

P Primary Health Care

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MID-TERM EVALUATION REPORT OF
THE MACINA CHILD HEALTH PROJECT

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Project Implemented by: CARE Mali

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CARE/Austria
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EXECUTIVE SUMMARY

Phase II of the Macina Child Health Project (MCHP) is a three-year project funded by USAID/Washington, USAID/Mali, CARE Austria and CARE USA. Located in the Segou region of Mali, it operates in 94 sites that are found in five Macina Circle districts. The project began the second phase of Child Survival Funding in September, 1990. Under the auspices of its original mandate (1987) to reduce child morbidity and mortality, project staff proposed and

immunization of children less than five and pregnant women, personal hygiene and water and environmental sanitation.

Taking into account its past experiences and identified village needs, the project refined its activities to provide greater focus on promoting vaccination for children less than one year of age and malnutrition detection. The implementation strategy was also expanded to include a component on child-oriented health promotion and prevention activities and installation of a two-phase village advancement strategy. In collaboration with a Dutch-financed bilateral Primary Health Care Project with the Regional Department of Health in Segou, MCHP is now actively involved in the organization and training of village health committees and workers. New project ventures are anticipated in the areas of birth spacing and malaria prevention and control.

The purpose of the mid-term evaluation was to assess MCHP's design, implementation and progress after approximately eighteen months in Phase II of its operation. Using qualitative evaluation research methods, a three member evaluation team collected data through document reviews, in-depth interviews with project staff and collaborators and field visits to a representative sample of target villages (24). Actual data collection occurred over a fifteen day period.

Evaluation findings reveal that the project has made more than satisfactory progress during this funding period. Its objectives are well-conceived, and interventions have been designed based on the principle that innovations are more likely to be accepted if they are simple, concrete and provide tangible results that reflect village realities. Evaluators found that the project is well-received and accepted by project beneficiaries as evidenced by their level of health knowledge and community participation in project activities.

The greatest impact of project interventions on knowledge and attitude change was noted in the areas of immunization, diarrheal disease control and personal and village hygiene and sanitation. Key factors that appear to have contributed to project

accomplishments include: a) a highly skilled and technically trained field staff, b) strong working relationships with regional and local health officials and c) an integrated intervention approach which involves other CARE/Macina projects. Documentation of project activities and results have greatly improved with the installation of a computerized project information system. This facilitates the systematic analysis of monitoring data and preparation of periodic reports which are distributed to the funding agencies, project collaborators and other organizations.

From all indications, project interventions seem to have had a positive impact on the health status of women and children. In spite of project accomplishments, there are areas which need further development or modification. Most of the weaknesses noted in the project are obstacles and difficulties encountered in the daily implementation of project activities while others require redesign considerations. For example, the Child-to-child activities are a strong motivational tool for entire village participation in health promotion. Although project staff recognize its increasing importance, not enough attention has been devoted to developing a variety of health messages for this target group. Similarly, the increased involvement of village men and youth in family health promotion has been greatly solicited by project staff. More effort is needed in tailoring health messages and actions which take into account their role responsibilities and the male support needed to maintain good child and maternal health. Lastly, field staff have introduced home visits as a means of providing more direct educational support and health counseling on an individualized level. This has great potential for reinforcing the group health education sessions and facilitating adoption of desired health practices. However, the content and process of this intervention method does not appear to be systematic nor clearly thought out.

In light of project strengths and limitations, the evaluation team proposed 23 major recommendations to improve and/or reinforce MCHP effectiveness. These recommendations address the health intervention areas mentioned above plus the following areas: a) project design and program planning, b) project information system, c) human resources, d) project collaboration, and e) sustainability of health promotion and disease prevention behavior and practices.

These recommendations reflect the evaluation team's general perception that the project is sound and deserves continuation. Given the pace at which the target villages are advancing and the scope of change anticipated by the project, it is evident that additional time will be needed to fully realize project goals and objectives. Additionally, despite the project's commitment to sustainability of health behavior changes, a longer period is required to transfer health education and promotion responsibilities to local villages and to ensure that local Village Health Committees (VHCs) are viable. As such, the evaluators recommend that CARE/Mali seek to continue MCHP project activities following the FY'93 campaign.

GLOSSARY OF TERMS

AED	Academy for Educational Development
ADDZ	Agricultural Development in Drought Zone Project
CDD	Control of Diarrheal Disease
DIP	Detailed Implementation Plan
DRSPAS	Direction Régionale de la Santé Publique et de l'Action Sociale
EPI	Expanded Program for Immunization
FINA	Project Activity Level Record (Fiche d'indicateurs de niveau par activité)
FIV	Village identify Record (Fiche d'identité de village)
GRAAP	A non-formal education method
GRM	Government of the Republic of Mali
HP	Health Promoter
HS	Hygiéniste-Secouriste (First Aid Workers)
IEC	Information, Communication and Education
KAP	Knowledge, Attitudes and Practices
MCHP	Macina Child Health Project
MHC	Macina Health Center
MOH	Ministry of Health
MUAC	Middle Upper Arm Circumference measure
NGO	Non-governmental organization
ORS/ORT	Oral Rehydration Solution/ Therapy
PHC	Primary Health Care Project (bilateral) financed by the Dutch Government
PIS	Project Information System

RTA Regional Technical Advisor, CARE
SSS Sugar Salt Solution
TBA Traditional Birth Attendant (accoucheuse traditionnelle)
USAID United States Agency for International Development
VHC Village Health Committee
VHW Village Health Workers (composed of AT and HS)
WHO World Health Organization

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1. INTRODUCTION AND PROJECT DESCRIPTION

This report presents the findings of the mid-term evaluation of the Macina Child Health Project (MCHP). Originally funded in 1987 by a USAID Child Survival II Grant (Phase I), the project began with the goal of reducing infant and child morbidity and mortality in Macina Circle in the Ségou Region of Mali. The second phase of MCHP is funded from a variety of sources. About half comes from Child Survival VI funds through AID/W; 15% from a supplemental grant from USAID/Mali, and the remainder from CARE-Austria and CARE/USA.

The project is actively involved in a total of 93 villages and one hamlet. The original 55 target villages were located in the districts of Central, Sarro and Saye; but now the project has expanded its activities to the remaining districts of Kolongo and Monimpé. Health education activities are concentrated in the areas of immunization, nutrition, diarrhea disease control, maternal health, hygiene and sanitation. The supplemental USAID/Mali funding enabled the project to expand its original health interventions to include family planning in the form of birth spacing, malaria prevention and village health worker (VHW) training. CARE-Austria funding supports primarily EPI activities.

MCHP interventions are complemented by activities in three other CARE/Macina projects. The current co-working relationship with the Macina Wells Project is such that as it constructs wide diameter wells, MCHP staff intervene in the same villages to provide supportive health education activities. All but two of the MCHP target villages have wide diameter wells. The Agricultural Development in Drought Zones Project (ADDZ) works in 16 MCHP target villages developing family gardens and village-level agro-forestry. The newest project, the Macina Literacy Initiative, was originally a pilot component of the health project. Currently, it has its own source of funding and operates in 11 villages but gives priority to MCHP villages.

Several important changes have taken place in the original design and subsequent implementation of MCHP during Phase II. The first major change was a refocusing of the health education messages. A decision was made to limit the number of health themes and topics to be presented in a given health education session and to limit the number of health topics to be covered during the first year of project activity in a new village. Based on past experiences, introductory health education foci include vaccination, diarrheal disease control and hygiene and village sanitation.

Second, there was a redefinition and clarification of the sustainability strategy to include a two-fold phasing process for village development. Using a 10-level scale with knowledge and practice criteria, villages were classified as either "training" or "maintenance" phase. The focus and intensity of project activities vary according to the advancement status of the villages. For those in the training phase, emphasis is placed on knowledge acquisition in all of the key project areas. In maintenance phase villages, focus is placed on practice and development of village-based structures which can assume health activities after the departure of the project.

The third major change was the decision to include the installation, training and supervision of village health committees and workers to the overall project intervention. This is the major strategy used to foster sustainability of health promotion activities and serves a mechanism through which the project can phase out and transfer health education activities to project villages. The VHC initiative was developed in close collaboration with Macina Health Center under the auspices of a Dutch-financed Primary Health Care Project at the Regional Health Department. A formal, written agreement was prepared and signed by all parties involved.

Fourthly, under the USAID/Mali amendment funding, four additional objectives were added to the project:

-- To increase to 60% in 40 Phase I villages the number of families who know about one or more modern methods of family planning and where to locate family planning services;

-- To increase to 60% the number of families able to practice malaria prevention and management for themselves and their children in 80 project villages;

-- To enhance the potential of sustainability of project activities through the training of community supported village health works (VHWs) in 90 villages;

-- To increase to 70% the number of households which maintain a) a clean drinking water supply and b) improved sanitation practices.

2. DESCRIPTION OF EVALUATION METHODOLOGY

A three-member team was organized for the mid-term evaluation of the Macina Child Health Project. The evaluation occurred from April 6, 1992 to April 30, 1992 and assessed project implementation activities since September, 1990. The team was composed of the following individuals:

Dr. Idrissa MAIGA, DRSPAS/Segou
Dr. Erna MANOUCOUR, Team leader, External Consultant
Mrs. Pauline BAUTE, Sociologist, Local Consultant

As such, the team was balanced in terms of expertise and perspective. It included an American who resides outside Mali but is familiar with the country, a Malian who represents the Ministry of Health at the regional level and a Dutch expatriate who resides in the region.

2.1 General Purpose

The purpose of this midterm evaluation was to assess MCHP operations during the first 18 months of its Phase II funding and offer suggestions for improvement or modification which could guide the remaining project activity. The team was primarily guided by the terms of reference developed by CARE (see Appendix A). In keeping with the scope of work, the evaluators focused their attention on four dimensions of the project: 1) planning and design, 2) implementation strategies and results by intervention component, 3) sustainability and 4) project monitoring and evaluation mechanisms. Two new interventions which are in the design stage, birth spacing and malaria were also investigated.

Another aim of this evaluation exercise was to assess the extent to which major recommendations noted in the 1989 Final Evaluation Report of Phase I operations of the project had been addressed in the design and execution of Phase II interventions. Accordingly, this investigation focused on seven suggestions made by the previous Phase I evaluators:

- 1) Development of a malaria control intervention
- 2) Continuation of EPI support
- 3) CDD activities should be shared throughout Circle through Macina Health Center
- 4) Development of a birth spacing/family planning component
- 5) Encouragement of village-based structures and mechanisms for community mobilization
- 6) More effective collaboration between MCHP and the Macina Circle Health Center and local MOPH personnel
- 7) Support for village health worker training.

Second, the evaluation also sought to address some issues raised in the technical review of the CSVI Detailed Implementation Plan (DIP). Since the project already responded to the technical review, the evaluators only focused on the issues or questions which either remained unresolved or need further clarification. These include:

- a- Immunization: joint plan with MOH to achieve 90% goal
VHC capacity to affect dropout rates
- b- Nutrition: measures to determine behavior change
impact of nutritional messages
Vitamin A participation by project
nutrition and migration issues
- c- Prevention of High Risk Births: introduction of
modern family planning methods
- d- Malaria: development of prevention strategies
- e- Human Resources: periodicity of supervisory visits
and health sessions during project period
- f- Health Information System - mechanisms for feedback
to beneficiaries, staff, collaborators etc.

To aid the reader, evaluation findings which respond to questions raised during the DIP technical review are referenced in the appropriate section of the report.

2.2 Evaluation Strategy

The evaluation strategy was based on qualitative research methods. Data collection included project document reviews, in-depth interviews with national, regional and local health personnel, project staff, collaborating agencies as well as field visits to villages in the project's targeted areas. All evaluation data was collected in a ten-day period.

2.2.1 Project Document Reviews

A variety of project documents were made available to the evaluation team (see Appendix B). To expedite the review process, reading assignments were divided among team members according to their interest and areas of technical expertise.

2.2.2 Individual and Group Interviews

The majority of in-depth interviews in Macina were conducted with the full evaluation team present. In order to conduct all interviews in a limited time period, the evaluation team divided and individually conducted village visits and interviews with the project's health promoters and local district health officials.

To ensure evaluation consistency and discussion focus, interview guides were developed for each level of the investigation (national, regional, local). Copies of the guides can be found in Appendix C. On the average, interview sessions ranged from one-

half hour to one hour in duration. A list of all appointments made is found in Appendix D.

2.2.3. Field Visits

The evaluation team felt strongly that discussions with villagers, as project beneficiaries, should be an essential component of this evaluation. Time limitations and geographical accessibility limited team visits to twenty-four (24) villages over a seven-day period (see Appendix E). Project administrators and supervisors greatly assisted in suggesting village selection criteria and arranging the field visits.

A stratified random technique was used to assure that the interview sample was representative. Villages were selected after stratifying the total project villages along two major criteria: a) village progress status and b) geographical location (district). As such, the evaluation team visited villages in all five districts served by the project. Other factors were taken under consideration as secondary criteria in village selection. They were 1) the presence of Village Health Committees (VHC), 2) Child-to-child Diploma activities and 3) collaborative activities with the Adult Literacy, Wells and Agriculture (ADDZ) Projects. Characteristics of the village are summarized in the table below:

Comparison of Evaluation Sample with Project Targets

	Evaluation Sample	Project Targets Fiscal Year 1992
Total villages	24	94 (93 + 1 hamlet)
Training Phase	12	57
Maintenance Phase	12	35
VHC	9	26
VHW	5	52
Child-to-child Diploma	3	12
Wells Project (past & current)	24	92
Project ADDZ (current)	11	40
Adult Literacy (current)	7	11

Upon arrival in project villages, the evaluators arranged meetings with village chiefs and their advisors, village health committees and village health workers (where applicable), available village men and women, in some instances, children. To overcome language differences and communication obstacles, project field staff were available to translate the evaluators' questions into Bambara, the local language.

2.3 Evaluation Constraints

Upon reading this report and its findings, the reader should be aware of several constraints or limitations encountered by the

evaluation team. Although CARE provided French and English versions of most documents, some critical ones were only available in English. As a result, one team member was prevented from taking full advantage of all the materials available. Secondly, the time period was not sufficient for conducting a quantitative assessment of knowledge and practice levels. Therefore, results reported in this document are qualitative in nature and based on field observations and village self-reports.

2.4 Organization of the Evaluation Report

The final document was prepared by the team leader based upon written input from other evaluation team members. To expedite the writing process, each member had lead responsibility for writing draft versions of the following report sections:

- a. Malaria Control, Project Information System and Expanded Program for Immunization, Program Planning and Design, Malaria Control and Project Collaboration (MAIGA)
- b. Nutrition, Maternal Health, Birth Spacing and Child-to-child, Birth Spacing, Program Management and Personnel and Evaluation Methodology (MANONCOURT)
- c. Water Hygiene and Sanitation, Diarrheal Disease Control, Village Health Committee and Health Worker Training and Sustainability Strategies (SALTET).

Chapters in this report are organized such that a situational overview of each intervention is presented; field observations are summarized; and a discussion section presents project accomplishments and highlights its strengths and weaknesses. Overall conclusions concerning the project and recommendations as well as a "Lessons Learned" are summarized in the final three chapters.

3. FINDINGS AND DISCUSSION

3.1 Planning and Design

3.1.1 Project Design

Findings

MOHP's approach to reducing rates of child morbidity and mortality is preventive. On the village level the project aims for behavioral change by educating residents about vaccination, hygiene and sanitation, diarrheal disease control, maternal health, nutrition, and malaria control. Secondly, as a means of assuring sustainability and durability of health practices, the project also promotes organization building. The choice of this approach has been influenced by national health policies, the current level of Ministry of Health activity in Macina Circle and Health Promoter capabilities. Since 1990, the educational approach consists of two different intervention phases:

1. Training Phase. This start-up phase involves basic health education training for women, men, and children. It is aimed at changing behavioral patterns and introducing new health and hygiene practices.

2. Stabilization Phase. This second phase emphasizes practice by building on the knowledge and skills acquired by villagers in the first phase. It has two major components: a) identifying individuals who could serve as potential health educators and monitors of project activities and b) forming a Health Committee composed of community residents who have shown an interest during the first phase and will be ultimately responsible for assuming village health care activities.

Discussion

The educational approach seems to be, in design, very interesting and fosters the development of a relatively simple monitoring system. At the moment of this evaluation, 30 villages were classified "maintenance phase villages". Of the remaining 58 villages, 27 had been in the training phase for two years or more. This appears to be an unusually long period given the level and quantity of knowledge which is to be reached. Even project personnel estimate that two years are sufficient to reach the maintenance phase level. Reasons for this long training phase duration have not yet been sufficiently studied to provide insights into developing a corrective strategy or refining the educational approaches. There is some indication that if the pace of educational attainment is too slow, community interest is diminished. This

is reflected in field personnel's concern that community participation is difficult to maintain. The choice of MCHP villages is a joint selection effort with the Wells project staff. However, the Regional Health Director indicated that Ministry of Health (MOH) priority health indicators were not sufficiently weighed against population criteria used by the Wells project in village selection. In his point of view there are small villages who do not meet the population criterion but would be a priority intervention site given its present health needs.

Project activities which support the public health sector are limited in scope, primarily focused on logistical support for the immunization program. Other system-oriented interventions that MCHP will entertain are not clearly defined. The present health system does not have sufficient personnel and physical resources to meet the increased demand that is generated by project health promotion activities. As such, health personnel expressed a desire for more project involvement in logistics and providing basic curative services. System-oriented interventions that are directly related to service accessibility deserve project consideration.

CARE policy that prohibits project health promoters from providing curative services was cited as a problem by project field staff and reiterated by both villagers and government health officials. Although this policy was the result of a written agreement demanded by the Ministry of Health, the wisdom of this approach is now doubted in light of the lack of available health personnel in the rural areas. Given their level of technical training, the field staff are concerned that they are not allowed to provide emergency care or simple curative services (e.g. injections, assist in child birth deliveries etc). Since the original agreement is up for renewal, it is an opportune time for project management staff and CARE administrators to review their prevention only position and study the positive and negative consequences of providing curative services on a limited basis.

It is the evaluation team's perception that the project has reached its maximum staff-village ratio.

3.1.2 Program Objectives

Findings

Based on the first interim evaluation report, MCHP modified its original objectives to read as follows:

1 - To increase and maintain at 80% the number of children under one who are completely immunized through regular, permanent immunization sites in five districts in Macina Circle;

2 - To increase to and maintain at 90% the number of women between the ages of 15 and 45 who have received complete tetanus toxoid (TT) coverage through regular, permanent immunization sites in five districts in Macina;

3 - To ensure that an adequate infrastructure is in place for the Government of Mali (GOM) to continue Expanded Program for Immunization (EPI) activities throughout Phase II of the Project and in the post-project period. The necessary material and equipment will be available and the GOM personnel will be fully trained;

4 - To increase to 50% the number of adults who can state the importance of EPI for women and children;

5 - To increase to 80% in 60 Phase I villages and 60% in 30 Phase II villages the number of women who practice effective management of diarrheal disease for their children under two;

6 - To increase to 75% in 60 Phase I villages and 60% in 30 Phase II villages the number of women who use local resources to practice improved nutritional management for themselves and their children under two;

7 - To increase to 75% in 60 Phase I villages and 60% in 30 Phase II villages the number of women who practice improved pregnancy management and safe birth practices;

Later given a project decision to target children as another conduit for promoting attitude and behavior regarding health promotion and disease prevention, another objective was added:

8 - To increase to 70% the number of children between the ages of 6 and 14 years who recognize the importance of immunization, participate in village clean-up activities and promote better nutrition.

Under the USAID/Mali grant amendment, four additional objectives were added:

9 - To increase to 60% in 40 Phase I villages the number of families who know about one or more modern methods of family planning and where to locate family planning services;

10 - To increase to 60% the number of families able to practice malaria prevention and management for themselves and their children in 90 project villages;

11 - To enhance the potential of sustainability of project activities through the training of community supported village health works (VHWs) in 90 villages;

12 - To increase to 70% the number of households which maintain a) a clean drinking water supply and b) improved sanitation practices.

All the above objectives, with the exception of # 3 (EPI) and # 12 (Hygiene and Sanitation), are presented in the DIP, the only life-of-project document which brings together activities from all sources. In the light of ongoing project activity in both EPI and Hygiene and Sanitation, it appears that these omissions were unintentional.

