respective MOH clinics to be given to each CHW, two at a time. SCF has also requested a mid-wife from each clinic to do outreach visits one day a week to the SCF impact areas.

6. Has the utilization of the existing MOH facility increased as a result of the project's community oriented approach?

Arid clinic in JBH has been routinely underutilized for a variety of reasons. One monumental reason is distance. Not only is the distance great from most of the villages, but some of the villages are not even reachable by car! Utilization of Arid clinic has improved by 27% from 2012 visits in January-May 1987 to 2559 visits from January-May 1988. Increased outreach should increase utilization numbers.

For the urban areas, increased utilization of the existing health facilities cannot be measured yet. As the CHWs begin their visits, this should be closely monitored. However, as a baseline, it is known that the Mahatta MOH center is greatly underutilized. For example, considering the whole health center's impact area (of which the SCF project is only one part), there is a potential of 2500 pregnant women in the area and only 68 being seen in the antenatal clinic! There is also a problem with the women not returning after their first visit. Follow-up on these women should be a high priority for the CHWs and the MOH clinic nurses.

7. What steps has the project taken to ensure its sustainability, both financial and institutional?

Again, the linkage between the MOH and the project is monumentally important. A well bonded linkage insures a committed institution left to carry on the work the project began. The CHWs are in place and undergoing

continual training and supervision. The SCF health team has constant interaction with the CHWs and works with them in all aspects of their job. The CHWs, as indicated in the name, are all from their own communities so the acceptance by the families is very positive. The CHW, in another year, should be able to conduct a home visit without supervision and be able to cover all the issues and questions.

The MOH clinic staff (doctors, nurses, mid-wife) are all part of the project and the training of the CHWs is to be gradually taken over by them. This training might include in-service topics such as how (the procedure) and at what point to refer clients to the MOH clinic or a food science topic such as teaching mothers to be aware of potentially bad or outdated manufactured food stuffs. The MOH has been requested to specify within job descriptions this responsibility for on-going training of CHWs and to allow outreach activities. These outreach activities are essential to the continuation of the project.

The SCF health team has the responsibility to gradually turn over the outreach activities to the CHWs and MOH clinic staff. The planning of the mothers' group meetings will be gradually taken over by the MOH clinic staff with the assistance of the CHWs.

The CHWs receive a stipend of JD 10-20 now through the end of the project. The SCF team is looking for ways to raise and sustain this to JD 20-30. The MOH will not be able to take on this responsibility. This problem needs to be one of the top priorities requiring attention.

8. Are the trained community health workers capable of:
- carrying out training sessions for the mothers.
 - promoting the use of the MOH health facility in the area.
 - implementing the program's essential PHC services.

Mother's group meetings were begun early in the JBH program. During the first quarter of 1987, 53% of all mothers with children under five attended the meeting on "Women's Views of their own Health Problems." Then the second group meeting on "First Aid and Accident Prevention" was attended by 61% of mothers with children under five. Dr. Nafez from the Arid clinic led that meeting.

The September-October 1987 meetings ranged from 21% to 100% of women with children under five attending. Mothers meetings are affected by such external influences as harvest time, Ramadan, milking season, and summer migration. Meetings held during the April-June 1988 quarter ranged from 23.5% to 86.7% attendance with an average attendance of 53.9%.

The rural CHWs are not carrying out mothers' group meetings by themselves yet. At this point they assist in arranging the meetings and share a small part in the presentations. It will take some more time to get the rural CHWs to the point where they are able and confident enough to run a mothers' meeting alone.

In contrast, many of the urban CHWs show more initiative and self-confidence. Some are able to hold a mothers' meeting with only an observational supervision from the SCF team. They are able to speak up and to stimulate questions and comments from the mothers. Their training will continue from the SCF team and the MOH team. Two of these CHWs have expressed a desire to organize and run a mothers' group meeting together.

The CHWs, both rural and urban, spend much of their time encouraging mothers to go into the MOH clinic for antenatal check-ups, postnatal follow-up, immunizations, growth monitoring and at risk follow-up in all categories. It is thought that this has contributed to the overall increased utilization of the rural MOH clinic.

The CHWs are learning more and more about the projects targeted essential components:

- (1) Oral Rehydration
- (2) Growth Monitoring
- (3) Appropriate Child Spacing Programs
- (4) Immunization
- (5) Appropriate Prenatal and Postnatal Care
- (6) Nutrition Education
- (7) Appropriate Referral and Follow-Up Care

Their training concentrates on one or two subjects at a time so as to minimize confusion of facts.

9. Is the system of supervision of the community health workers adequate? What system of compensation and support is being used to encourage and sustain them?

The supervision of the CHWs is very well and closely done. The SCF health team is completely involved in the CHWs training and their work in the field. The SCF team has actually done a lot of the tasks now being performed by the CHWs. This was before the CHWs were brought on the scene, or when the CHWs were doing only growth monitoring. At this point, the rural CHWs do not do mothers' meetings or home visits (excluding growth monitoring) without supervision.