Discussion

Nutrition

A review of the nutritional indicators used by the project reveal that there are not enough benchmarks identified for specific learning that is appropriate to this component. For example, one indicator is "number of women with a good knowledge of nutrition"; but "good" is only defined as "70% of mothers who cite correct weaning practices." This could be expanded to include indicators that reflect knowledge of balanced diets, actual preparation etc. Home visits are considered to be an important support for the nutrition intervention, but information concerning the number of home visits devoted to this topic is not collected on a systematic basis.

At the present time, no specific nutrition questions are included on the Fiche de Supervision. Although found in HP health education plans, the intermediate learning objectives associated with nutrition behavior change are not clearly identified with associated indicators. As such it is unclear, exactly what decision process is used to determine that a village has progressed from one level to another. For example, is there a certain percentage of sessions in which participants must have met the learning objective criteria? Is this attainment required in more than one group -- men or women?

Hygiene and Sanitation

In the proposal and DIP no objectives are found for this component even though it has been and continues to be a high priority project activity. It is surprising that the first and only mention of a specific intervention objective is located in the Grant amendment proposal document submitted to USAID/Mali. Indicators used to measure village advancement in this component need to be expanded and will be developed in conjunction with the Wells project.

Village Health Worker (VHW)

No specific objective is established for village health committees (VHC). In contrast, a VHW objective is proposed in the Grant Amendment proposal document. It is reported that 360 villagers will be trained as village health workers. Taking into account that 50 villages are programmed, this means that approximately four residents in each project village will be trained during the project period. Actual practice reveals that a minimum of six persons are solicited per village. The major criterion used to monitor progress on this objective is the number of trained VHWs. VHW indicators should be expanded to include the number of trained and functioning individuals, the type and number of prevention and curative services provided, the number of supervisory visits etc.

Birth Spacing

More concrete objectives have recently been established through the assistance of the CARE/Mali Population Coordinator (refer to Section 3.3.6). The new focus appears to be more feasible in that it limits intervention to fifteen project villages (both training and maintenance phase) and expands project services to the central towns of each district. Specific indicators were not yet developed at the time of this evaluation nor had the proposed implementation strategy been officially accepted by the project.

Malaria

The objective appears to be very general. At present this component has not been developed and consequently, no behavioral indicators have been identified.

Diarrhea Disease Control, Immunization and Maternal Health

The objectives for these components are straight-forward. The indicators used are appropriate for monitoring progress.

Child-to-child

Although child-to-child activities have become an integral aspect of the overall implementation strategy, no specific information concerning the numbers of children participating in project activities is collected. This underlines the fact that no specific indicators have been established for this component. Behavioral expectations in terms of knowledge and practice are not clearly delineated for children in the areas of nutrition, hygiene and sanitation and immunization. Without indicators, the project is not able to effectively monitor progress and impact in this intervention.

RECOMMENDATIONS

1. The project should consider setting time parameters in their educational approach, by indicating how long period a village may be classified as "training" or "maintenance" phase. Accordingly, long delays in either phase could be studied to determine intervention adaptations which may be necessary.

2. As the project adds new villages, staff should expand their selection criteria to sufficiently reflect priority health indicators. This would involve closer discussions with Macina Health Center personnel in terms of identified health priorities which are also consistent with MCHP's funding mandate.

3. The project should explore the possibility of providing technical/training support to the Macina public health structure. This might include financing short-term training for Macina Health Center staff or assisting in the renovation of the Circle's maternity.

4. Indicators for all project objectives need to be reviewed and expanded or modified to better reflect health promotion activities and project field realities.

3.2 Human Resources

3.2.1 Personnel

Findings

The project has a simple organizational structure (see appendix F). This is a modification from earlier project documents. Present personnel is composed of twenty full-time professionals and two support staff. In terms of senior management, staff includes the project manager, field coordinator and three supervisors. Their administrative work is also complemented by the presence of a project assistant.

Fifteen staff members are health promoters (HP) who are responsible for providing community health education activities in 93 villages and one hamlet. On the average, the HPs each monitor and conduct activities in 4 to 7 villages. The actual number depends upon village status. In practice, HPs are assigned 4 to 7 training phase villages or 9 maintenance phase villages. Project policy is that only experienced HPs are now assigned to maintenance phase villages.

DISCUSSION

Detailed job descriptions which clearly delineate lines of authority and responsibility for the professional technical positions are available. In light of staff size and the nature of the project, the delegation of responsibility and authority is appropriate and represents implementation realities.

Present staff skills and credentials appear appropriate to their specific job tasks and responsibilities. Both the project manager and field coordinator have appropriate public health experience and related academic degrees. All health promoters and first-line supervisors have basic training as either nurses or mid-wives.

Given the nature of the project and its size, there is limited advancement opportunity. However, the project is commended for its internal job search efforts to fill the new positions of "field coordinator" and "project assistant". The final result was that a former HP was promoted to the administrative assistant position and the coordinator was an external hire.

Staff turnover is relatively high. Both senior managers have been with the project less than one year. Only five professional staff (three supervisors and two HPs) have been working in the project since its inception. Nearly 50% (7 out of 15) of the health promoters were hired during the current funding period. Field visits revealed that some villages have had at least three or four different individuals. This raises a question about the effect that loss of intervention momentum and lack of project field staff continuity could have on the sustainability of project activities and community motivation.

With the exception of the project manager and field coordinator, all professional staff are employed on 10-month seasonal contracts which include an additional one month paid leave. It should be noted, however, that in recognition of program planning needs and ongoing service provided by the three supervisors, efforts are underway to offer them full-year, determinate contracts.

The predominance of seasonal contracts means that no project field activity occurs during the months of July and August. Although the decision to select this type of contractual arrangement was originally based on a) lack of villager availability during planting and harvesting season and b) village inaccessibility during the rainy season, it has led to some discontent among project staff and uneasiness concerning job security. When staff was questioned about motivational incentives provided by the project, evaluators were repeatedly informed by HPs and supervisors that the present contracts are a deterrent. It was suggested that this discontent (often disguised as personal reasons for quitting) contributed significantly to the high rate of job resignations. It is unclear what type of impact staff turnover

has had on village advancement. The team did note that villages which had remained in the training phase for a significant period of time have had a large number of different HPs with which they worked over the past few years.

3.2.2 Project Supervision

Findings

A decentralized supervisory system has been initiated to monitor staff performance and activity progress. On the whole, the supervisory system is extremely functional and results in a maximum span of control of one direct-line supervisor per five staff members. On a day-to-day basis, the project manager has direct supervisory responsibility for two staff members, and the field coordinator oversees three field supervisors, who are responsible for supervising four to six health promoters, depending on district distribution.

Daily supervisory field visits are programmed by the supervisors such that over a 6-week period, each HP will be monitored at least once in each of her assigned villages. Both the field coordinator and project manager also make field visits, generally programmed 4 or 5 times per month, other obligations permitting. At an administrative level, the project manager is in constant contact with the Bamako office. She receives bimonthly visits from the Assistant Country Director who technically backstops MCHP and quarterly visits by the Country Director who also has technical expertise in public health.

Discussion

The CARE/Bamako office support provided to the Project Manager appears to be quite good. Regular visits from organizational directors as well as CARE regional technical advisors (RTA), are an ongoing source of technical assistance for the project.

A positive working relationship between project administrative and field staff was noted by the mid-term evaluation team. Personnel felt, in general, that the supervision was adequate and responded to their professional development needs. Communication between project staff at the village level and the supervisors allows for the feedback of information.

HPs spoke highly of the supervisory visits as well as their usefulness and the appropriateness of their frequency. The project has developed a supervision manual and guidelines which outline performance indicators and provide a structured format for constructive criticism and performance evaluation.

Although supervisors assume direct responsibility for this task, both the project manager and field coordinator provide periodic monitoring/supervisory visits as well.

The programming of supervisory field visits is such that supervisors are expected to be in the field six days per week. This leaves relatively no time for them to reflect and plan on a routine basis. Time conflicts became more apparent as supervisors received increased responsibility in overall program planning and design. If the project continues its policy of increasing supervisor involvement in program planning and design activities, the frequency of supervisory visits need to be readjusted.

3.2.3 Staff Development

Findings

Staff training is a major, on-going component of the project. In addition to project-sponsored training activities, individual staff members are sent to external events (conferences, seminars etc.) and are expected to train (learning transfer) their colleagues.

Refresher training is offered every September when HPs return from their vacations. Three weeks are devoted to techniques and methods of rural health education as well as technical information. One week training was given in the GRAAP method of community-based education. The HPs also participated in a three-day nutrition and Vitamin A workshop organized by the Helen Keller Institute and the Academy for Educational Development. Under the auspices of the CARE Literacy Project, they were also trained in reading and writing Bambara. In preparation for a new project initiative, the HPs are also being trained in family planning methods.

At each monthly meeting, time is set aside for training in 1) new or modified health education techniques, 2) technical areas such as malaria control, malnutrition, maternal health etc., and/or 3) problem areas encountered in the field. As such, HPs are encouraged to review special interest topics which they can present to their colleagues.

Discussion

The evaluation team is encouraged by the range and depth of the training provided to staff. Internal training wherein supervisors and local MOH personnel serve as facilitators and trainers is frequent. The decision to send different HPs to various training opportunities reinforces the training of trainers approach being promoted by the project.

One area of concern is the computerized information system training. Both the field coordinator and administrative assistant have received informal in-house training in either data entry and/or data manipulation using the DBASE III program. However, their lack of formal training in this software and other related computer programs restrict the type of analyses and reports that can be generated.

RECOMMENDATIONS

1. CARE Administration should review its ten month contract policy in light of its potential negative impact on project activities. A more in-depth investigation of health project personnel resignations would help in clarifying the issues and provide insight into potential solutions. Additionally, it might also be useful to determine if differences in knowledge level and practice can be found between villages with low and high HP turnover.

2. Given current personnel resources and workload, village expansion is not suggested unless the project phases out of some of its existing target areas or increases the number of HPs. In any case, MCHP staff need to review all possible options.

3. Project should consider reducing the frequency of supervisory visits if supervisor responsibilities in program planning and design continue to increase.

4. Project is also encouraged to explore the possibility of decentralizing the meeting process and holding district level (small group) supervisory meetings. This might be one way to reduce the amount of supervisor travel to individual villages but still respond to HP needs.

5. Given increasing data analysis needs and reporting requirements, more formal training should be provided in the areas of database construction (DBASE III) and statistical testing (EPIINFO). Personnel targetted for this training should be the Field Coordinator and the Administrative Assistant.

6. Refresher Bambara literacy course should be considered in the next three week staff training program. This would serve as a complement to the initial training received by health promoters.

3.3 Implementation

3.3.1 Nutrition

Findings

The general focus of this intervention targets children less than five years of age, with specific attention to those who are less than two years. The project has opted for a malnutrition prevention rather than growth monitoring approach to nutrition education. As such, the Middle Upper Area Countermeasures (MUC) measure is the primary technical resource being used. Educational messages have emphasized balanced meals, the problems and signs of malnutrition, nutritional needs of children of weaning age and children suffering from diarrhea, malaria or malnutrition as well as the nutritional needs of pregnant and lactating women.

Excluding villages newly enrolled in the project, these messages are presented on a regular basis to target audiences of men and women, separately. In collaboration with ADDZ project personnel, HPs also participate in culinary demonstrations which integrate the introduction of new foods and nutritional advice.

To foster community involvement, the HPs have organized and trained village nutrition teams to assist them in the following activities:

- . conducting nutrition education and demonstration sessions
- . conducting bi-annual malnutrition detection activities;
- . providing intensified nutritional counseling and education through home visits as a malnutrition detection follow-up; and
- . referring severely malnourished cases to the nearest health facility.

Interviews and Field Observations

Field observations by the evaluation team revealed that village mothers have a basic understanding of important weaning practices and foods. Knowledge about basic nutrition and healthy foods was not as easily confirmed; in some villages, pregnant and lactating women seem to be cognizant of appropriate foods to meet their nutritional needs. It should also be noted that men were identified as a target group for nutrition education. In most villages, there was recognition among villagers that without an adequate water supply, the assurance of nutritional crops would be difficult.

The arm circumference measure seems to be highly effective in assisting villagers to recognize malnutrition. When questioned, mothers and village nutrition committee members could correctly explain significance of each MUAC color level and the appropriate nutritional advice. In terms of practice, several team members actually observed the actual measurement correctly being done by a village nutrition team member.

Among the HPs interviewed, nutrition was identified as a key, but the most difficult component to implement and realize concrete behavior changes. Particular problems cited were the repetitiveness of the educational messages and lack of ongoing practice. The former complaint tended to surface in maintenance villages and those who have been in the training phase for two years or more.

Discussion

- Nutrition Education Messages

According to recent monthly reports, nutrition education is one of the three most common project activities. A decision was made by the project during its current year of operation to phase in nutrition education sessions in new villages after their initial campaign period. This seems a logical approach which allows building upon previous knowledge and experience and not overloading the topics to be covered at any one time. At the present time, children are not exposed to nutrition messages. This seems to be a missed opportunity in that simple messages could be tailored to a child's understanding (e.g. preparation of enriched porridges).

Involvement with the nutritional baseline survey conducted by the Academy for Educational Development (AED) led the project to refocus this intervention to a malnutrition detection approach. As noted earlier, this change seems to have increased villagers' perception and understanding of malnutrition, especially as it relates to MUAC. On the other hand, there does not appear to be enough attention placed on positively reinforcing mothers whose children have good nutritional status or discussing barriers to maintaining balanced, nutritious diets and related problem-solving strategies. When questioned, HPs indicated that they cover such issues but it doesn't appear to be a programmed, systematic basis.

There is a clear concern about the sameness and repetitiveness of the nutrition messages as factors contributing to community lack of interest or participation, especially in villages that have been in the project since 1987. Taking this into account, project managers have been

proactive in expanding the repertoire of messages and appropriate communication strategies. For example, under the auspices of the Nutrition Communication Project, staff has been trained in new flip chart presentation techniques, and the project will send selected staff members to a follow-up workshop on communication techniques involving radio diffusion (to be held in May, 1992).

Further study is needed to determine the extent to which message monotony really exists and/or its potential causes. Although the project presently charts number of health talks on nutrition, no information is available on number of home visits devoted to this subject nor the frequency pattern of specific messages covered. For example, out of 20 talks on nutrition over a campaign period, it would be helpful to know: how many were directed on malnutrition signs? balanced diets? preparation of enriched porridge? Over what period of time? for what groups? timing and frequency of nutritional demonstrations?

One concern raised in the DIF Technical Review comments was a lack of health messages directed toward nutrition and migration. This evaluation team noted that there are seasonal periods when access to agricultural products is limited and nutritional problems are aggravated in the target villages. Two trends were found: 1) there is an exodus of younger members seeking work in the cities in order to support village families with meager wages and 2) there is a migration of city dwellers to the villages when urban economic conditions are severe. At the present time, not enough is really known concerning the particular nutritional problems faced during this period. The evaluators felt this is an area that is more appropriately discussed with the National Nutrition Division in terms of the issues involved and potential strategies to be employed. Discussions with other child survival-oriented projects could be pursued to discuss the extent to which nutritional implications of migration and approaches being used to address these particular problems.

- Nutrition Data Collection

As part of a recent baseline survey of 16 villages in two new districts (Kolongo and Monimpe), information was collected on existing nutritional knowledge, attitudes and practices. It revealed that there is a high reported rate of progressive weaning, lack of knowledge about appropriate weaning age and foods and malnutrition causes. Despite the amount of nutrition KAP data collected, it is not clear how this information will be actually used in the design (targeting and structuring of health messages) and in tailoring the nutrition implementation activities in the new intervention districts. For example, will the nutrition education lessons in Kolongo and Monimpe be tailored to specific harmful knowledge or practices identified

in the survey? Since nutrition education sessions will not begin in these areas until the next campaign period, the project is in an unique position of being able to tailor or modify existing content of nutritional talks and demonstrations to reflect study findings. From an evaluation research perspective, there is also a potential to conduct a follow-up study to assess impact of adapted content or approach during the next project campaign.

In light of data on night blindness and bitot spots provided in the DIP, Technical Reviewers suggested that the level of Vitamin A deficiency in the project area should be determined and a Vitamin A policy needed to be defined. Although HPs address problems related to Vitamin A deficiency as part of general nutrition education, it does not appear to be an emphasis. No particular information is available on the number of sessions provided on this topic or extent to which it might be addressed in nutritional home visits.

Before the project undertakes more extensive work in this area, more information is needed. The evaluators concur with the Reviewers' suggestion that a VITAP consultant investigate the situation. Additionally, the team is aware that the Ministry of Health has been testing several different approaches to address the problem of Vitamin A deficiency. It seems worthwhile for the project to confer with the Nutrition Division and other health providers with respect to a Vitamin A policy before developing a specific strategy.

- Nutritional Home Visits

The addition of home visits with a nutritional counseling focus appears to be an appropriate strategy for detection follow-up and a potential mechanism for verifying the application of nutritional messages. However, two particular issues are raised. First, the format and content of the nutritional counseling sessions needs to be reviewed. The advantage of home visits is their ability to facilitate individualized problem-solving on nutritional obstacles in respective households. However, it was the evaluators' perception that these sessions only targetted mothers with malnourished children and were often a repetition of already existing nutrition education lessons rather than counseling sessions. To be more effective, they would be expanded to include the development of household-specific action plans wherein the tasks and activities to be accomplished by mothers are agreed upon and subsequently monitored by the Village Nutrition Team.

Secondly, the decision to limit home visits to malnourished children needs to be reconsidered. Home visits provide a unique opportunity to address health and nutrition

observing nutritional practices in the home and posing questions concerning food consumption over a specified period of time. By expanding visits to include families where children are not ill or malnourished, HPs and village health teams could gain more insight into what is actually done and obtain more in-depth information about obstacles and constraints faced by individual families. By programming home visits as a distinct nutrition activity (preferably timed during meal preparation and infant feeding periods), a behavior checklist including food consumption recall could be developed and used to guide the counseling session.

- Village Nutrition Teams

Where organized, the village nutrition committees seemed highly functional. Members appeared to be interested in their work and extremely active in nutrition education sessions and home visits. The decision to organize village nutrition committees and incorporate their work into nutritional activities deserves special mention. The process of shifting responsibility of the nutrition education sessions, home visits and demonstration to committee members under the supervision of HP fosters the self-help approach inherent in health promotion and disease prevention.

RECOMMENDATIONS

1. Project staff should document how current KAP survey findings in the districts of Kolongo and Monimpe will be used in planning future nutrition activities and designing/tailoring specific nutrition education lessons. Exploring the possibility of seeking additional funds to conduct follow-up nutrition KAP study in these districts is encouraged. Such information would allow the project to document in a concrete manner any changes that occurred.

2. Project staff should periodically review material supports and educational materials and tailor them to reflect specific target audiences such as male villagers and young children and village-specific nutritional needs.

3. The project should also explore the possibility of incorporating simple nutrition messages in Child-to-child program activities. These could focus on identifying locally available foods that are healthy and various combinations which produced balanced diet or introducing them to new foods (in areas where agricultural interventions exist through the ADDZ Project).

4. More emphasis on the counseling aspects of the nutritional home visits is needed. As such, a certain number of these visits should be programmed per village and

counted as one of the three activities required of all health promoters.

3.3.2 Expanded Program for Immunization (EPI)

Findings

In the EPI Maintenance Phase which began in December 1990, immunization targets were redefined to focus on children less than 2 years of age as well as women of procreating age. Present MCHP activities in this component is in the form of logistic support and financing. In terms of transportation, the project furnishes 10 light motorcycles (2 per district), gasoline, and parts for the Ministry's advanced mobile strategy teams, and fuel to maintain the EPI cold chain. A vehicle is also made available to MHC personnel to conduct monthly supervisory visits.

In project villages, HPs conduct several activities in support of the overall immunization effort. First, educational sessions that stress the importance of vaccination for young children and women of procreating age are organized regularly as group meetings or individual home visits. Secondly, they register all village births as well as vaccinations received and provide immunization advice as needed.

Interviews and Field Observations

Both villagers and Macina Health officials were found to be in agreement concerning the positive impact of the vaccination component of the project. According to Regional Health Department statistics, Macina Circle had one of the highest rates of immunization coverage in Mali, and this was attributed to MCHP intervention activities.

In all the villages visited during the evaluation, it was noted that immunization was most often cited by rural women and men as the key indicator of improved health. The evaluators were repeatedly told that villages had experienced a significant decrease in neonatal tetanus, measles, whooping cough and other childhood disease because of the activities of the HP. When questions were asked about theoretical knowledge related to vaccinations, it was interesting to see men, women and young children list the six childhood immunizable diseases and type of vaccination needed. In many instances, mothers brought their immunization cards to the evaluation interviews to ask HP to either verify the record or to confirm the next visit/vaccination needed.

EPI Coverage and KAP Survey Results

A survey of vaccination coverage, mothers' knowledge about immunization and an assessment of EPI operations was conducted in Macina Circle in May 1992 under the auspices of

the DRSPAS in Ségou. A full description of survey findings are found in the report in Appendix H.

According to survey results, the coverage rates of fully immunized EPI target groups can be summarized in the table below:

Table: EPI Immunization Rates by Target Group and Project Status (completely and correctly vaccinated)

Target Group	MCHP	Non-project
Children		
12 to 23 months	35.58%	23.22%
24 to 35	51.18%	33.49%
36 to 71	71.11%	63.85%
Women of procreating age	82.01%	62.56%

The DRSPAS vaccination evaluation team found that the overall coverage for children, between the ages 12 and 23 months, who are fully (completely and correctly) immunized is weak and not at a satisfactory level. Findings did indicate that immunization rates for this age group are higher in project villages than in which MCHP is not involved. However, the regularity of immunizations was the same in both types of villages.

It was also determined that the coverage rate of children who are fully immunized is higher among children of 24 to 35 months than the previously mentioned age group. Immunization coverage rates by vaccine are appreciable for first vaccinations and were more evident in the project villages. Unfortunately, the abandonment rate was elevated in both project and non-project villages.

The highest immunization coverage rates were discovered among children who range in age from 36 to 71 months, but the risk of the target EPI diseases is the greatest in this age group. This is in direct contrast to younger age groups where rates are the lowest but the risk is the greatest.

The coverage rate of tetanus toxoid immunizations for pregnant women was found to be higher in project villages than non-project villages. The percentage of fully immunized women (TT2) was found to be 82.01% in project and 62.56% non project villages.

In terms of the KAP survey, findings showed that mothers, regardless of project status, evidenced a poor understanding of the EPI target diseases and the purpose of the

vaccination calendar (less than 25% could cite all target diseases as well as the calendar.) On the other hand, their knowledge of immunization secondary effects and the vaccination card was relatively high (over 50%) in all villages. There was a decided difference in understanding with respect to the target population for tetanus toxoid vaccinations. Mothers in MCHP villagers had more knowledge (73.57%) than their counterparts in non-project villages. Results reflect that the majority of village mothers have insufficient knowledge about immunization especially in the villages not served by MCHP. It was also found that the principal causes of no or incomplete vaccinations were: 1) lack of information, 2) travel by mother and child, and 3) discontinued use of mobile immunization teams for follow-up shots etc.

In terms of the vaccination strategy being used, villages covered by fixed immunization centers and the advanced strategy had better coverage rates in project than non-project villages. With respect to EPI operations, the problems found were disquieting and reflected: 1) a lack of respect for the norms of vaccines conservation, 2) poor document storage, 3) the lack of certain supports, 4) incomplete maintenance of the sites and logistics. The efficiency calculations demonstrated an average approximate vaccination cost of 5280 FCFA (\$20) during the 1990-92 period per completely and correctly vaccinated child.

Discussion

The evaluators noted that USAID-Washington review comments on the DIP seem to imply that the 80% coverage rate may be unrealistic. A member of the mid-term evaluation team who works as an epidemiologist at the Regional Health Department confirmed that this rate is realizable if one takes into account the redefined national target groups: children less than 2 years with a special focus on those less than 1 year of age. It should be noted that members of the vaccination coverage team acknowledged that the principal objective of attaining and maintaining a vaccination coverage rate of 80% is very ambitious. Although it has not yet been reached, they felt that the present results are encouraging. In fact, the findings indicate that current coverage rates for the older age groups (14-15 and 24-31 months, respectively) are not far from meeting national objectives. Nevertheless, more effort is needed to accelerate the immunization of village children less than 24 months of age.

The level of cooperation and collaboration between MCHP and local immunization officials has been exemplary. According to the present agreement, project support to the Macina Health Center for EPI activities is scheduled to end shortly.

Negotiations have been underway between Ministry officials and UNICEF who would assume the charges with the understanding that subsequent vaccination services will be assured by health personnel at the Circle and district levels. Although both parties have agreed in principle, no funding has actually been forthcoming. Until such monies are received, it is unclear how the regional health department and health center officials could maintain their present level of effort without project support.

Village Health Committees serve as a potential resource that could continue the vaccination mobilization efforts and educational sessions under the supervision of the HFs. However, at the present time VHUs have only been trained in nine villages and are too new to take full charge of such activities.

Based upon responses to open-ended, group interview questions, the mid-term evaluators were impressed by villagers positive attitudes toward and theoretical knowledge about immunization. Analysis of KAP survey results show a definite pattern in which knowledge levels are generally higher in MCHP versus non-project villages. This is consistent with the higher coverage rates found in the MCHP villages and the perception among villagers and district health officials that immunization-seeking behavior was high.

The data also reveals that there is a fairly high dropout rate between immunizations (more severe in non-project villages). This phenomenon is especially reflected in the very low rates of fully immunized children who are less than 2 years of age. As such, particular attention needs to be focused around stated reasons for noncompliance. Changes in the EPI vaccination strategy may also be a contributing factor to the low rate. For example, one might be able to explain the high rate of fully immunized children in the older age group by the fact that many probably received their vaccinations during the period when the mobile strategy teams were still active. Obstacles such as long distances to fixed centers and lack of reliable transportation for mothers and children combined with the termination of mobile strategy teams to remote areas have probably had an inhibiting influence on current immunization participation and follow-up.

Given the present EPI strategy of fixed immunization centers accompanied by advanced strategy activities, physical sites which are well equipped and operated efficiently are essential to the attainment of the EPI objectives. The vaccination evaluation team's findings concerning center operations and procedures are disturbing and suggest that a continued MCHP role in supporting EPI activities in Macina Circle is needed.

RECOMMENDATIONS

1. Project staff should review and expand EPI educational materials (such as posters, pamphlets) that can be handed out to mothers and audiotape cassette recordings that could be used in group listening sessions.

2. MCHP is encouraged to explore the possibility of sponsoring selected training programs for health personnel in vaccine conservation and document storage procedures.

3. Given the volume and variety of EPI educational materials and messages developed in the project, MCHP staff is encouraged to share them with local public health and welfare personnel for use in disseminating the same messages in non-project villages.

4. As a means of continuing the momentum of EPI activities in Macina Circle and trend toward realization of the immunization objectives, MCHP logistical support for EPI activities should be continued to include updated immunization materials and ongoing light motorcycles maintenance.

5. MCHP is also encouraged to continue to explore the use of other channels of communication such as religious and traditional authorities and schools for disseminating EPI messages.

6. Parallel to MCHP activities to support EPI objectives, local public health officials need to more proactive in

- * seeking financial support for the expansion and renovation of fixed immunization center sites
- * providing refresher training to center personnel in the conservation of vaccines and the maintenance and storage of immunization records
- * exploring mechanisms to improve immunization follow-up after the first year of childhood vaccinations.

3.3.3 Diarrheal Disease Control

Findings

This component is one of the first three interventions introduced in all project villages and an integral aspect of the Child-to-child program. Health messages address the following key issues: a) the causes, definition of and dangers of diarrhea, b) signs of dehydration, c) prevention and treatment of diarrhea, and d) rehydration and use of the Sugar

Salt Solution (SSS). To ensure that intervention activities were up-to-date and appropriate, HPs received refresher training in 1990 by a representative of the National Program for Diarrheal Disease Control.

Different techniques are used to transmit these messages including health talks, demonstrations, stories, flip charts, songs and GRAAP methods. In practice, intervention success is closely linked to hygiene and village sanitation activities as well as nutritional home visits. During the educational sessions, HPs emphasize the relationship between a clean water and food supply and the prevention of diarrheal diseases. Secondly, home visits also serve as an opportunity to follow-up on diarrhea cases and monitor SSS preparation and nutrition provided to sick children.

Interviews and Field Observations

Visits in the village showed a high level of knowledge on the different aspects of diarrhea. Men and women were able to recite the steps in making SSS and seem to understand that it was not a medicine against diarrhea. In all the villages visited, educational sessions on diarrhea were often cited as events to which most attended. It was most impressive to hear village chiefs explaining how to make the solution and watching children actually mix SSS. The use of songs to aid in the learning of SSS was observed among children and women.

In almost all visits, villagers perceived that one of the major health improvements since the arrival of the HP was the reduction in the number of diarrheal cases. Although statistic information was not available, medical staff at the district health posts had also the impression that the incidence and prevalence of diarrhea had indeed decreased. All reported seeing a lower amount of childhood diarrhea as a presenting complaint among patients who resided in the project villages.

Interestingly, Village Health Committee members did not mention follow-up on diarrheal activities as one of their tasks. It appears that the HP continues to assume this as a primary responsibility.

Discussion

This is one of the project's more popular interventions. Given the reported use of SSS, the approach of the project in using very simple messages and techniques seems justified. The evaluators were pleased to note that recent monthly reports correlated diarrhea cases with educational activity statistics as a means of determining health impact. This type of analysis is to be encouraged and will be especially useful in detecting major incidence fluctuations and their potential causes.

Nevertheless, more attention could be placed on documenting actual behavior and not relying on self reports. Home visits provide a good opportunity to observe the actual preparation of and use of SSS and whether or not appropriate foods are given to sick children. By noting potential problems encountered by mothers, HPs and the nutritional teams could provide personalized advice and suggestions. This information could also be useful in identifying reasons for non-utilization and formulating new strategies, as needed.

RECOMMENDATION

No specific recommendations.

3.3.4 Hygiene and Sanitation

Findings

Hygiene and village sanitation is also one of the first health education topics introduced in all project villages. On the premise that progress in hygiene and sanitation is linked to access to good water quality, intervention activities are closely tied to those of the Macina Wells Project. Under an inter-project agreement, MCHP selects villages in which wide-diameter wells have been installed, and initial activities focus on water sanitation.

Using non-formal education techniques, the HPs provide health education sessions that cover the following subjects: a) water-related diseases, b) water treatment by filtering and the use of chlorine, c) personal hygiene and d) disposal of wastes, water and excrement. For the most part, the same communication techniques used in the diarrhea component are used to transmit hygiene messages. Other HP activities involve the establishment of village sanitation teams who are responsible for a) maintaining village hygiene activities and b) developing an operational structure for well maintenance.

Interviews and Field Observations

With respect to village knowledge level, this project component seems to be no problem. Villagers are able to explain the importance of hygiene and sanitation and know how to maintain it. Evaluators noted that, in general, the areas surrounding the wells were remarkably clean: stagnant water was rarely observed. Additionally, it was found that fines (established by the community) were levied against individuals who entered the well surrounding with their shoes. This was perceived as a negative reinforcer in keeping the well area clean. In most villages, one man had been designated as the well manager and was responsible for chlorinating it. Actual chlorination intervals varied from two weeks to three months,

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depending on the village. The team observed that each family had its own water buckets which were used to fetch water and was responsible for their upkeep. Although pulley hooks had been constructed with the wells, they were usually not used, and often one or both were missing.

Villages visited by the evaluators tended to be clean, swept and had weeds removed. Most villagers declared that they held weekly village sanitation days. These clean-up days are the responsibility of the young (children and teenagers) and/or the women in the village.

When investigating the practice of treating water in the household, the team discovered two patterns. Filtering seems to be a commonly practiced habit as reported by the villagers. In contrast, adding chlorine to household drinking water is not systematically done. Major constraints cited by villagers are chlorine costs and availability (in some areas).

Perceptions of changes in health status were varied. As mentioned earlier, villagers were convinced that diarrheal disease as well as poliomyelitis had diminished since project inception. In some villages, it was also noted that guinea worm infections were reduced. These changes were often attributed to cleanliness and hygienic precautions which are now observed in the rural communities. Despite this positive outlook, group interviews also revealed that other water-related diseases such as bilharziasis, cercarial dermatitis and malaria are still prevalent.

Discussion

A considerable amount of project time is dedicated to this component; yet in most key project documents no explicit objective for the sanitation component is found. The section is the USAID/WHO Grant Agreement. It is remarkable that no specific activities are mentioned in the Phase II project proposal nor are they addressed in the file. This is ironic given activities undertaken. For example during the last month of February, HFs documented that 51 health sessions were held on this theme. At the same time, village sanitation days are identified as one of the very tangible activities in which villagers participate. This lack of documentation, on paper, suggests that these activities have evolved without a clear plan of action guiding the intervention and reflects a conceptual under-estimation of its significance. Without a clearly stated objective, the purpose of this intervention remains speculative.

The results of educational activities on hygiene and sanitation are obvious. Project villages are reported to be

significantly cleaner than others not served by HFs, and villagers associate diminution of water-related diseases to improved hygienic measures. From a scientific perspective, improved water quantity and quality provided by the Wells Project as well as EPI interventions (poliomyelitis) are also contributing factors to health improvement. Therefore, it is difficult to determine how much of this change can be directly attributed to community health education.

Evaluators found that the sustainability of hygiene practices was difficult to judge. It was noted that in some villages where the HF had been absent for a significant period of time, village clean-up days seemed to have stopped, whereas filtering water for household consumption was often seen, chlorination was less prevalent. This is probably due to economic considerations rather than just lack of interest.

Although general knowledge level about the benefits of personal and village hygiene is good, the MCHP could look more into why knowledge is not being uniformly practiced on an individual level. This information could be solicited through focus groups. It would be helpful, as well, if villagers received more feedback (concrete information) about the impact of their hygienic measures on actual health status for young children and their mothers. Simple research could be done whereby villagers were involved in evaluating the effects of intervention activities on behavior and health status. If perceptions of decreases in hygiene-related diseases are confirmed in a scientific manner, this information could serve as a motivating influence in perpetuating positive hygiene practices.

Given ongoing hygiene-related illnesses, it seems appropriate that the project consider expanding component activities to address unmet needs. By incorporating a problem-solving-approach into their education activities, HFs could tailor their interventions to respond to such problems as dermatosis among children and other problems.

From the evaluators' perspective, an important source of well pollution is probably introduced by the inappropriate use of the water buckets. The staff would be advised to pay special attention to the proper use of water buckets and overall well maintenance in the prevention of pollution and ultimately diseases during their health education sessions. Other general field experiences have shown that changing villager habits with respect to proper maintenance and utilization of water buckets is difficult. Therefore, education emphasis should focus on a problem-solving approach which identifies obstacles to desired behavior and ways to resolve them. It would be desirable to have collaboration with the well project staff in this activity.

RECOMMENDATIONS

1. MCHP should add the sanitation objective stated in the USAID/Mali Grant Amendment to the overall project objectives and include well maintenance as another component. All elements need to be made operational.

2. Hygiene messages should be expanded to reflect the prevention of water-related diseases that are prevalent in project villages. Although these diseases vary according to each village community, the evaluators noted that both dermatosis and bilharziosis are perceived problems that could be addressed by the project.

3. The elaboration of the wells maintenance component should be continued in collaboration with the Wells Project. Special attention should be placed on improved use of water buckets as a health promotion activity.

3.3.5 Prevention of High Risk Births/Maternal Health

Findings

Current educational messages center around the following themes:

- . safety measures for pregnant women
- . delivery preparations
- . hygienic delivery techniques and practices
- . importance of prenatal and postnatal care/visits
- . high risk deliveries.

Besides conducting education sessions on maternal health issues which target female and male audiences, the project is involved in training Traditional Birth Attendants. As such, it proposes to train 250 TBA in hygienic delivery practices and pregnancy problem detection through its collaboration with a bilateral Dutch project (PHC). At the time of this evaluation, approximately 13 TBAs had been formally trained by the Macina Health Center under the auspices of the bilateral Dutch project. In addition to education activities and delivery services, they also provide pre and post natal consultations. As such, they are supervised by the PHC and Health Center personnel.

In villages where VHCs have not yet been established, HPs conduct health education sessions for untrained TBAs and villagers in hygiene issues related to pregnancy and childbirth. Under a new project philosophy, village men and young male adolescents have been identified as a secondary target group for maternal health talks.

Since the inception of the project, HPs have maintained

documentation on every delivery in their villages. Using a questionnaire, they note date of birth and ask mothers about their preparations: use of sterile razor, clean sheets and alcohol and prenatal practice: number of Tetanus Toxoid immunizations and prenatal check-ups. In cases where a TBA assisted in the delivery, she is asked about the methods which were used.

Interviews and Field Observations

In all villages, women readily discussed the importance of prenatal visits and often explained necessary hygienic conditions and procedures during childbirth delivery. The message of using clean materials and giving birth in a clean environment seems to have made an impact. Some village women also talked precautions to be taken during the pregnancy itself (resting, not lifting heavy loads etc.) Many reported that since the arrival of the HPs and this information, they had noticed more visits to local health clinic for prenatal consultations, an increased number of births occurring in the village since the TBAs were functioning at a higher level than before.

In villages where untrained TBAs exist, a request was often made for supplies. Although hygienic awareness was present, the lack of adequate simple supplies, such as alcohol posed a problem.

In one village, an evaluation team member met with young men who discussed the importance of proper care for women during pregnancy and childbirth. Other evaluators reported that village men sometimes reported attending sessions wherein this subject was also discussed.

When questioned about actual practice, women reported increased use of project recommended actions such as clean delivery area, use of sterile materials etc. Additionally, district health post directors confirmed the increased frequency of prenatal consultations by women who lived in project target villages. They also noted an improved health status in the pregnant women.

Discussion

The team was impressed by the knowledge level concerning maternal health issues. Women often made the association between a healthy mother and a healthy child. The project is also commended on its efforts in introducing topics to village men and youth. The evaluators feel that a better appreciation of maternal health issues among male members of the village is an important reinforcing factor in the actual practice of preventing high risk births. If men understand the importance

of prenatal care visits, the needs of pregnant women and the necessity of clean materials during delivery, they are more likely to offer less resistance to actions which their wives might need to take.

Despite the apparent success of this component, the evaluators concur with findings in the Final Evaluation Report of 1989. To avoid message repetitiveness and monotony, especially in villages where the project has been active since 1987, it is important that the educational messages are expanded to include other aspects of maternal health. The project's decision to phase in maternal health messages in new project villages is a sound one. This evades overloading villagers with a variety of messages at any one time.

RECOMMENDATIONS

1. The project is strongly urged to continue sensitizing the villagers to the importance of financing and contributing to the establishment of TBA kits with minimum supplies such as cotton, razor blades and alcohol. The PHC needs to be more proactive in making these kits available with minimum delay after the VHW training has been completed.

2. Educational messages should be expanded to include other maternal health topics such as:

- . gynecological infections and problems of sterility
- . adolescent pregnancy issues (< 14 years)
- . the importance of gynecological examinations.

This additional information would further complement current maternal health messages and should be offered on a programmed, systematic basis.

3. The project is encouraged to strengthen its educational sessions on maternal health which target men by offering them on a more systematic basis and tailoring the content to focus on their role as a support to women during periods of pregnancy and childbirth.

3.3.6 Prevention of High Risk Births/Birth Spacing

Findings

In accordance with the DIP technical review, the project undertook the design of a specific birth-spacing intervention during the period of the mid-term evaluation. Led by CARE/Mali's Population Coordinator, the above-mentioned objectives were developed in consultation with personnel at the Madina Health Center and project staff. The preliminary

design of this component occurred during the period of the mid-term evaluation.

Objectives:

- 1) *To enable project and health center staff to effectively explain: the concept of birth spacing
different contraceptive methods
advantages and disadvantages of different methods
contraindications and secondary side effects*
- 2) *To increase the number of families in project villages*
 - . *Bring to 60% the number of families who are aware of one or more contraceptive methods and/or who use birth spacing services*
 - . *Bring to 10% the number of couples of procreating age who correctly use effective birth spacing methods*
 - . *Bring to 50% the number of couples who seek birth spacing information at local health centers*
 - . *Bring to 75% of the number of men and women between the ages of 14 and 45 years who are capable of correctly citing three advantages of birth spacing*
 - . *Bring to 70% of the population who are capable of correctly citing three modern contraceptive methods*
 - . *Make contraceptive products available and accessible.*

The intervention is designed to target both men and women between the ages of 14 and 45 years of age and will be focused in 15 project villages, Macina and the 4 other district capitals (Sare, Tolone, Sarro and Nonimbe).