The SCF team needs to begin turning over their supervisory capacity to the MOH clinic staff. The sooner this begins, the more impact the SCF team will have on how it is to be done and the more time there will be to change or modify the approach. Sustainability ultimately comes from the phasing over of responsibilities to the MOH clinic staff through the MOH outreach office from the SCF team in both the urban and rural areas.

Compensation for the CHWs is given in a small stipend of JD 10-15 for rural CHWs and JD 20 for urban CHWs. There is an incentive of JD 2 for things such as accuracy of records, rapport with mothers and organizing mothers' group meetings. It is essential that there be a method in place for paying the CHWs when the SCF project ends. According to the project proposal, this process of self-sufficiency would take place over a five year period. Initial funding done by USAID would be succeeded by SCF scholarship funds which in turn would be succeeded by community or public funds.

10. Can the existing health information system be used to follow up the health status of mothers and children in the community and how can it be modified?

The records as kept by the SCF team and the CHWs differs from the MOH clinic records. These two systems need to come together. Once the project ends, the SCF health information system will be difficult to maintain if it differs from the clinic system. The optimum is to have all the information on mothers and children in one place so as to reduce duplication and possibly letting families slip through the system. If the SCF proposed "health information system" were approved for use in the MOH clinic, statistics would be more accurate and more

readily accessible. This use of one information system between the CHWs and the MOH clinics would also help solidify the linkage between the two. At this point, SCF has a computer to feed numbers into and produce project statistics. As the MOH clinic does not have a computer, tabulations would have to be done manually. The MOH staff should be trained to manually access the useful statistics from the Health Information System.

FINDINGS AND CONCLUSIONS

1. There is a marked difference between the rural CHW and the urban CHW. The rural CHW has a much more limited life experience as opposed to the urban CHW who has a broader experience base and also tawjehi (high school). Therefore, the time frame for training and the supervised practical application of that training has to be greater for the rural CHW. The urban component of the project was delayed by about one year.

The process of identifying village/community funds for paying the salaries of the CHWs once the project ends is a much more tedious process than anticipated. Support from the MOH and village councils is readily forthcoming until salaries of the CHWs are discussed.

2. Much time is spent on every two month weighing of 0-59 month old children by the CHWs. The urban and rural baseline surveys show only children below three years of age exhibiting any significant malnutrition and that is 0.7% and 2.3% respectively.

RECOMMENDATIONS

The project should be extended for one year from January 1990 to January 1991. This would not require additional allocation of funds, as work on the urban component of the project was delayed by a year. The SCF has already submitted a four-year budget proposal to USAID requiring no additional allocation of funds. The SCF team needs this additional year to accomplish all its objectives. A significant side benefit would be the extra year for strengthening the expertise of the rural CHWs who have proven more difficult to train than was originally anticipated. A one year extension should bring the project to a close. If it is not self-sufficient by that point it may never be. More extensions would only serve to perpetuate the "sustainability" problem.

Growth monitoring should be done by CHWs every two months for 0-3 year olds and every six months for 3-5 year olds, (with the concurrence of the SCF nutritionist) allowing more time for education and referral of at-risk 0-3 year olds

3. The CHW is described in the project proposal as being identified only to be trained to help SCF workers with monthly growth monitoring in the homes. The Letter of Agreement (June 1988) calls for the training of the CHWs (a minimum of 30 in all areas) in preventive health care. The health workers come from and represent their own communities.

The project must include trained CHWs. There should be a minimum of 40 trained CHWs (20 rural, 20 urban) by the end of the project. These CHWs provide the essential link between the MOH clinic staff and the community.

4. The MOH mid-wives and nurses are often reluctant to do home visits. The SCF mid-wife or nurse most often accompanies them.

The job description of the MOH clinic mid-wives and nurses must include outreach responsibilities to at-risk cases, be that growth monitoring, ante-natal or post-natal care, oral rehydration therapy, immunizations, or nutrition education.

Each CHW should undergo a one week training program at the respective MOH clinic conducted by the clinic staff. Emphasis should be on outreach, referrals, familiarity with clinic procedures and reinforcement of basic primary health care concepts.

6. More than 45% of JBH women still deliver at home while in the urban area it's only 15%. In JBH there is no facility for deliveries, at-risk or otherwise. The MOH clinic is not set up to provide such a service.

In JBH, a Traditional Birth Attendant should be identified for each village (10) and trained by SCF team and the MOH staff to perform safe home deliveries and identify at-risk pregnancies to be referred to hospital. UNICEF might be approached to provide home delivery kits to each of the trained birth attendants. The CHW should teach all families of pregnant women who plan to deliver at home the basic principles of a clean, safe delivery.

7. The SCF team and the MOH clinic personnel have two separate systems for record keeping. SCF has a computer allowing for more sophisticated records and statistics during the life of the project.

A health surveillance system should be developed by SCF and MOH teams together in order to ensure a working system understood and accepted by everyone involved. This would be a manual system until such time as computers are introduced into the health centers.

8. There is a concern by the SCF team that environmental health, especially in the urban area, is not addressed.

Training of the CHWs should include basics of environmental health. Through health education, the CHW could increase the awareness of mothers to possible resources to improve their living conditions, i.e.: sewage disposal, prevention of insects and rodents and public cleanliness.