Although specific activities and educational messages are in the process of being developed, broad intervention strategies had been identified. These include:

- 1) technical training of project staff and local health personnel
- 2) IEC activities directed toward village health workers (TEAs)
- 3) introduction of messages related to birth spacing and sexually transmitted diseases
- 4) establishment of an adequate management system for contraceptive products
- 5) monitoring and ongoing evaluation
- 6) development of a system of data collection and analysis to monitor the progress and impact

Prior to implementing birth spacing activities, a baseline KAP survey will be scheduled in May, 1992 in 30 project villages. To ensure a representative sample, 6 villages were selected in each district and 3% of the population per village will be randomly sampled. A minimum of 500 respondents is anticipated.

Interviews and Field Observations

HPs reported that there was an interest on the part of village women and men for information on family planning methods. During evaluation team visits, women in several villages expressed this need. Although no direct question was asked on this subject, it was often volunteered after posing the question "how else could the project be of help to you?"

Discussion

Under the proposed birth spacing document, initial technical training would be sought from AMPPF and the project would sponsor two participants (1 HP and 1 midwife from the Macina Health Center). These individuals would then be expected to train other project members and necessary government health personnel (training of trainers approach). In light of the project's past history of staff turnover and the ongoing possibility of government health personnel being transferred, the proposed number of sponsored participants seems insufficient. To ensure adequate in-house expertise, a minimum of 4 individuals should be sent for the initial training. Additionally, more information is needed on the final number of individuals who will receive technical training in this area. Besides project HPs, it is not clear if the project will assure technical training for government personnel in district health posts.

The objectives of this intervention seem well-planned and clear in terms of knowledge and behavior changes to be accomplished. It is important that preliminary project activities are designed as soon as possible. Additionally, close attention should be paid to behavior indicators that will be used to track progress.

The decision to conduct a baseline survey prior to activity implementation is a sound one. However, survey findings should serve as the basis for finalizing the content and strategy of the birth spacing intervention. It has two distinct advantages: a) intervention objectives can be reviewed and adjusted, if necessary, in light of study findings and b) the development of educational messages can be tailored to address knowledge misconceptions, prohibiting attitudes and practice deficiencies that have been identified in the target population. Adequate planning has been taken to

1) develop, pretest and modify a questionnaire and 2) train HPs as interviewers with an emphasis on potential problems, Bambara translation etc. Although a minimum of two people will be involved in analyzing and interpreting the data, more attention is needed on defining the analytical framework and specifying the statistical methods that will be used. The decision to use a team approach in analyzing the data is important.

Ideally, the team should be composed such that both "insider" and "outsider" perspectives are involved in the data interpretation.

RECOMMENDATIONS

1. Project should commence educational activities on birth spacing no later than September, 1992. This would ensure sufficient time to analyze the KAP data and develop concrete, educational messages and strategies over the summer.

2. To ensure practical application of survey results in developing interventions, it is imperative that the field coordinator is involved in the analysis of the KAP survey data. His full appreciation for the complexities of the data and possible interpretations would be a useful perspective combined with the day-to-day realities of intervening in the target area.

3. To complement the initial TBA training, the PHC (in collaboration with MCHP) should consider providing follow-up training and/or ongoing supervision to VHWs on family planning methods etc.

3.3.7 Malaria Control

Findings

This component is still in the planning stage. To date, activity has centered around making primary contact with a local malaria expert and soliciting technical and educational materials on the subject.

Interviews and Field Observations

The evaluation team consistently found that when villagers were asked to identify priority health problems, malaria was one illness commonly mentioned. In the Bambara language "sumaya" refers to simple malaria and "kono" refers to a severe form of the disease; both are well-known in the target villages. Team members observed that in the majority of villages visited knowledge levels concerning the prevention and treatment of malaria were highly variable. For the most part, malaria treatment appears to be based on traditional

remedies as opposed to using chloroquine. Other medical methods are only considered when the traditional approach does not work.

In maintenance phase villages which have both active VHCs and VHWs, the villagers seem to have a basic understanding level of preventive measures. In terms of malaria treatment, first-aid workers reported that they tend to give chloroquine and aspirin tablets to any patient with a presenting case of fever.

In contrast, the evaluators found that residents in training villages had a more limited awareness of preventive measures. Traditional treatment (teas made from herbs and bush leaves) are more often given in simple cases of malaria "sumaya" in these villages than in maintenance phase villages. In severe cases of malaria, villagers in both type of villages would evacuate the sick person to the closest health facility.

It is also noted that in some maintenance villages, chloroquine and aspirin are stocked in the first-aid kit ("boite de pharmacie"). The evaluators discovered that the malaria prophylaxis for pregnant women and children under two years was done in selected maintenance phase villages but not systematically.

Discussion

The evaluators took note of the DIP technical review comments concerning chloroquine resistance in Mali. According to the Malian epidemiologist who served on the team, the problem is not one of resistance but rather a) inadequate dosage and/or b) inappropriate compliance with the malaria prophylaxis and therapeutic regimen. According to him, the general accepted treatment in case of fever (suspected malaria) is aspirin and the WHO recommended chloroquine treatment.

Despite no formal project activities in malaria prevention, project field staff have begun to include discussions on preventive measures that an individual (sleeping under a mosquito net) and group (village hygiene and sanitation) can implement against malaria. In villages with VHWs, the health promoter also encourages collaboration between them and traditional health care practitioner. This approach fosters a collaborative approach to preventing and treating malaria using both scientific (WHO) standards and culturally-based medical care.

Given the perceived need in the villages, the team is concerned that no concrete action has taken place to develop a malaria prevention component. To assist in this process, the

Given the perceived need in the villages, the team is concerned that no concrete action has taken place to develop a malaria prevention component. To assist in this process, the team proposes a preliminary intervention strategy which can be found in Appendix G.

RECOMMENDATIONS

1. Project accomplishments in this component will be heavily influenced by medicine availability (chloroquine etc.) which will be supplied by the PHC as an essential drug component. As such, implementation of this intervention should be closely coordinated with PHC activity in providing Village Promoters training.

2. MCHP is urged to reinforce the efforts of the Adult Literacy Project to accelerate literacy training for women and youth. This is a means of facilitating villager involvement in managing project activities, particularly in the area of malaria prevention.

3. The design and development of a malaria implementation strategy in the shortest time possible is needed. To ensure continuity, local health center personnel should be involved in the planning process. In addition, specific, measurable learning objectives should be established to guide the intervention process. Suggested topics include:

- . individual and collective preventive measures
- . malaria treatment
- . groups at risk.

3.3.8 Child-to-child Component

Findings

This intervention was added to the initial project design as a result of previous project observations that children were attending adult health education lessons and an awareness that in the rural setting, an older child is often responsible for younger child care when the mothers are in the fields.

Each health promoter is required to conduct three health education activities per village visit of which one is usually reserved for Child-focused activities. Educational messages for the Child-to-child component emphasize three major themes: the importance of immunization, prevention of diarrhea and SSS preparation, general hygiene and village sanitation by way of community clean-up.

Child-to-child health diploma program was introduced in twelve villages. Its intent was to test the motivational impact of awarding diplomas to villages where children demonstrated required knowledge in three intervention areas: vaccination, diarrheal disease control, and hygiene and sanitation.

Interviews and Field Observations

When questioned about the appropriateness of health education sessions which target children, village men and women were practically unanimous in their support of this type of intervention. Comments were often made that teaching children about health today would have long-term effects since children are a key resource in village clean-up day activities and often have primary responsibility for sweeping communal areas and aiding the HPs in mobilize mothers during vaccination periods.

HPs interviewed in the field were unanimous in their support of this intervention as an effective strategy to both impart health information and to generate community interest and willingness to participate.

Discussion

This component has great promise and appears to be the most personally rewarding and stimulating for project personnel and villagers, alike. The present style of this intervention seems to be well-received by villagers and deserves continuation. However, it needs formalizing in the sense of clearly defining concrete actions desired and preparing child-specific messages.

Whereas the evaluation team was impressed by the overwhelming positive response to this type of educational activities, a question is raised with respect to the actual learning objectives and desired behavior sought from children. Upon reviewing the animation plans for these sessions, the content and objectives seemed exactly the same as those used in adult community health education sessions. There was a distinct difference in the educational methods used, however. For the most part, child-to-child sessions were more active and incorporated a variety of techniques such as singing, dancing etc. Secondly, it is not clear what exactly is expected of children after they have learned their messages: what concrete actions can be proposed for a child to complete at home, with siblings, or peers or families? Several discussions indicated that sometimes where children were given homework assignments, these might be adapted to include practice activities.

At the present time, children oriented sessions are limited to three main subject areas. Although nutrition is mentioned in the objective, this topic is not presented. Project documents indicated that there was difficulty transmitting such nutrition messages to children, but did not elaborate on the causes. Since the Project participates in the Nutrition Communication Project activities through the National Center of Information, Education and Communication, it has potential access to new or revised nutrition education materials which could be adapted to meet child learning needs. Given the scope of health problems in the village, educational content could be expanded to include other topics such as caring for sores and simple cuts or bruises.

Project documents mention proposed activities such as sponsoring a "Children's day" and developing Children Health Committees. Neither have been implemented to date, but deserve further study in terms of their feasibility and sustainability implications.

Child-to-child activities are occurring in all target villages, and the evaluation team supports the project's decision to review the results and impact of the diploma strategy before expanding this approach in other project villages. Although the principle underlying the diploma strategy seems sound, it is important that the project explores the extent to which this motivational tool actually makes a difference in desired behavior change among children and their families. For example, initial results reveal that children in only three (3) of the villages had "graduation" ceremonies in which they received their diplomas. Some questions to be answered include: a) Are their health practices better than non-diploma villages? b) After the initial diploma for knowledge, should the next focus be practice or new knowledge areas?

RECOMMENDATIONS

1. Project staff should consider expanding the health messages to cover basic topics in nutrition, simple first-aid treatment and other health issues of interest to children.

2. The use of children's theater is another animation technique that might be explored. It can serve a dual purpose: a) conveying health ideas to adults using child actors and b) reinforcing children's understanding and behavior practice. This could be combined in a Children's Day special event.

3. Project staff is encouraged to continue to explore other motivational instruments that could be used in the child-to-child activities, such as preparing nutritional meals during a demonstration and serving them or awarding a packet of seeds.

3.4 Sustainability

3.4.1 Maintenance Phase Villages

Findings

Since 1990, the project has attempted to target its village activities according to a phasing process which guides the educational interventions. As such, project villages are divided into two major categories: Training Phase and Maintenance Phase. They are distinguished by their foci. In training phase villages, the emphasis is on knowledge acquisition and understanding. Initial health messages address issues related to vaccination, diarrheal disease control and hygiene and village sanitation. As a village progresses, additional health themes on nutrition and actions to prevent high risk births are introduced.

In maintenance phase villages, the institutionalization of desired health behavior practices in all the intervention areas is the primary focus. As such, HPs promote practical application of what has been learned and transfer of responsibility to villagers for their own health care and illness prevention. To facilitate long-term durability of project interventions, this second phase has two major components: a) identifying village residents who could serve as potential lay health educators and assist HPs in monitoring village health practices and b) forming Village Health Committees who have ultimate responsibility for assuming community health care activities. (NOTE: More detailed discussion of VHCs is found in the chapter which follows.)

Interviews and Field Observations

At the present time, 36 villages have been classified in the "maintenance" level, and an additional eighteen are programmed by the end of this current project campaign period. The actual determination of village advancement status is a joint decision between the respective HP and her supervisor. A graduated (ten-level) monitoring scale is used to rate village progress. These ratings are determined by quarterly (originally monthly) assessments of villager knowledge and practice levels. For this purpose, a question guide has been developed which addresses content in the key project intervention areas and is administered randomly.

When questioned specifically about their readiness to assume village-wide health care activities and education sessions, little difference was found between residents in training and maintenance phase villages. Most tended to respond that the villagers, themselves, had the capability and willingness to assume health activities and indicated specific individuals who had been or could be designated to assume such roles.

Discussion

The concept of tailoring educational activities and supervisory visits according to village advancement status seems sound. In keeping with the principle of skill and knowledge transfer, the project's priority during the maintenance phase is the promotion of increasing village responsibility. Consistent with this goal, HPs are involved in forming local resource groups such as the village nutrition and sanitation teams. These individuals are gradually involved in conducting educational sessions and home visits. The evaluators concur with project staff opinion that supervision and monitoring is especially crucial during this period, especially as the active educational role of the health promoter is reduced. It also seems appropriate that only experienced HPs are assigned to maintenance phase villages.

The average amount of time a village should be considered as "maintenance" is not known. Clearly, more information is needed on inhibiting factors which impede village advancement and transition to independence. This is an area which needs further discussion and reflection among project personnel. When questioned, field staff speculated that given the quantity and level of knowledge change and desired preventive behavior, a maximum of two years was sufficient for the training and maintenance phases, respectively. Project experience has revealed that among villages that were in the training phase for two years or more, there was the perception of increased risk of message redundancy and monotony and consequently, a lack of community interest. This raises the issue as to whether or not a time limit should be set on each phase and what approach should be taken when villages don't progress through phase levels.

The evaluators were concerned that the behavioral indicators in maintenance phase villages are not as well-defined as the knowledge indicators associated with the training phase. For the most part, the criteria indicate what village structures should be in place but not specific practices to be measured by the HPs. As a result, it is not clear what specific health-related behaviors are used to determine whether or not a village has moved from one maintenance level to another and/or is ready to "graduate" to self-autonomy status.

RECOMMENDATIONS

1. An alternate maintenance strategy for villages which are not programmed to have trained VHC/VHWS in the near future needs to be discussed. Project staff could build upon initial ideas which were formulated in the project proposal. For example, the TBAs seem to function quite well, even in villages without trained VHWS; perhaps they could be given priority for training. Also, more

accent could be placed on household interventions and existing formal and non-formal village organizations.

2. Criteria for the performance levels within the maintenance phase need to be more clearly written with specific behavioral indicators which can be used to assess village progress to self-autonomy.

3. Educational strategies associated with maintenance phase villages need to be reviewed with the intent of minimizing redundancy and monotony. More emphasis on the application of health practices given day-to-day realities would involve: a) adapting learning objective, b) providing feedback on the village level, c) incorporating problem-solving approaches and d) developing special messages for specific target groups.

4. Innovative ways to retain knowledge at the village level should be a priority for maintenance phase villages. In addition to working closely with the Adult Literacy Project, MCHP might explore the use of radio cassettes and simple written materials.

3.4.2 Village Health Committees (VHC)

Findings

According to project documents, the establishment of VHCs in twenty-one (21) villages is planned during Fiscal Year 1992. The functioning of this component is dependent upon intensive project collaboration with the Macina Health Center and the Dutch financed PHC project which operates under the auspices of the Regional Health Department. MCHP financially contributes to the creation, training and supervision of VHCs and village health workers (VHW) as well as training for public health personnel who work with VHCs and VHWs. Besides co-financing, the Project is involved in a more direct manner. Its field personnel are responsible for the day-to-day supervision and guidance provided to these village committees and their respective traditional birth attendants (TBA) and first-aid workers.

The present strategy is such that VHCs are only introduced and organized in villages which have reached a certain level of knowledge and have been classified as "maintenance phase". It is through this project component that a curative aspect of health care is added as a complement to ongoing prevention activities. Emphasis is placed on preparing VHCs so that villagers, themselves, (and not HPs) are empowered to provide simple medical care treatment and assume health prevention activities. Accordingly, all VHC members receive training in hygiene, village sanitation, nutrition and immunization. TBAs are provided additional technical training in maternal and infant health care; and the first-aid workers have technical training in non-formal education techniques,

diagnosing and treating minor illnesses, managing health post referrals and managing village pharmacy kits.

Project staff realize that villagers need basic reading and writing skills to ensure that these committees and health workers function effectively. Through collaboration with the CARE Adult Literacy Project, priority for intensive literacy courses is given to villages in which there are trained VHWs.

Interviews and Field Observations

Presently, VHCs have been organized and trained in nine project villages. Among these, only five have had their village health workers trained. Nevertheless, the PHC has also programmed additional VHW training before the current project year ends.

The concept of village health committees has been well-received by villagers, but the actual implementation has not been easy. VHC composition and choice of members is determined by each village. Inappropriate selections have already resulted in one village totally changing its committee members, and another considering the same action. Both HPs and PHC supervisors felt this problem surfaced because inadequate attention had been devoted to VHC selection criteria and processes. Another encountered difficulty has been the poor integration of local nutrition and sanitation teams within the larger health committee structure.

Although TBAs seem to be functioning rather well, difficulties have been noted among the first-aid workers. First, some trained first-aid workers are no longer available to their communities. One reason often cited was that the lack of financial remuneration and need to earn income has led first-aid workers to migrate out of their villages to seek work. Second, most first-aid workers encountered expressed more interest in selling medicines and the curative aspect of their work than their prevention activities. Among both groups of village health workers, there were continuing requests for village pharmacy kits and childbirth supplies which had been promised during their training.

Even in villages in which VHCs have not been established, evaluators found lay health workers, particularly traditional midwives, who were providing services. In these villages, HPs have identified local practitioners (i.e. midwives, traditional healers etc.) and other interested persons to assist them in the health education activities. Depending upon the village, one can find nutrition committees who are involved in malnutrition detection activities, sanitation committees who monitor environmental sanitation. It was made clear to the evaluation team that villager perception of their ability

to handle their own health needs was contingent of having trained, local residents. Consequently, these villages often requested training for their village health workers.

Discussion

It would be premature to judge which tasks a VHC could finally perform after project departure. At the moment too few VHCs are functional, and no village has reached the autonomy stage. There is some indication, however, that TBAs could continue their work after the HPs have left. Given the curative bias inherent among first-aid workers, it is not really certain that they would continue educational activities related to general health promotion and disease prevention.

Although MCHP has had the advantage having worked for a considerable period in VHC villages, staff have encountered the same problems experienced in other projects interested in establishing village health committees: committee instability, disappointments about remuneration, unrepresented community membership, resignations and under-utilization of other health team members. This suggests that more stress is needed on preparing villages for health committees. This does not mean simply prolonging the preparatory process but rather identifying potential inhibiting factors and seeking solutions. More explicitly, each village has its unique characteristics that need to be taken into consideration in forming and selecting VHC members, ranging from basic survival needs to the amount of technical support or supervision required. Experiences elsewhere have shown that when there is a clear integration into other traditional or modern village organizations, all are reinforced, and health committees are more stable. Applying this integration philosophy in project villages could be helpful in promoting long-term viability of village health committees. This is also relevant to project-sponsored sanitation and nutrition teams which are often under-utilized.

There is flexibility with respect to the quantity of members of the village health committee; but roles and associated training tend to be narrowly defined in terms of which tasks are attributed to whom. This is especially true for the organizer and first-aid worker responsibilities. In practice, their tasks overlap. For example, some first-aid workers only accomplish curative tasks and leave non-formal education (prevention) activities to the VHC organizers, who have not been trained in different educational and communication techniques. This suggests that non-formal education information in the first-aid worker training should also be made available to VHC organizers. This would also be a means of underlining the importance, often under-estimated, of prevention and community health education activities. Secondly, record-keeping is an important aspect of the first-aid worker's management of

pharmacy kits. Observation revealed that adequate records were not always maintained, and villagers often did not recognize the importance of this function. This is an area where both literacy and good record-keeping (not just how to? but why?) training is essential. If MCHP and PHC personnel consider this as an indispensable task of village health committees, more attention should be focused in this area.

The project approach of phasing in village health committees seems logical and builds upon the groundwork established by earlier interventions. In the Annual Implementation Plan document, personnel raised the possibility of introducing VHCs earlier in project villages (after the first year of project activities). This is another approach to gradually transfer HP responsibilities which merits further consideration. The major advantage is that more time would be available for individualized supervision and technical assistance to VHCs and village health workers during the transition period. It would also be useful if they could also determinate priorities in which program components would be emphasized given village realities.

The actual number of villages in which functioning VHCs are expected should be re-examined based upon project experience over the past year. Although improvement is expected, neither MCHP staff nor the PHC coordinator are very optimistic about their capacity to supervise all potential committees at their programmed rate. Because of a lack of sufficient organizational and human resources (both at the National Health Center and project), it is questionable whether VHCs will be established and operational in TI villages by June 1992 as anticipated and highly unlikely that all project villages could be covered before Phase II funding ends.

HPs plan village-level activities with members of either VHC, if existing, or other health teams such as the Nutrition committee, Sanitation etc. but it is not a formal process. No project results or data are provided as feedback in a systematic, periodic fashion nor do villagers appear to be involved in project planning activities. This is an area which has important sustainability implications and deserves more attention by the project.

RECOMMENDATIONS

1. MCHP needs to reconsider, according to its organizational potential, the number of villages for which it can guarantee selection, training and follow-up supervision of VHC/VHW. This involves re-examining jointly with the Primary Health Care project the feasibility of the projected strategy and pace for installing these committees.

2. PHC staff with MCHP assistance needs to re-examine the present approach to installing village health committees. More emphasis must be placed on the stage of sensitizing villagers to the concept of VHC and member selection. This entails using a very flexible approach to the composition of committee members as well as integrating already existing health teams and other traditional or modern organizations (such as Village Associations) in a more effective manner.

3. A separate training program for VHC organizers on non-formal education techniques should be considered by the Primary Health Care Project and MCHP staff.

4. The concept of village health committees should be introduced in villages after one year in the training phase. This would facilitate a slow organization building process coupled with a longer period (several years) of back-up assistance provided by the health promoters. One of the most difficult periods in VHC development is during the autonomy phase where unanticipated problems are often encountered. This proposed strategy would enable project staff to be available in a "consultant" capacity, offering suggestions and guidance as villages assumed total responsibility for health education and basic health care activities.

5. The necessity of the complicated bookkeeping system for medicine sales should be reviewed with the intent of simplifying this task.

3.4.3 Project Collaboration and Sustainability Issues

3.4.3.1 Ministry of Public Health, Social Affairs and the Promotion of Women

Findings

CARE/Mali, in general, and MCHP, in particular, work closely through government health structures at all levels. The project collaborates with four levels of the government health structure: national, regional, circle and district (5). At the national level, MCHP has developed a working relationship with National Center of Information, Education and Communication in the area of nutrition. Regionally, the Project Manager makes regular visits to update the Regional Health Department Director on project activities as well as forwarding monthly and quarterly reports.

Within Macina, staff confer with Health Center personnel in planning and evaluating a wide range of project activities. At the beginning of Phase II funding, a joint coordinating committee was established between the Macina Health Center (MHC), CARE and a bilateral Primary Health Care (PHC) project financed by The Royal Dutch Institute of the Tropics through the Regional Health Division. The PHC objectives are complementary to MCHP's as they stress the training of VHWs (First-aid workers and TBAs) and the distribution of essential medicine at the village level.

In two instances, MCHP services involve the co-financing of joint activities with the Health Center in the areas of vaccination and training village committees/workers. Additionally, under the auspices of the PHC, Health Center staff and project HPs jointly supervise the VHCs and VHWs.

At the district level, HPs are responsible for meeting periodically with their respective health post directors to apprise them of village health conditions and/or problems. This occurs in Sarro, Saye, Central, Monimpé and Kolongo.

Discussion

From all reports, project collaboration with the Malian officials has greatly improved during the Phase II funding period. Regional and local public health personnel feel that they are adequately involved in the planning, implementation and evaluation dimensions of the project. Most recently they have been closely involved in conceptualizing and designing two new project interventions: village health committee training and birth spacing component.

Issues still remain with respect to the type of collaboration, and support that MCHP should provide the Health Center. Local health officials continue to insist on the need for financial assistance in renovating the physical structure of the Macina Health Center (more specifically, the maternity) or in training health center personnel. They acknowledge that insufficient resources limit their ability to respond to increased demand for services that is generated from project activity. This is further complicated at the district levels where resources and personnel are even more restricted. From their perspective, the feasibility of sustaining project gains will only be possible if adequate government structures exist at the local level, and health services are both accessible and available.

3.4.3.2 Collaboration with other CARE/Macina Projects

Findings

MCHP's closest working relationship is with the Wells Project, and as such, its hygiene and sanitation intervention is linked very closely to the well construction. Prior experience led to the conclusion that this complementary arrangement had a more positive effect on better maintenance of the wells and helping villagers take better advantage of potable water. The present intervention strategy is designed so that health activities are only targetted to villages in which the Wells Project is operating. As a result, there only two villages where the two projects are not working together. This situation occurred when the MCHP moved into the village, and the Wells Project personnel later discovered that the village did not fit its construction criteria.

The Agricultural Development in Drought Zone (ADDZ) Project also operates in some of the MCHP target villages. Field agents collaborate through joint presentations in the area of nutrition. These take the form of nutrition and culinary demonstrations which incorporate produce recently introduced by ADDZ Project. Roles are divided so that ADDZ agents discuss the technical aspects of planting and harvesting; whereas the HP focuses on the preparation of nutritious meals using the produce.

The Adult Literacy Project is a recent CARE/Macina endeavor. It originally began as a small component of MCHP, but given the large demand and need, separate funding was found. In terms of sustainability of the Village Health Committees (VHC), literacy is considered to be a key predisposing factor. As such, it is planned that intensive literacy programs will be targetted in villages in which there are trained VHCs and village health workers. During its initial phase of operation, the Literacy Project projects involvement in 26 MCHP target villages. There is ongoing consultation between personnel of both projects in terms of identifying basic health literature in local language which can be distributed at the village level.

Discussion

To ensure that CARE projects are well-informed of each other's activities, needs and problems, monthly meetings are held in each project, and managers from sister projects are invited to make presentations. At the present time, joint program planning and implementation occurs between the MCHP and the Wells Project. The existing interrelationship has resulted in cost-sharing whereby the Wells Project pays salaries of several health personnel (3 HPs, 1 supervisor). As a result, MCHP expansion is tied into the Wells Project. Given that the amount of effort is different, it is questionable whether the health project should expand at the same rate as its counterpart given limited staff and financial resources.

It appeared that a similar level of collaboration does not exist with ADDZ despite the fact that nutrition is one of the largest health intervention areas. MCHP's newly formed relationship with the Literacy Project seems to be moving smoothly along, but is too young to assess. It should be noted, however, that MCHP's presence has influenced the placing of health materials in basic language in the literacy project-financed libraries. As the number of VHWs increase, it is anticipated that this relationship will become stronger.

RECOMMENDATIONS

1. The project is encouraged to continue its reciprocal working relationships with government health personnel.
2. It would be useful if the project could explore ways to strengthen its collaboration with Project ADDZ. Perhaps, more systematic programming could be explored.

3. Despite the basic operating principle for joint collaboration between the Wells and Health Projects, it is an opportune time to re-evaluate the "piggy-back" strategy that is being employed. Decisions must be made as to whether or not MCHP will expand at the same pace as the Wells Project, given its resources and the amount of effort expended on each intervention.

3.5 Monitoring and Evaluation

Findings

Project monitoring and evaluation is dependent on the Project Information System (PIS). No longer manual, the computerized information system became fully operational in the Spring, 1991. Despite the departure of the original programmer, a manual was developed which explains the system and skill transfer training was conducted with other project staff before he left. All collected data is entered and managed on the database using the computer software program DBASE3+. Computer hardware includes a Zenith SupersPort 286 and an Epson LX printer.

The field coordinator is responsible for the Project Information System which includes overall data quality control, data analysis and report writing. The administrative assistant is responsible for data entry and cross-checking raw data which has been compiled. The project's three supervisors screen all data collection submitted by the HFs for accuracy and are responsible for data compilation.

Project reporting occurs on a monthly, quarterly and annual basis. For internal monitoring purposes of the CARE organization, MCHP prepares monthly and quarterly reports. The monthly reports (French) are also distributed to local health officials, USAID/Bamako and other non-governmental organizations (NGO). Both the quarterly and annual reports respond to the respective reporting requirements of USAID/Washington and CARE/International. Internally, project personnel are updated on recent analyses or findings at monthly staff meetings. To facilitate data collection, a variety of forms have been developed and are described below.

Six different data sources are interfaced through the computerized database. Data analysis presently involves descriptive statistics such as central tendency and percentage calculations. The data collected below is the foundation of project monthly reports:

1. *Village Identity Record (Fiche d'Identité de Village (FIV))*

This is a village census record which provides baseline information on project village. It contains data on the social conditions, economic activities, ethnicity, accessibility to water and health care facilities.

2. Project Activity Level Record (Fiche d'indicateurs de niveau par activité, FINA).

This record registers the level of advancement for each village by intervention and is updated on a monthly basis by both the HP and her supervisor. Using a Likert scale of 1 to 10 ratings, villages are assessed on knowledge acquisition (Training Phase: Levels 1 to 5) and practice (Maintenance Phase: Levels 6 to 10).

3. Health Indicator Record (Fiche d'indicateurs sanitaires)

Information is collected monthly on the health status according to project intervention activities. Some examples are: number of cases of diarrhea in the past two weeks, type of treatment applied, frequency of village clean-up days, disinfection of the large-diameter well, malnutrition detection results, tests on levels of knowledge and practice, etc.

4. Expanded Program for Immunization (EPI Record (Fiche PEV))

This record tracks immunizations received among the target population in each village. The HPs record all new births and review immunization cards to note type of vaccine received and date. This data is useful in the vaccination coverage surveys sponsored by the Regional Health Department.

5. Health Promoter Activity Record (Fiche d'activités des monitrices, FAM)

This form provides summary information on specific activities in terms of number of intervention activities and level of community participation (number of participants). Data is compiled on a monthly basis.

6. Pregnancy and Childbirth Hygiene Record (Fiche pour l'Hygiène de la Grossesse et de l'Accouchement, FHGA)

This form is filled out monthly per village and registers information concerning recent deliveries (childbirth conditions, maternal vaccination etc.)

Interviews and Field Observations

The Project Manager maintains contact with USAID, other NGOs and Malian counterparts and keeps all parties apprised of project activities. Project collaborators in the Malian government stated that the project reports were timely and adequate. As such, they felt that they were more than adequately informed of activity progress on a systematic basis. Direct, ongoing personal communication by the project manager was identified by all interviewed as a decided project strength.

In the field, the evaluators inspected different records maintained by the HPs and found them to be up-to-date. The field staff also stressed that the monthly meetings and supervisory visits were two mechanisms used to keep them informed.

Nevertheless, HPs expressed interest in receiving individual copies of the monthly report with follow-up visits from the Field Coordinator to discuss the interpretation of the results.

Discussion

The computerized database provides the project with the capacity to collect and manipulate large amounts of project data. The team was pleasantly surprised with the actual amount of quantitative information that is being collected on a regular basis. However, computerization seems to have fostered the collection of numerous data without a clear plan as "to who needs what type information". Given the volume of data collected, it is not surprising to note that it doesn't always seem to be used in a concrete manner for program planning purposes. In a recent visit by the Regional Technical Advisor for Health, it was noted that FIV data was collected but not being used. When the evaluators sought to confirm this observation, they found that once FIV data is collected, it is not routinely analyzed in the system. Whereas HPs maintain village files, there is little or no systematic use of the information to either tailor educational messages or plan specific village strategies.

On the other hand, some data which would be useful tracking information is not collected. For example, the HPs report the number of health education sessions given monthly and attendance levels per health intervention topic on the FINA; but information about the participants is missing. In terms of tracking project benchmarks and the diffusion of various health messages, it would be useful to know: a) "how many participants are the same individuals returning again and again?" b) "are different individuals showing up for different topics?" c) "how often is a particular message repeated over the course of yearly campaign?"

Upon reviewing the computerized database file, it was observed that the present structure does not always lend itself to data manipulation and analysis needed by the project. To be specific, DBase 3+ is limited in the amount of statistical analysis it can provide. Additionally, variables that the project would like to analyze can not be accessed through the database due to the present computer programming. This problem is compounded by the fact that although the Field Coordinator has had some basic (informal) training in DBase 3+, his knowledge is not sufficient to reprogram the database system.

Macina Health Center staff found the project reports to be of good quality; but there was also the perception that not enough health indicator data was presented. Given the Center's need to document epidemiological indicators such as disease prevalence and project access to this information at the village level, a desire was expressed that this type of data (e.g. number of cases of diarrhea, number of cases of malaria etc.) could be expanded in the monthly report.

The evaluation team also found that most of the project reports tend to be administrative in nature. For example, the quarterly and annual implementation reports describe program activities, strategies and problems encountered but don't address progress on intermediate goal achievement in a quantitative manner. The project has access to this type of information given data collected on the Health Indicator Record (e.g. number or percent of villages in which participants correctly cited the preparation of SSS during the health education session). In the monthly report, project activity data is compared and analyzed quantitatively to reflect trends and patterns as they related to selected health indicators. It also presents the information in a concise manner using charts and graphs. This effort needs expansion and inclusion to the larger reports.

The evaluators noted that the distribution of project data and information is punctual and systematic between the project and its collaborators. The one area of need is information dissemination to project beneficiaries. At the present time, no formal mechanism has been established to inform villagers of project activities, data results or lessons learned. If the project's intent is promoting village autonomy, it is important that project beneficiaries, especially villages with Village Health Committees benefit from the body of knowledge that is gathered by the project.

Additionally, plans are now underway to distribute copies of monthly reports to the HPs, rather than limiting information dissemination to oral presentations at monthly staff meetings. Distributing reports to staff is only a first step. It will also be necessary to assist them in interpreting the results and finding ways in which they can use the data to enhance their field activities and transmit the findings to the villagers.

RECOMMENDATIONS

1. Project should explore the addition of the statistical software program EPIINFO, which is compatible to DBASE 3+, to its information system. This program would permit different types of statistical analyses in the form of cross-tabulations.

2. Project staff should review its information needs (for the project, funding agency and local health officials) with the intent of streamlining the data collection and focusing data analysis. This would eliminate information that is unnecessary and allow for the concentration on the collection of more important data.

3. Where possible, the project should consider expanding its monthly report to include more statistically analyzed results with respect to project indicators and benchmarks. A mechanism for providing periodic reports to project villages should also be explored. This could include meetings with VHCs, other health teams and/or community members wherein health promoters present project findings.

4. Given that the supervisors play an important role in the data collection and verification process, the project should consider providing them with a brief training on the PIS so that they would have a better appreciation for its capability. Additionally, they should have some basic training in how to interpret the data and findings given their day-to-day role in conveying this information to the HPs.

4. GENERAL CONCLUSIONS

4.1 Results

The project is well conceived and executed. During the current funding period, MCHP has undertaken major efforts to improve its educational approach and implementation strategy: This includes developing criteria for classifying target villages, training the health promoters in up-to-date communication methods and techniques, streamlining data collection and implementing a computerized information system which can provide regular, reliable feedback.

From all indications, project interventions have had a positive impact on the health status of rural residents. This perception was confirmed by villager self-reports and assessments of the target population by local health care professionals. According to them, the project has been most successful with the immunization component (refer to section 3.3.2). Repeated mention was made concerning the reduction of diseases such as measles, whooping cough and other childhood, immunizable diseases and the improved health status of children less than 5 years of age. Data presented in the vaccination coverage survey report reveals that MCHP villages fared better than non-project villages. The former have higher childhood immunization coverage rates, and the mothers are more knowledgeable about the importance of vaccination.

For some practices such as SSS preparation, immunization and TBA activities, the impact is very clear and tangible for villagers. As such, the behaviors being promoted are "incidental" in that one "gives a new medicine (SSS)" in the case of diarrhea or "goes periodically" for immunizations. In project records, there is suitable information to document behavior change. Other practices such as chlorinating drinking water, conducting village sanitation days and maintaining good nutrition habits occur but are harder to maintain. This is due to two factors: the desired behaviors require changing common daily habits and provide less immediately attributable results.

Villager knowledge for the major intervention areas appears to be high, especially with respect to hygiene and sanitation and diarrheal disease control. In fact, it is in these domains that improved health behavior practices have been most noted and documented. Village women appear to understand the importance of good maternal health care and good nutrition; but actual, ongoing practice is not consistently applied. According to the quantitative KAP survey findings, the understanding of immunization by mothers in project villages is not as high or widespread as seemed indicated by the qualitative methods of the mid-term evaluation. In fact, there are mixed results which are confusing to interpret. For example, mothers in project villages expressed a lower than expected knowledge of EPI target diseases and the vaccination

calendar. However, their knowledge of immunization cards, vaccination side effects as well as the appropriate target group for tetanus toxoid immunizations was high.

An unintended, positive consequence of MCHP intervention which deserves special mention is the interest of village men in health education activities. By conducting educational sessions and demonstrations with men, the project field staff have stimulated male involvement in family health care problem-solving and decision-making. This approach plus the initiation of child-to-child activities have reinforced the notion that good health is a family responsibility and has led to active participation of village men, women and children in health promotion activities. Whereas the evaluators suspect that family relations have been favorably impacted by MCHP interventions, no direct measure was taken. Again, their findings were based on individual/key informant self-reports.

The family focused strategy is very important since many behavior changes occur at the household level. Project staff's intent to focus on the family unit for those activities that are more likely to be adopted if the family analyzes its own situation and contributes its own resource is sound. As a means of streamlining this educational strategy, time must be taken to clarify the extent and level of this approach which is time-consuming. Some of the following questions must be addressed:

- a) What themes are most effectively covered in the home?
- b) Is it sufficient to reach women individually or must all be informed?
- c) Is it more practical to work with smaller groups (i.e. neighborhood groups of women) to work on knowledge and attitude change rather than regrouping village communities by age or gender (i.e. men, women or children)?

During the project's evolution, the importance of the VHC as a mechanism for intervention sustainability has increased. However, the reliability and viability of these committees and the village health workers remain questionable (among villagers and MCHP/MHC personnel). Given the present organizational and financial capacity of both MCHP and PHC, it is doubtful that the selection, training and supervision of VHC/VHW in 93 project villages is realizable by the end of the present funding cycle (refer to Section 3.4.2).

4.2 Project Strengths and Weaknesses

With the realization that a mid-term evaluation is useful in assessing process and implementation issues of a project, the evaluators identified project strengths which could help explain the successful impact of its interventions as well as areas that need further improvement or changes.

4.2.1. Project Strengths

1. Project goals and activities are well appreciated and received by target beneficiaries as well as health collaborators. Community support for MCHP interventions is evident in both training and maintenance phase villages.
2. CARE/Mali's integrated approach to development has enabled the MCHP to reinforce its interventions through close working relationships with other CARE/Macina projects.
3. The decision of MCHP management staff to solicit the participation of all project personnel in the conceptualization and planning of new activities has fostered a better understanding of project goals, constraints and unintended consequences.
4. The project has been able to staff its field positions with high quality, technically trained personnel.
5. The inclusion of village men and children in health education activities has had the positive side effect of fostering support for women who are ultimately responsible for child care.
6. Joint collaboration with the Primary Health Care Project in the establishment, installation and supervision of Village Health Committees is an effort that is consistent with the project's interest in sustainability of health care activities.
7. Interventions in the areas of diarrheal disease control, vaccination and hygiene and sanitation form the high priority core. In general, the level of knowledge related to these health areas remains high. Target villages report increased practice and appear to have a good understanding of the utility of sugar salt solution and the necessity of personal and village hygiene. Project staff's promotion and encouragement of immunizations among children and pregnant women were cited by villagers as a most appreciated activity. As documented by the vaccination coverage survey, MCHP promotional and educational activities have had a positive effect on immunization rates and knowledge levels in project villages. In terms of nutrition and maternal health, there is an awareness and acceptance that malnutrition can be prevented and that home visits are important.

8. There appears to be a willingness among villagers to accept responsibility for the health care among their members. As such, many villages are requesting training in adult literacy, village health committees and workers.

9. The decision to refocus and simplify the project's educational messages and phase in intervention components into target villages seems to have resulted in less confusion and a more systematic, logical implementation strategy.

10. The computerized Project Information System facilitates quick access to project data for planning and monitoring purposes. As such, the quantity and quality of data collected by the health promoters is significant.

11. Health promoters have been trained and retrained in a variety of non-formal education methods and group facilitation techniques. Correct educational offerings are programmed on a case-by-case method.

4.2.2. Project Weaknesses

Despite the many positive attributes found in MCHP, the evaluation team found some key areas which need further improvement. These are as follows:

1. Although project reporting is systematic and regular to collaborators and funding agencies, little or no systematic feedback is provided to villagers, as project beneficiaries. As such, villager involvement in the planning process is not readily evident.
2. The redundancy and monotony of health messages, more pronounced in older project sites, was cited repeatedly by both health promoters and villagers. This seems a deterrent in mobilizing community participation in the health education sessions. Since no new messages are introduced or redelivered in new formats or methods, villagers are not motivated to sit and listen to the "same old message" which they already know, even if packaged as a home visit.
3. The delay in developing a malaria intervention component is problematic given that it is a high priority problem in the target areas.
4. There is a lack of clear behavioral indicators for determining different performance levels for the maintenance phase villages. Concrete activities and actions in terms of health-related behavior are needed.

5. The high turnover rate of project field staff (health promoters) interrupts project activity and continuity.
6. In keeping with CARE's integrated approach, collaborative activities between MCHP and Project ADDZ and Adult Literacy need reinforcing.
7. The long duration of villages in the "training phase" pose problems in terms of community motivation and may have negative effect on overall participation.
8. Health messages which target village men need adapting to include the important role that men play in the promotion of good health among mothers and young children.

5. RECOMMENDATIONS

5.1 Post-project Follow-up

Whereas the project appears to have made steady progress on the achievement of its goals, the full realization of intermediate goals is not possible by the end of this funding cycle. This clearly suggests the need to: a) refine, reinforce or modify present intervention strategies and b) continue MCHP activities beyond the FY'93 campaign. A third project phase would enable MCHP staff to consolidate and maximize their present accomplishments. Sufficient time would be available to: 1) provide monitoring support (joint PHC and MCHP) to villages in the maintenance phase as they pass into self-autonomy; 2) assure adequate preparation and development of village health committees/workers; 3) integrate birth spacing and malaria control activities in the project; and 4) enable new project villages which entered during the FY'92 campaign to attain "maintenance phase" status. In keeping with the conceptual framework of the project, the primary emphasis of the third funding phase should be on knowledge application, practice and aiding villagers to resolve obstacles which impede adoption of desired health behaviors and practices.

5.2 Major Recommendations to Refine Implementation Strategy

Based upon an analysis of data collected from field visits, interviews and project documents and the vaccination coverage survey results, the evaluation team has recommended 24 priority actions to be undertaken in refining the present implementation strategy:

1. If the project adds new villages, staff should expand their selection criteria to sufficiently reflect priority health indicators. This would involve closer discussions with Macina Health Center personnel in terms of identified health priorities which are also consistent with MCHP's funding mandate.

2. CARE Administration should review its ten month contract policy in light of its potential negative impact on project activities. A more in-depth investigation of health project personnel resignations would help in clarifying the issues and provide insight into potential solutions. Additionally, it might also be useful to determine if differences in knowledge level and practice can be found between villages with low and high HP turnover.

3. Given current personnel resources and workload, village expansion is not suggested unless the project phases out of some of its existing target areas or increases the number of HPs. In any case, MCHP staff need to review all possible options.

4. Project is also encouraged to explore the possibility of decentralizing the meeting process and holding district level (small group) supervisory meetings. This might be one way to reduce the amount of supervisor travel to individual villages but still respond to HP needs.

5. Given increasing data analysis needs and reporting requirements, project should explore the addition of statistical software program EPIINFO, which is compatible to dBASE 3+, to its information system. This program would permit different types of statistical analysis in the form of cross-tabulations. More formal training should be provided to the Field Coordinator and the Administrative Assistant in the above mentioned statistical testing (EPIINFO) and database management (dBASE 3+) programs.

6. Project staff should periodically review material supports and educational materials and tailor them to reflect specific target audiences such as male villagers and young children and village-specific nutritional needs.

7. The project should also explore the possibility of incorporating of simple nutrition messages in Child-to-child program activities. These could focus on identifying locally available foods that are healthy and various combinations which produced balanced diet or introducing them to new foods (in areas where agricultural interventions exist through the ADDZ Project).

8. As a means of continuing the momentum of EPI activities in Macina Circle and trend toward realization of the immunization objectives, MCHP logistical support for EPI activities should be continued to include updated immunization materials and ongoing light motorcycles maintenance.

9. Parallel to MCHP activities to support EPI objectives, local public health officials need to be more proactive in

- * seeking financial support for the expansion and renovation of fixed immunization center sites

- * providing refresher training to center personnel in the conservation of vaccines and the maintenance and storage of immunization records.

- * exploring mechanisms to improve immunization follow-up after the first year of childhood vaccinations.

10. Hygiene messages should be expanded to reflect the prevention of water-related diseases that are prevalent in project villages. Although these diseases vary according to each village community, the evaluators noted that both dermatosis and bilharziosis are perceived problems that could be addressed by the project.

11. The elaboration of the wells maintenance component should be continued in collaboration with the Wells Project. Special attention should be placed on improved use of water buckets as a health promotion activity.

12. Educational messages on maternal health should be expanded to include other topics such as:

- gynecological infections and problems of sterility
- adolescent pregnancy issues (< 14 years)
- the importance of gynecological examinations.

This additional information would further complement current maternal health messages and should be offered on a programmed, systematic basis.

13. The project is encouraged to strengthen its educational sessions on maternal health which target men by offering them on a more systematic basis and tailoring the content to focus on their role as a support to women during periods of pregnancy and childbirth.

14. To ensure practical application of survey results in developing interventions, it is imperative that the Field Coordinator is involved in the analysis of the KAP survey data. His full appreciation for the complexities of the data and possible interpretations would be a useful perspective combined with the day-to-day realities of intervening in the target area.

15. The design and development of a malaria implementation strategy in the shortest time possible is needed. To ensure continuity, local health center personnel should be involved in the planning process. Additionally, specific, measurable learning objectives should be established to guide the intervention process. Suggested topics include:

- . individual and collective preventive measures ;
- . malaria treatment ;
- . groups at risk.

16. Project staff should consider expanding the health messages to cover basic topics in nutrition, simple first-aid treatment and other health issues of interest to children.

17. Criteria for the performance levels within the maintenance phase need to be more clearly written with specific behavioral indicators which can be used to assess village progress to self-autonomy.

18. Educational strategies associated with maintenance phase villages need to be reviewed with the intent of minimizing redundancy and monotony. More emphasis on the application of health practices given day-to-day realities would involve: a) adapting learning objective, b) providing feedback on the village level, c)

incorporating problem-solving approaches and d) developing special messages for specific target groups.

19. PHC staff with MCHP assistance needs to re-examine the present approach to installing village health committees. More emphasis must be placed on the stage of sensitizing villagers to the concept of VHC and member selection. This entails using a very flexible approach to the composition of committee members as well as integrating already existing health teams and other traditional or modern organizations (such as Village Associations) in a more effective manner.

20. The concept of village health committees should be introduced in villages after one year in the training phase. This would facilitate a slow organization building process coupled with a longer period (several years) of back-up assistance provided by the health promoters. One of the most difficult periods in VHC development is during the autonomy phase where unanticipated problems are often encountered. This proposed strategy would enable project staff to be available in a "consultant" capacity, offering suggestions and guidance as villages assumed total responsibility for health education and basic health care activities.

21. The necessity of the complicated bookkeeping system for medicine sales should be reviewed with the intent of simplifying this task.

22. Despite the basic operating principle for joint collaboration between the Wells and Health Projects, it is an opportune time to re-evaluate the "piggy-back" strategy that is being employed. Decisions must be made as to whether or not MCHP will expand at the same pace as the Wells Project, given its resources and the amount of effort expended on each intervention.

23. Project staff should review its information needs (for the project, funding agency and local health officials) with the intent of streamlining the data collection and focusing data analysis. This would eliminate information that is unnecessary and allow for the concentration on the collection of more important data.

6. LESSONS LEARNED

This evaluation exercise surfaced a variety of issues and principles that need to be reinforced in future efforts as well as pitfalls to be avoided whenever possible. For the purposes of this report, they are summarized in project-related and evaluation-related comments.

6.1 Macina Child Health Project

Based on project experience over the past several years, lessons learned are highlighted below:

1. The decision to link MCHP activities with interventions by the Wells Project reflects the importance of taking into account the perceived need of potable water in village communities. By starting with problems which are experienced as important by the villagers, their receptivity to health behavior change activities is increased.

2. The inclusion of more problem-solving methods and discussions in the educational strategy is necessary for health practices which are difficult to maintain, such as chlorinating household water or using water buckets to draw water under good hygienic conditions.

3. By expanding health education and promotion activities to all segments of village communities, including men and children, MCHP promotes the concept that healthy children is a community responsibility, not just that of individual mothers.

4. The over-reliance of educational interventions that are knowledge-based can mask important behavior change factors. Thus, educational objectives that balance attitudes and practice with knowledge are needed to address the predisposing, reinforcing and enabling issues which inhibit behavior change.

5. Sustainability of health behavior and prevention is more likely when villagers are well-informed and involved in the planning process. MCHP's role in developing VHCs has evidenced the importance of this fact. Nevertheless, the project has also noted that "being well-informed" also includes receiving feedback and periodic information on project activity, village progress etc.

6.2. Mid-term Evaluation

There are distinct advantages to forming an evaluation team that is small and multi-cultural in nature. Whereas there is a richness of analytical perspectives; the following considerations are suggested for future evaluation activities.

1. Since MCHP reports and project documents are prepared and distributed in two languages, it is important that all team members have at least reading familiarity with English given that many of the source documents are in this language. When differences in interpretation and meaning were noted between French and English documents, team members who are bi-lingual were able to review and make comparisons as needed which expedited group analysis and work.

2. Having a small number of individuals on the evaluation team made division of member responsibilities and logistical arrangements easier to manage. However, a team composed of four individuals is more conducive to forming sub-groups (combining Malian and non-Malian perspectives) for field site visits and enables the team leader to more evenly distribute evaluation responsibilities and writing assignments.

3. A sufficient amount of time is needed in writing the final evaluation report. This is a two step process. Time must be set aside for team members to analyze their findings, organize their thoughts and prepare their preliminary draft sections. After the evaluators had met to discuss and finalize their findings and recommendations, the team leader must edit and translate (when necessary) draft sections in order to finalize the document. The length of time for Step 2 is varies according to such factors as the amount of document written in another language and written conceptual abilities of team members.

A P P E N D I C E S

- A. EVALUATION TERMS OF REFERENCE
- B. LIST OF DOCUMENTS REVIEWED
- C. INTERVIEW QUESTION GUIDES
- D. INTERVIEW- MEETING SCHEDULE
- E. FIELD VISIT SITES AND SCHEDULE
- F. MCHP ORGANIZATIONAL CHART
- G. PROPOSED MALARIA IMPLEMENTATION STRATEGY
- H. SUMMARY OF VACCINATION COVERAGE SURVEY
- I. LISTING OF ALL RECOMMENDATIONS

TERMS OF REFERENCE

1. CARE-Mali: Macina Child Health Project (MCHP)
2. TOR Prepared By: Denise D. Gordon
3. Date TOR prepared: March 2, 1992
4. Evaluation Point Person: Peter Buijs, CARE-Mali/Bamako
5. Project Funding Cycle: FY91 - FY94 (09/90 - 08/93)
6. Donors: USAID/W (CS VI), USAID/Mali, CARE/USA, CARE-Osterreich, Edward Ryan

7. Background of Activity to be Evaluated:

The Macina Child Health Project (MCHP) began in 1986 with the goal of reducing infant and child morbidity and mortality in the administrative district of Macina Circle in the Segou Region. MCHP is now in its second phase of operations, which began in September, 1990 and which will continue to August, 1993.

Over the past five years, MCHP has worked closely with the Ministry of Public Health, Social Affairs, and the Promotion of Women (MSPASPF) to deliver primary health care messages to 93 of the 246 villages of the Circle, serving approximately 41,000 people. MCHP also offers logistical and outreach support to the MSPASPF Health Center in Macina for immunization services to small children and women of childbearing age throughout the entire Macina Circle (population 150,000).

A guaranteed water supply is an important criteria by which MCHP selects its villages. In this regard MCHP works closely with CARE-Mali's Macina Wells Project by entering villages where an improved supply of water has been (or is being) secured to permit better sanitary conditions. The intensive child survival interventions focus on changing health behaviors of the caretakers of small children, primarily women between the ages of 15 and 45 years, but, increasingly, also older children and men. The project focuses on diarrheal disease control, hygiene and sanitation, the expanded program of immunizations, nutrition, and maternal health. A birth spacing component is currently being designed.

8. Background of the Evaluation

This evaluation is the mid-term evaluation of the second phase of

the Macina Child Health Project, as planned in the Detailed Implementation Plan and Proposal. This evaluation will review the project's first 18 months of phase II operations (September 1990 - present), identifying successes and problems. The evaluation should assist project and mission management in assessing the appropriateness of the project strategies and methodologies that were introduced and/or modified in phase II. The evaluation should also indicate the rate of progress towards achieving stated project objectives with a special emphasis on villages where the project began implementation during phase I.

9. Specific Evaluation Issues/Keys Questions

The evaluation is requested to be creative about involving the project staff and beneficiaries in the evaluation process to the maximum extent possible.

A. Planning and Design

- Review the appropriateness of the project objectives and their indicators as presented in the Detailed Implementation Plan in terms of measurability and whether they are realistic.

B. Implementation

- Determine the characteristics of project participants. What is their motivation for participating? For those who do not participate, what are the prevailing reasons?
- Assess the effectiveness of the project strategies for each component in terms of their relevance to the problems to be addressed, the technical content of activities and messages, the audience targeted, the time and effort spent by project staff, the communication methods and techniques employed, and the role community members play.
- Evaluate and measure the impact of the Child to Child activity. Is it worth formalizing the activities or should the style of present intervention be maintained?
- Evaluate EPI intervention for Macina Circle. Has it been effective? What has been the impact of CARE's contribution to the program? Is future support required? If so what kind?

C. Sustainability

- Evaluate the activities for maintenance phase villages. Do they represent appropriate actions in preparing the village

for the departure of MCHP?

- What are the advantages and disadvantages of establishing Village Health Committees?
- Which tasks and responsibilities currently fulfilled by the Health Promoters can be assumed realistically by the Village Health Committees and First-Aid workers?
- Assess the need for and capabilities of the MSPASPF structures (Macina Health Center, Regional Direction of Public Health) and other collaborative partners (SSP-Segou) to continue activities once MCHP departs.

D. Results:

- How much progress has been made until now towards achieving the project's intermediate goals?
- Are any additional activities required to enhance the level of goal achievement in older sites?
- How has the health of children aged 0 - 5 years been affected (attributable to MCHP)? How has family relations been affected by the interventions of MCHP?

E. Monitoring and Evaluation

- Assess the present structure and use of the Project Information System, including data collection methods, and its suitability to 1) monitor project progress; and 2) evaluate goal achievement?

F. Post-project follow-up

- Will there be a need to continue MCHP project activities in Macina circle following FY93 campaign?

10. Proposed Evaluators:

1. Erma Wright-Manoncourt (external Consultant) - Team Leader
2. Representative of the Regional Directorate of Public Health (to be assigned).
3. Elise Kone, World Vision CS project manager (we are hoping to obtain clearance from World Vision for his participation,

APPENDIX B

Documents Reviewed (denote availability in French and English)

1. Child Survival VI Proposal and Contract Letter
2. USAID/Mali Amendment Grant
- 3.* Detailed Implementation Plan
4. USAID/Washington Technical Review Comments on Detailed Implementation Plan
5. Project Response to DIP Technical Review Comments
- 6.* 1989 Final Evaluation Report of MCHP, Phase 1
7. CARE/Mali Response to Final Report
- 8.* Project Information System Manual
- 9.* Final Report - 1991 Baseline Survey in villages in Kolongo and Monimpé
10. Annual Child Survival Report, FY' 91
11. Project Implementation Report, July 1990 to June 1991
* Project Implementation Report, July-December 1991
12. 1991 Trip Reports - CARE Regional Technical Advisors in Health and Population
- 13.* Annual Implementation Plan, FY' 92
14. Contrat de GRE à GRE (CARE, DRSPAS, SSP)
15. Détection de la Malnutrition: Guide pour l'Animateur Rural
16. Analyse Institutionnelle du Secteur d'Agriculture et des Ressources Humaines
17. Project Monthly Reports - January and February '92
18. Gestion des Medicaments Essentiels dans le Cercle de Niono
19. EPI Reports and Meeting Documentation
20. Project Activity Forms and Documents
21. Programme d'éducation des Enfants pour la Santé
22. Mid-Term Evaluation Guidelines for CSV Projects (CSVI is not available)

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Appendix C

COORDINATEUR DE CARE/MACINA ET CHEF DU PROJET

1. QUELLES SONT VOS TACHES A PROPOS DU PROJET ET COMBIEN DE TEMPS CONSACREZ-VOUS A LES EXECUTER? QUEL EST VOTRE ROLE DANS LA CONCEPTION ET LA PLANIFICATION DES ACTIVITES DU PROJET?
2. QUELLES SONT LES DIFFERENCES PRINCIPALES ENTRE PHASE 1 ET PHASE 2 DU PROJET?
3. DANS QUELLE MESURE LES OBJECTIFS SPECIFIQUES ET INTERMEDIARES FIXES PAR LE PROJET ONT ETE ATTEINT?
4. PENSEZ-VOUS QUE LES OBJECTIFS QUI NE SONT PAS ATTEINTS SONT REALISABLES? EXPLIQUEZ.
5. COMMENT PREPAREZ-VOUS VOTRE PLAN D'ACTION?
6. QUE PENSEZ-VOUS DE LA COLLABORATION DU PROJET AVEC LE PERSONNEL DU CENTRE DE SANTE? COMMENT DECRIVEZ-VOUS VOTRE COLLABORATION AVEC EUX? LE PROGRAMME SSP? ET DES AUTRES PROJETS DE CARE A MACINA?
7. QUEL EST VOTRE SYSTEME D'INFORMATION ET COMMENT INFORMEZ-VOUS LES DIFFERENTS INTERVENANTS AU PROJET (A TOUS NIVEAUX)?
8. QUELS SONT LES DIFFERENTS SUPPORTS UTILISES DANS VOTRE SYSTEME D'INFORMATION?
9. QUI COLLECTE ET ANALYSE LES DONNEES?
10. QUELS SONT LES PROBLEMES RENCONTRES DANS LA COLLECTE ET L'ANALYSE DES DONNEES ET LA TRANSMISSION DE L'INFORMATION (CHAQUE VOLET)?
11. QUELS INDICATEURS DE SANTE UTILISEZ-VOUS DANS VOTRE SYSTEME D'INFORMATION? (DANS CHAQUE VOLET D'INTERVENTION)
12. DE QUELLE FACON INFORMEZ-VOUS LES VILLAGEOIS DES RESULTATS PROVENANT DE L'ANALYSE DES DONNEES COLLECTEES A LA BASE?
13. DE QUELLE MANIERE ARRIVEZ-VOUS A SATISFAIRE LES EXIGENCES DE L'USAID ET DES COLLEGUES MALIENS EN MATIERE D'INFORMATION, DE SUIVI ETC.?
14. AVEZ-VOUS DES OBSERVATIONS CONCERNANT LES CHANGEMENTS, LES NOUVELLES INITIATIVES OU LA FAISABILITE DE LA DURABILITE DES ACTIVITES DU PROJET?
15. AVEC QUELS VOLETS AVEZ-VOUS LE PLUS GRANDE SUCCES? A QUOI ATTRIBUEZ-VOUS CE RESULTAT?

16. QUELS SONT LES PROBLEMES PRINCIPAUX RENCONTRES AU NIVEAU DE L'EXECUTION DES DIFFERENTES ACTIVITES? COMMENT LES AVEZ-VOUS RESOLU OU COMMENT ENVISAGEZ-VOUS DE LES RESOUDRE?
17. QUELLES SONT LES RAISONS QUI VOUS ONT AMENEES A MAINTENIR LES 27 VILLAGES EN STADE FORMATION DE PLUS DE DEUX ANS? QUE PRECONISEZ-VOUS DU DEVENIR CES VILLAGES?
18. COMBIEN DE TEMPS UN VILLAGE DOIT FAIRE EN STADE DE STABILISATION? QUEL EST LE RHYTHME OU LA FREQUENCE DES INTERVENTIONS/SUPERVISION AU NIVEAU DE VILLAGE EN STADE DE STABILISATION?
19. QUEL STADE PREVOYEZ-VOUS APRES LE STADE DE STABILISATION ET QUELS ACTIVITES PREVOYEZ-VOUS DANS CE NOUVEAU STADE?
20. ENVISAGEZ-VOUS L'EXTENSION DU PROJET DANS D'AUTRES VILLAGES DES ARRONDISSEMENTS?
21. PENSEZ-VOUS QU'IL Y AURA UN TROISIEME PHASE? SI OUI, COMMENT SI PRENDRE? SI NON, POURQUOI?
22. COMMENT PERCEVEZ-VOUS L'AMELIORATION DE L'ETAT DE SANTE DE LA POPULATION CIBLE DE DEBOUT DU PROJET A CE JOUR? AVEZ-VOUS DES CHIFFRES POUR APPRECIER CETTE JUSTIFICATION?
23. PENSEZ-VOUS QUE LES EQUIPES LOCALES (EX: CSV) PEUVENT-ELLES PRENDRE LA RELEVÉ EN COLLABORATION AVEC LES VILLAGEOIS A LA FIN DU PROJET?
24. SELON VOUS, QUELLES SONT LES POINTS FORTS ET FAIBLES DU PROJET? COMMENT PROPOSEZ-VOUS DE RESOUDRE LES FAIBLESSES?
25. COMMENT APPRECIER-VOUS LE RAPPORT ENTRE LE PERSONNEL DU PROJET INTERVENANT SUR LE TERRAIN?
26. COMMENT LE PERSONNEL EST EMBAUCHE?
27. QUELLES SONT LES CRITERES DE PROMOTION?
28. COMMENT MOTIVEZ-VOUS LE PERSONNEL?
29. QUELS SONT LES DIFFERENTS PROBLEMES RENCONTRES AU NIVEAU DU PERSONNEL DANS LE CADRE DE L'EXECUTION DES ACTIVITES QUOTIDIENNES?
30. QUELLE DUREE PEUT FAIRE UNE MONITRICE RECRUTEE POUR MATRISER SES NOUVELLES TACHES?
31. A VOTRE AVIS, QUELLES PROPOSITIONS DES SOLUTIONS ENVISAGEZ-VOUS POUR REMEDIER AUX DIFFERENTES DEMISSIONS DES MONITRICES EXPERIMENTEES ET L'EMBAUCHE DES NOUVELLES NON EXPERIMENTEES?

32. POSSEDEZ-VOUS UN CALENDRIER DE SUPERVISION? QUEL EST LE RHYTHME DE SUPERVISION (PAR NIVEAU)? QUEL EST LE CONTENU DE LA SUPERVISION? QUELLE DIFFERENCE FAITES-VOUS ENTRE LA SUPERVISION ET LE CONTROLE?

33. QUELS PROBLEMES RENCONTREZ-VOUS DANS L'EXECUTION DE VOTRE CALENDRIER DE SUPERVISION?

PERSONNEL DU PROJET: COORDINATEUR SUR LE TERRAIN
ASSISTANTE ADMINISTRATIVE DU PROJET **

- 1.** QUELS SONT LES OBJECTIFS DU PROJET? SONT-ILS REALISABLES?
2. COMMENT ETES-VOUS IMPLIQUEE DANS LA PLANIFICATION ET L'EVALUATION DES ACTIVITES?
- 3.** QUELLES SONT VOS RESPONSABILITES DANS LE PROJET? QUEL EST VOTRE PERCEPTION DU TRAVAIL QUE FAITES-VOUS? COMBIEN DE TEMPS CONSACREZ-VOUS A EXECUTER VOS DIFFERENTES TACHES?
- 4.** QUELLE EST VOTRE PERCEPTION DE LA FORMATION RECUE? LA FORMATION RECU REpond-ELLE A VOS NOUVELLES TACHES QUI VOUS ONT ETE CONFIEE?
5. QUELS SONT LES OBJECTIFS DU VOLET DE LA FORMATION DES CSV? QUELLE FORMATION LE CSV A-T-ELLE RECUE?
 - A. QUELS SONT LES CRITERES POUR CHOISIR LES MEMBRES DU COMITE? COMBIEN DES FEMMES COMPOSENT LE COMITE? LES MEMBRES DU COMITE SONT-ILS RENUMEREES?
 - B. QUELS AUTRES COMITES OU EQUIPES DE SANTE EXISTENT DANS LES VILLAGES?
 - C. QUEL ROLE JOUE LE CSV DANS L'AMELIORATION DE LA SANTE AU VILLAGE? QUELLES SONT LES TACHES OU FONCTIONS ASSUREES PAR LA MONITIRICE QUI DOIVENT ETRE PRISE EN CHARGE PAR LE CSV?
6. QUELS SONT LES PROBLEMES QUE VOUS AVEZ CONSTATE DANS LES VILLAGES 'AU COURS L'INSTALLATION DES CSV?
7. PENSEZ-VOUS QUE LES COMITES DE SANTE VILLAGEOIS SONT-ILS CAPABLE DE PRENDRE EN CHARGE LES DIFFERENTES ACTIVITES EDUCATIONNELS? SI OUI, QUEL SOUTIEN EST NECESSAIRE? SI NON, POURQUOI PAS?
8. COMBIEN DE TEMPS UN VILLAGE DOIT FAIRE EN STADE STABILISATION? QUEL EST LE RHYTHME OU LA FREQUENCE DES INTERVENTIONS/SUPERVISION AU NIVEAU DE VILLAGE EN STADE STABILISATION?
9. QUEL STADE PREVOYEZ-VOUS APRES LE STADE DE STABILISATION ET QUELS ACTIVITES PREVOYEZ-VOUS DANS CE NOUVEAU STADE?
10. ENVISAGEZ-VOUS L'EXTENSION DU PROJET DANS D'AUTRES VILLAGES DES ARRONDISSEMENTS?
- 11.**SELON VOUS, QUELLE PERCEPTION FONT LES VILLAGEOIS DU PROJET?
12. COMMENT APPRECEIEZ-VOUS LE RAPPORT ENTRE LE PERSONNEL DU PROJET INTERVENANT SUR LE TERRAIN?

13. COMMENT MOTIVEZ-VOUS LES SUPERVISEURS ET MONITRICES?
14. QUELS SONT LES DIFFERENTS PROBLEMES RENCONTRES AU NIVEAU DU PERSONNEL DANS LE CADRE DE L'EXECUTION DES ACTIVITES QUOTIDIENNES?
15. QUELLE DUREE PEUT FAIRE UNE MONITRICE RECRUTEE POUR MATRISER CES NOUVELLES TACHES?
16. A VOTRE AVIS, QUELLES PROPOSITIONS DES SOLUTIONS ENVISAGEZ-VOUS POUR REMEDIER AUX DIFFERENTES DEMISSIONS DES MONITRICES EXPERIMENTEES ET L'EMBAUCHE DES NOUVELLES NON EXPERIMENTEES?
17. POSSEDEZ-VOUS UN CALENDRIER DE SUPERVISION? QUEL EST LE RHYTHME DE SUPERVISION PAR NIVEAU? QUEL EST LE CONTENU DE LA SUPERVISION? QUELLE DIFFERENCE FAITES-VOUS ENTRE LA SUPERVISION ET LE CONTROLE?
18. QUELS PROBLEMES RENCONTREZ-VOUS DANS L'EXECUTION DE VOTRE CALENDRIER DE SUPERVISION?
- 19.**QUELS SONT LES DIFFERENTS SUPPORTS UTILISES DANS VOTRE SYSTEME D'INFORMATION?
- 20.**QUI COLLECTE ET ANALYSE LES DONNEES?
- 21.**QUELS SONT LES PROBLEMES RENCONTRES DANS LA COLLECTE ET L'ANALYSE DES DONNEES ET LA TRANSMISSION DE L'INFORMATION (CHAQUE VOLET)?
- 22.**QUELS INDICATEURS DE SANTE UTILISEZ-VOUS DANS VOTRE SYSTEME D'INFORMATION? (DANS CHAQUE VOLET D'INTERVENTION)
- 23.**DE QUELLE FACON INFORMEZ-VOUS LES VILLAGEOIS DES RESULTATS PROVENANT DE L'ANALYSE DES DONNEES COLLECTEES A LA BASE?
- 24.**QUE PENSEZ-VOUS DU PROJET? QUELS SONT LES POINTS FORTS ET FAIBLES?

PERSONNEL DU PROJET: SUPERVISEURS

1. QUELS SONT LES OBJECTIFS DU PROJET? SONT-ILS REALISABLES?
2. COMMENT ETES-VOUS IMPLIQUEE DANS LA PLANIFICATION ET L'EVALUATION DES ACTIVITES?
3. QUELLES SONT VOS RESPONSABILITES DANS LE PROJET? QUEL EST VOTRE PERCEPTION DU TRAVAIL QUE VOUS FAITES? COMBIEN DE TEMPS CONSACREZ-VOUS A EXECUTER VOS DIFFERENTES TACHES?
4. QUELS SONT LES OBJECTIFS DU VOLET _____? QUELS MATERIELS PEDAGOGIQUES SONT DISPONIBLES?
5. QUEL TYPE DU SOUTIEN RECEVEZ-VOUS DU PROJET?
6. QUELLE EST VOTRE PERCEPTION DE LA FORMATION RECUE? LA FORMATION RECU REpond-ELLE A VOS NOUVELLES TACHES QUI VOUS ONT ETE CONFIEE?
7. QUELS SONT LES PROBLEMES QUE VOUS AVEZ CONSTATES DANS LES VILLAGES CONCERNANT:
 - . LA TRANSMISSIONS DES THEMES DE SANTE?
 - . LE CHANGEMENT DU COMPORTEMENT?
 - . LA MOTIVATION DE LA POPULATION?
8. QUE FAITES-VOUS QUAND LES MONITRICES ONT PRESENTE TOUS LES MESSAGES DE SANTE ET QUE LE VILLAGE N'A PAS ENCORE ATTEINT LES OBJECTIFS PREVUS?
9. AVEZ-VOUS CONSTATE UN CHANGEMENT DE COMPORTEMENT ET DE COMPETENCE DES AGENTS DE SANTE VILLAGEOIS? COMITES DE SANTE VILLAGEOIS? LA POPULATION CIBLE? SI OUI, LEQUEL?
10. COMBIEN DE TEMPS UN VILLAGE DOIT FAIRE EN STADE STABILISATION? QUEL EST LE RHYTHME OU LA FREQUENCE DES INTERVENTIONS/SUPERVISION AU NIVEAU DE VILLAGE EN STADE STABILISATION?
11. QUEL STADE PREVOYEZ-VOUS APRES LE STADE STABILISATION ET QUELS ACTIVITES PREVOYEZ-VOUS DANS CE NOUVEAU STADE?
12. ENVISAGEZ-VOUS L'EXTENSION DU PROJET DANS D'AUTRES VILLAGES DES ARRONDISSEMENTS?
13. SELON VOUS, QUELLE PERCEPTION FONT LES VILLAGEOIS DU PROJET?
14. PENSEZ-VOUS QUE LES COMITES DE SANTE VILLAGEOIS SONT-ILS CAPABLE DE PRENDRE EN CHARGE LES DIFFERENTES ACTIVITES EDUCATIONNELS? SI OUI, QUEL SOUTIEN EST NECESSAIRE? SI NON, POURQUOI?
15. COMMENT APPRECEIEZ-VOUS LE RAPPORT ENTRE LE PERSONNEL DU PROJET INTERVENANT SUR LE TERRAIN?

16. COMMENT FAITES-VOUS POUR MOTIVER LES MONITRICES?

17. QUELS SONT LES DIFFERENTS PROBLEMES RENCONTRES AU NIVEAU DES MONITRICES DANS LE CADRE DE L'EXECUTION DES ACTIVITES QUOTIDIENNES?

18. QUELLE DUREE PEUT FAIRE UNE MONITRICE RECRUTEE POUR MATRISER SES NOUVELLES TACHES?

19. A VOTRE AVIS, QUELLES PROPOSITIONS DES SOLUTIONS ENVISAGEZ-VOUS POUR REMEDIER AUX DIFFERENTES DEMISSIONS DES MONITRICES EXPERIMENTEES ET L'EMBAUCHE DES NOUVELLES NON EXPERIMENTEES?

20. POSSEDEZ-VOUS UN CALENDRIER DE SUPERVISION? QUEL EST LE RHYTHME DE SUPERVISION PAR NIVEAU? QUEL EST LE CONTENU DE LA SUPERVISION? QUELLE DIFFERENCE FAITES-VOUS ENTRE LA SUPERVISION ET LE CONTROLE?

21. QUELS PROBLEMES RENCONTREZ-VOUS DANS L'EXECUTION DE VOTRE CALENDRIER DE SUPERVISION?

22. QUE PENSEZ-VOUS DU PROJET? QUELS SONT LES POINTS FORTS ET FAIBLES?

PERSONNEL DU CENTRE DE SANTE A MACINA

1. QUE PENSEZ-VOUS DU PROJET ET DES SES OBJECTIFS?
2. QUEL TYPE DE COLLABORATION EXISTE-T-IL ENTRE LE CENTRE DE SANTE ET LE PROJET? QUELLE CONTRIBUTION APPORTE CHACUN A L'AUTRE?
3. PENSEZ-VOUS QUE VOUS ETES SUFFISAMMENT IMPLIQUE DANS LES DIFFERENTES PHASES DU PROJET? (EX: CONCEPTION, PLANIFICATION, EXECUTION, SUIVI ETC.)
4. QUELLE PROPOSITION FAITES-VOUS POUR UNE PLUS GRANDE IMPLICATION DU PERSONNEL SOCIO-SANITAIRE DU CERCLE DE MACINA DANS LES ACTIVITES DU PROJET?
5. COMMENT ETES-VOUS INFORME DE L'EXECUTION DES ACTIVITES DU PROJET? LE SYSTEME D'INFORMATION DU PROJET EST-IL APPROPRIE?
6. SELON VOUS, QUEL EST L'IMPACT DU PROJET SUR L'AMELIORATION DE L'ETAT DE SANTE DE LA POPULATION? DE LA SANTE DES ENFANTS DE 0 A 5 ANS?
7. EST-CE QUE LA STRATEGIE D'INTERVENTION DU PROJET PERMET D'ASSURER LA DURABILITE DES ACTIVITES DU PROJET? SI OUI, COMMENT? SI NON, POURQUOI?
8. QUELLES SONT VOS REMARQUES OU SUGGESTIONS A FAIRE A PROPOS DE LA SUITE DE PROJET?
9. QUELLE PROPOSITION OU OBSERVATION POUVEZ-VOUS FAIRE POUR PERMETTRE LA POPULATION DE PRENDRE EN CHARGE LES ACTIVITES APRES LA FIN DU PROJET? (A COURT TERME? A MOYEN TERME? A LONG TERME?)
10. EN CONCLUSION, QUELLE EST VOTRE PERCEPTION PERSONNELLE DU PROJET? QUELS SONT LES POINTS FORTS ET FAIBLES DU PROJET?

-----COORDINATEUR SSP/MACINA-----

PENSEZ-VOUS QUE LA FORMATION RECUE A TRAVERS LE PROJET A ETE BENEFIQUE POUR VOUS? SI OUI, COMMENT? SI NON, POURQUOI?

-----RESPONSIBLE DU PEV ET SAGE-FEMME-----

QUEL APPUI APPORTE LE PROJET AU CENTRE DE SANTE DANS LE CADRE DU _____?

CHEFS DES POSTES DE SANTE

1. QUE PENSEZ-VOUS DU PROJET ET SES OBJECTIFS
2. QUELLES SONT LES ACTIVITES MENEES PAR LE PROJET DANS VOTRE ARRONDISSEMENT?
3. PENSEZ-VOUS QUE LES ACTIVITES DU PROJET PERMETTENT LA REALISATION DE SES OBJECTIFS? SI OUI, COMMENT? SI NON, POURQUOI?
4. QUEL TYPE DE COLLABORATION EXISTE-T-IL ENTRE VOTRE POSTE DE SANTE ET LE PROJET? QUELLE CONTRIBUTION APORTE CHACUN A L'AUTRE?
5. AVEZ-VOUS DES RESPONSABILITES DANS LE PROJET? SI OUI, LESQUELLES? ONT-ELLES ETE REDIGEES? SI NON, QUELLES RESPONSABILITES PEUT-ON VOUS ATTRIBUER?
6. COMMENT ETES-VOUS INFORME DE L'EXECUTION DES ACTIVITES DU PROJET? LE SYSTEME D'INFORMATION DU PROJET EST-IL APPROPRIE?
7. AVEZ-VOUS OBSERVE UN CHANGEMENT DU COMPORTEMENT SUITE AUX INTERVENTIONS DU PROJET? SI OUI, LEQUEL?
8. SELON VOUS, QUELLE EST LA PERCEPTION DE LA POPULATION DES ACTIVITES DU PROJET?

CHEFS DES PROJETS DE _____ A CARE/MACINA

1. QUELLES SONT LES RELATIONS ENTRE VOTRE PROJET ET LE PROJET DE SANTE?
2. QUELLES SONT LES ACTIVITES DU VOTRE PROJET DANS LESQUELLES LES MONITRICES DE SANTE SONT IMPLIQUEES? COMMENT?
3. COMMENT VOUS AVEZ CHOISI VOS VILLAGES D'INTERVENTION ET QUEL EST L'IMPACT SUR LES ACTIVITES DU PROJET DE SANTE?

-----ALPHABETISATION-----
. EXISTE-T-IL DES DOCUMENTS DIDACTIQUES EN MATIERE DE SANTE DANS LE CADRE D'ALPHABETISATION? SI NON, QU'EST-CE QUE VOUS AVEZ PREVU?

QUESTIONNAIRE AU NIVEAU REGIONAL ET NATIONAL

1. QUE PENSEZ-VOUS DU PROJET ET DE SES OBJECTIFS?
2. PENSEZ-VOUS QUE LES OBJECTIFS DU PROJET CADRENT AVEC LA POLITIQUE NATIONALE EN MATIERE DE SANTE ET LES PRIORITES REGIONALES?
3. QUEL TYPE DE COLLABORATION EXISTE-T-IL ENTRE LA DIRECTION REGIONALE ET LE PROJET? QUELLE CONTRIBUTION APPORTE CHACUN A L'AUTRE?
4. PENSEZ-VOUS QUE VOUS ETES SUFFISAMMENT IMPLIQUE DANS LES DIFFERENTES PHASES DU PROJET? (EX: CONCEPTION, PLANIFICATION, EXECUTION, SUIVI)
5. PENSEZ-VOUS QUE LES ACTIVITES DU PROJET PERMETTENT LA REALISATION DE SES OBJECTIFS? SI NON, POURQUOI PAS? SI OUI, COMMENT?
6. COMMENT ETES-VOUS INFORME DE L'EXECUTION DES ACTIVITES DU PROJET? LE SYSTEME D'INFORMATION DU PROJET EST-IL APPROPRIE?
7. EST-CE QUE LA STRATEGIE D'INTERVENTION DU PROJET PERMET D'ASSURER LA DURABILITE DES ACTIVITES DU PROJET? COMMENT?
8. QUELS SONT LES POINTS FORTS ET POINTS FAIBLES DU PROJET?
9. QUELLES SONT VOS REMARQUES OU SUGGESTIONS A FAIRE A PROPOS DE LA SUITE DE PROJET?

AGENTS ET COMITES DE SANTE VILLAGEOIS
(OU EQUIPES DE SANTE)

1. COMMENT LES MEMBRES DU COMITE DE SANTE VILLAGEOIS ONT ETE CHOISI?
2. QUELS SONT LES ROLES ET FONCTIONS DU COMITE ET DES ASV?
3. QUE PENSEZ-VOUS DE LA FORMATION QUE VOUS AVEZ RECUE?
4. ETES-VOUS RENUMERES COMME ASV? SI OUI, COMMENT? SI NON, POURQUOI PAS?
5. EXISTE-T-IL UN TRADIPRACTICIEN DANS LE VILLAGE? SI OUI, QUELLE COLLABORATION EXISTE-T-IL ENTRE VOUS?
6. AVEZ-VOUS CONSTATE UN CHANGEMENT DE COMPORTEMENT DE LA POPULATION? (MERES? ENFANTS? TOUT LE MONDE?) UNE AMELIORATION DE LA SANTE DES ENFANTS DE 0 A 5 ANS?
7. QUELLES SONT LES MALADIES QUE LE COMITE POURRAIT AIDER LE VILLAGE A PREVENIR?
8. SI LA MONITRICE PART DEMAIN. EST-CE QUE VOUS SERIEZ CAPABLE DE PRENDRE EN CHARGE LES ACTIVITES DE SANTE?
-- SI OUI, QU'EST-CE QUE VOUS ALLER FAIRE?
-- COMBIEN DE TEMPS ELLE DOIT ENCORE RESTER ET QU'EST-CE QU'ELLE DOIT FAIRE PENDANT CETTE PERIODE?
9. QUELLE APPRECIATION AVEZ-VOUS DES ACTIVITES DES MONITRICES?
--QU'EST-CE QUE LE PROJET POURRAIT FAIRE ENCORE POUR VOUS?

FEMMES DU VILLAGE

1. QUELLES SONT LES MALADIES INFANTILES LES PLUS FREQUENTES DANS VOTRE VILLAGE?
2. AVEZ-VOUS ASSISTE A DES SEANCES DE DEMONSTRATION OU DES CAUSERIES MENEES PAR LES MONITRICES? QUI PARMI VOUS? SUR QUELS THEMES?
3. QUELS SONT LES SERVICES RENDUS PAR L'ASV?
--ET COMMENT VOUS LES ENCOURAGEZ DANS LEUR TRAVAIL?
4. AVEZ-VOUS CONSTATE UNE AMELIORATION DE L'ETAT DE SANTE DE LA POPULATION DEPUIS L'ARRIVEE DE LA MONITRICE? SI OUI, LAQUELLE?
5. QUELLE EST L'IMPORTANCE DE LA VACCINATION? DE L'HYGIENE PENDANT LA GROSSESSE ET L'ACCOUCHEMENT?
6. QUE FAITES-VOUS QUAND VOTRE ENFANT EST MALADE?
7. QUE FAITES-VOUS QUAND VOTRE ENFANT ATTRAPE LA DIARRHEE? (SRO, SIGNES DE DEHYDRATATION)
8. QUE FAITES-VOUS QUAND VOTRE ENFANT EST MALNUTRI?
-- COMMENT VOUS SAVEZ QUE VOTRE ENFANT EST MALNUTRI?
(PERIMETRE BRACHIAL)
9. QUE FAITES-VOUS QUAND VOTRE ENFANT A LE PALUDISME?
10. COMMENT FAITES-VOUS POUR TRAITER L'EAU? POUR ASSAINIR LE MILIEU?
11. EST-CE QU'IL FAUT IMPLIQUER LES ENFANTS A L'EDUCATION SANITAIRE? SI OUI, POURQUOI? SI NON, POURQUOI PAS?
12. SI LA MONITRICE PART DEMAIN, EST-CE QUE VOUS SERIEZ CAPABLE DE PRENDRE EN CHARGE LES ACTIVITES DE SANTE?
-- SI OUI, QU'EST-CE QUE VOUS ALLER FAIRE?
-- COMBIEN DE TEMPS ELLE DOIT ENCORE RESTER ET QU'EST-CE QU'ELLE DOIT FAIRE PENDANT CETTE PERIODE?
13. QUELLE APPRECIATION AVEZ-VOUS DES ACTIVITES DES MONITRICES?
--QU'EST-CE QUE LE PROJET POURRAIT FAIRE ENCORE POUR VOUS?

HOMMES DU VILLAGE

1. AVEZ-VOUS ASSISTE A DES SEANCES DE DEMONSTRATION OU DES CAUSERIES MENEES PAR LES MONITRICES? QUI PARMIS VOUS? SUR QUELS THEMES?
2. QUELS SONT LES SERVICES RENDUS PAR L'ASV?
--ET COMMENT VOUS LES ENCOURAGEZ DANS LEUR TRAVAIL?
3. AVEZ-VOUS CONSTATE UNE AMELIORATION DE L'ETAT DE SANTE DE LA POPULATION DEPUIS L'ARRIVEE DE LA MONITRICE? SI OUI, LAQUELLE?
4. EST-CE QU'IL FAUT IMPLIQUER LES ENFANTS A L'EDUCATION SANITAIRE? SI OUI, POURQUOI? SI NON, POURQUOI PAS?
5. SI LA MONITRICE PART DEMAIN, EST-CE QUE VOUS SERIEZ CAPABLE DE PRENDRE EN CHARGE LES ACTIVITES DE SANTE?
-- SI OUI, QU'EST-CE QUE VOUS ALLER FAIRE?
-- COMBIEN DE TEMPS ELLE DOIT ENCORE RESTER ET QU'EST-CE QU'ELLE DOIT FAIRE PENDANT CETTE PERIODE?
6. QUELLE APPRECIATION AVEZ-VOUS DES ACTIVITES DES MONITRICES?
--QU'EST-CE QUE LE PROJET POURRAIT FAIRE ENCORE POUR VOUS?

PERSONNEL DU PROJET: MONITRICES

1. QUELS SONT LES OBJECTIFS DU PROJET?
2. COMMENT FAITES-VOUS LA PLANIFICATION DE VOS ACTIVITES ET L'EVALUATION DES ACTIVITES?
3. QUELLES SONT VOS RESPONSABILITES DANS LE PROJET? QU'EST-CE QUE VOUS PLAIT DANS VOTRE TRAVAIL?
-- QU'EST-CE QU'IL NE VOUS PLAISE PAS?
4. DANS LES DIFFERENTS THEMES QUE VOUS FAITES PASSER AU VILLAGEOIS, QUELS SONT LES PROBLEMES QUE VOUS AVEZ RENCONTRE?
5. COMMENT LE PROJET VOUS DANS VOTRE TRAVAIL?
6. EST-CE QUE LA FORMATION RECUE VOUS PERMETTRE D'ACCOMPLIR VOS TACHES?
7. QUE PENSEZ-VOUS DE LA SUPERVISION RECUE? EST-ELLE ADAPTEE AUX REALITES DU TERRAIN? QUE PENSEZ-VOUS DE SA FREQUENCE?
8. QUE FAITES-VOUS QUAND LA POPULATION NE SUIV PAS VOS CONSEILS EN MATIERE DE SANTE?
9. AVEZ-VOUS CONSTATE UN CHANGEMENT DE COMPORTEMENT ET DE COMPETENCE DES AGENTS DE SANTE VILLAGEOIS? COMITES DE SANTE VILLAGEOIS? LA POPULATION CIBLE? SI OUI, LEQUEL?
10. SELON VOUS, QUE PENSENT LES VILLAGEOIS DU PROJET?
11. PENSEZ-VOUS QUE LES COMITES DE SANTE VILLAGEOIS SONT-ILS CAPABLE DE PRENDRE EN CHARGE LES DIFFERENTES ACTIVITES EDUCATIONNELS APRES VOTRE DEPART?
12. EN CONCLUSION, QUELS SONT LES POINTS FORTS ET FAIBLES?

Appendix D

INTERVIEW/MEETING SCHEDULE

1. **Week of April 6, 1992**
 - . Briefing meeting with CARE/Mali Administration staff
 - . Briefing meeting with USAID Health Officer and Child Survival Coordinator
 - . Protocol Visits with:
 - Deputy Director, Ségou Regional Department of Health
 - Economic Development Officer, Ségou Region
 - Administrator, Macina Circle
 - Chief Medical Officer, Macina Health Center
 - . Project Presentation Meeting with Manager, Field Coordinator, Administrative Assistant and Supervisors
2. **Week of April 13, 1992**
 - . Interviews with Macina Health Center personnel:
 - Chief Medical Officer
 - Assistant Chief Medical Officer
 - EPI Program Manager
 - Coordinator, Primary Health Care Project
 - Technical Advisor, Primary Health Care Project
 - Community Development Technician
 - Physician
 - . Interviews with Project Personnel:
 - Project Manager
 - Field Coordinator
 - Administrative Assistant
 - 2 Supervisors
 - . Interviews with CARE/Macina Personnel:
 - Coordinator
 - Director, Wells Project
 - Director, ADBE Project
 - . Field Visit: 18 Villages
 - Interviews with 7 Health Promoters
 - Interviews with 2 Health Post Officers
3. **Week of April 20, 1992**
 - . Field Visits: 6 Villages
 - Interviews with 2 Health Promoters
 - Interviews with 2 Health Post Officers
 - . Debriefing meeting with Macina Administrator and Community Development Council
4. **Week of April 27, 1992**
 - . Interview with Director, Ségou Regional Health Department
 - . Interview with Director, National Center for Information, Education and Communication, Ministry of Health
 - . Debriefing meeting with USAID and CARE/Mali Administrators

APPENDIX E

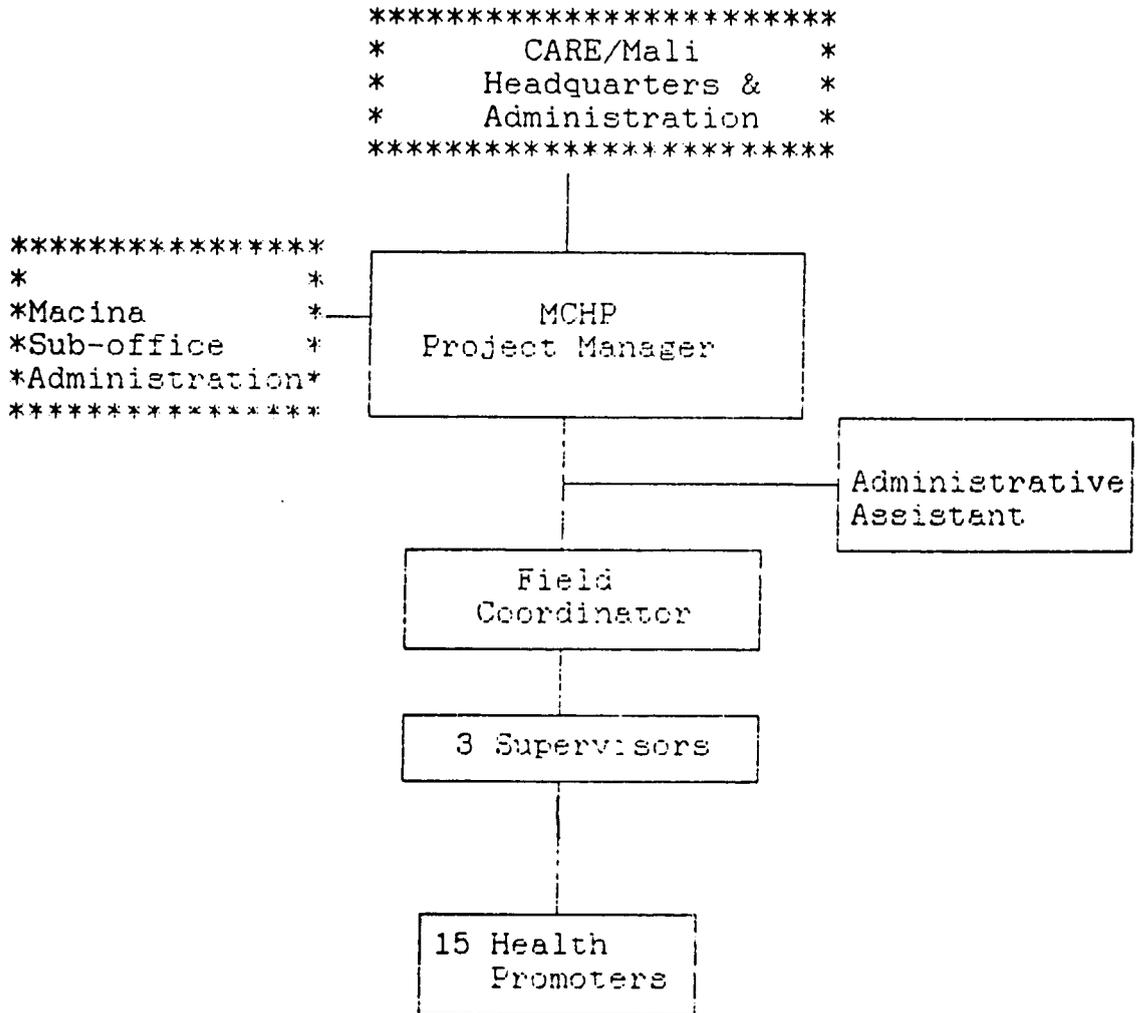
PROGRAMME DE SORTIE DE L'EQUIPE D'EVALUATION

15 Avril 1992	16 Avril 1992	17 Avril 1992
KE-BOZO (Daffa)	SAMPANA (Mariam F)	SELLEYE (Daffa DIALLO)
GUENDA (Hawa KEITA)	SANGHA (Aissata M)	TOUARA (Mariam Famanta)
	FING (Aissata M)	FLAH (Mariame KANTE)
	TONGOLO (Dielika)	1 VOITURE PASSE LE NUIT A MACI
		1 VOITURE PASSE LA NUIT A SARR
18 Avril 1992	19 Avril 1992	20 Avril 1992
KINGOLOLA (Haoua S)	NINGA (Tabara DIALLO)	OUANA (Biata KONTAO)
NIANZANA (HAoua S)	WAN (Coumba TRAORE)	DIADO (Kadia KONARE)
DIOMBOUGOUBA (Mai)	FONDIELA (Aminata)	KALALA (Kadia KONARE)
NIENTILELA (Mai)		N'GOOMA (Aminata TRAORE)
MANGONI (Coumba)		
NIENEMOU (Aldiaka)		
EQUIPE PASSE NUIT A SARRO	EQUIPE PASSE LA NUIT A SAYE	EQUIPE PASSE LE NUIT A SAYE
21 Avril 1992		
SIOMEDIELA (Daffa)		
SOGOLI (Hawa KEITA)		
EQUIPE RETOURNE A MACINA		

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Appendix F

Project Personnel
Reorganization



Appendix G

Suggestions for Malaria Implementation Strategy

The following malaria component considerations were proposed by Dr. Idrissa Maiga, a member of the mid-term evaluation team.

1. Objectives:

The objective stated in the DIP provides a general framework for the development of a malaria intervention. However, by elaborating two specific objectives, further focus and clarity is provided. The first emphasizes knowledge rather than practice in families; and in the second, practice and knowledge changes are directed towards women and youth.

1> 60% of families in the project villages will be able to correctly explain at the end of 18 months:

- . the preventive measures that an individual can undertake in the home
- . basic anti-vector measures
- . malaria treatment (using WHO guidelines)

2> 30% of women and youth between the ages of 15 and 45 years will be able to correctly practice malaria prevention methods (see above) at the end of 18 months.

2. Implementation Strategy:

The national malaria prevention and control strategy is centered on three foci:

- 1) individual and collective prevention actions,
- 2) anti-vector measures, and
- 3) treatment according to the WHO guidelines.

In keeping with the national strategy, MCHP's implementation approach should include the following activities: a) health education, b) environmental sanitation and c) better management of malaria medication. This component will be more appreciated by project villages when coupled with the installation of essential medicines as envisaged under the Ségou Primary Health Care Project.

Intervention activities will be reinforced by other prevention initiatives (i.e. village clean-up days) which have already been implemented in other project components. Specific actions could include:

1. Village meetings or small group discussions to:
 - explain the causes of fever,

- convince villagers to treat malaria with chloroquine and especially infants at the sign of fever with,
- adopt the malaria prophylaxis for pregnant women and children less than one year of age,
- encourage chloroquine treatment for everyone with presenting symptoms of fever, especially pregnant women and infants less than one year.

2. Health education activities (in collaboration with target group members and/or existing village health committees and workers) that are scheduled before rainy season. These would enable villagers to be sensitized to necessary preventive measures, such as sleeping under a mosquito net, protecting water sources etc.

3. Stocking village pharmacies with chloroquine which is targeted for pregnant women and treatment of infants.

4. Intensive preventive health messages during the epidemic period of June to October that emphasize:

- . immediate treatment for each fever episode.
- . the necessity of protecting pregnant women
- . the importance of evacuating grave cases (i.e. miscarriages among pregnant women, infant convulsions etc.) to nearest health facility.

APPENDIX H

Summary of Vaccination coverage Survey

1. Introduction

A survey of vaccination coverage, mothers' knowledge about immunization and an assessment of EPI operations was conducted in the Macina Circle in May 1992. Under the auspices of the DRS/AS in Ségou, an evaluation team was composed of three medical epidemiologists, two general practitioners and 15 interviewers. The purpose of the survey was to:

- * to compare vaccination coverage rates between MCHP project villages and non-project villages
- * to study the effectiveness of vaccination strategies
- * to determine the level of knowledge, attitudes and practices concerning immunization among village mothers.

The team also assessed the operations of the fixed immunization centers. Unfortunately, information on the efficiency of the Expanded Program for Immunization (EPI) was too meager to permit the drawing of conclusions. It appears, however, that there is a big difference between the vaccination rates for individual diseases targeted and the overall rate for completely and correctly vaccinated children.

2. Findings

2.1 Immunization Rates

2.1.1 Target group: 12 to 23 months

The overall coverage of subjects fully (completely and correctly) immunized is weak and not at a satisfactory level. It was found that only 35.58% in project villages as compared to 23.22% in non-project villages of children between the ages of 12 to 23 months were completely and correctly immunized.

An analysis of immunization coverage rates by vaccine reveal the following pattern among children between the ages of 12 to 23 months:

Vaccine	Villages	
	MCHP	Non-project
BCG	95.75%	82.46%
DPT1	89.15	57.82
Polio 1	86.32	54.98
DPT2	79.72	44.55
Polio2	78.30	44.55
DPT3	54.72	35.07
Polio3	54.72	35.07
Measles	76.42	43.60

As the data above indicates, immunization rates for this age group are higher in project villages than those in which MCHP is not involved. However, the regularity of immunizations is the same in both types of villages.

2.1.2 Target group: 24 to 35 months

The overall coverage of children who are completely and correctly immunized is higher among children of 24 to 35 months than the previously mentioned age group. It is also more satisfactory in project villages: 61.18% versus 38.43% in non-project villages.

Immunization coverage rates by vaccine are appreciable for first vaccinations and are more evident in the project villages. Unfortunately, the abandonment rate is elevated in both project and non-project villages. An analysis of immunization coverage rates by vaccine reveal the following pattern for children between the age of 24 to 35 months.

Vaccine	Villages	
	MCHP	Non-project
BCG	96.68%	88.68%
DPT1	88.15	64.15
Polio 1	87.20	60.38
DPT2	82.94	56.13
Polio2	82.46	56.60
DPT3	71.56	46.23
Polio3	71.56	45.75
Measles	83.89	58.02
Malaria	10.90	08.02

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2.1.3 Target group: 36 to 71 months

The immunization coverage rates are the highest among children ages 36 to 71 months, but the risk of the target EPI diseases is the lowest in this age group. This is in direct contrast to younger age groups where rates are the lowest but the risk is the greatest. the study found that the rate of children completely and correctly immunized is 71.11% in project villages and 63.85% in non-project villages.

An analysis of immunization coverage rates by vaccine reveal the following pattern for children between the ages of 36 to 71 months:

Vaccine	Villages	
	MCHF	Non-project
BCG	99.11%	88.59%
LPT1	93.78	84.04
Polio 1	92.89	83.10
DPT2	90.67	81.22
Polio2	91.11	81.22
DPT3	86.22	74.65
Polio3	86.22	74.65
Measles	90.22	83.10
Malaria	06.27	01.88

2.1.4 Target group: Women of procreating age

The coverage rate of tetanus toxoid is the highest project villages than non-project villages, the percentage of fully immunized women was found to be 82.01 in project and 62.56 non-project villages.

2.2 Knowledge, Attitudes and Practices

In terms of the KAP survey, results reflect that the majority of village mothers have insufficient knowledge about immunization especially in the villages not served by MCHF. A comparison between project and non-project villages is presented below:

Villages

Mothers perfect knowledge of	MCHP	Non-project
* EPI target diseases (knows all 6)	22.85%	01.87%
* Vaccination calendar	22.50	12.36
* Vaccination secondary effects	73.57	57.68
* Target population for tetanus toxoid vaccination	61.43	33.33
* Vaccination card utility	52.90	58.43

Partial knowledge rates were significantly higher. The principal causes of non or partial/incomplete vaccinations appear to be:

- 1) lack of information
- 2) travel by mother and child
- 3) lack of return of mobile immunization teams for follow-up dosages etc.

2.3 EPI Strategy and Operations

In terms of the vaccination strategy being used, villages covered by fixed immunization centers and the advanced strategy show better coverage rates in project than non-project villages. With respect to EPI operations, the problems found are disquieting and reflect: 1) a lack of respect for the norms of vaccine storage 2) poor document storage, 3) the lack of certain supports, 4) incomplete maintenance of the sites and logistics. The efficiency calculations demonstrated an average approximate cost of 5820 CFA (20 \$) per completely and correctly vaccinated child during the 1990-92 period.

3. Recommendations

The principal objective of attaining and maintaining a vaccination coverage rate of 80% is very ambitious. It has not yet been reached: nevertheless, the results are encouraging and are not off from national objectives for the older age groups (24-35 and 36-71 respectively). Efforts should be oriented toward the acceleration of immunization coverage for village children less than 24 months of age.

Based on the survey findings, the evaluation team believes that the overall situation is encouraging in the villages which being served by MCHP staff. However, there are common problems that exist and need an urgent solution. Resolution of these problems form the basis of the recommendations which are listed below:

- 1) Increase the number of fixed vaccination centers and improve older sites (e.g. glass doors to limit dust in the rooms)
- 2) Increase personnel competence in vaccine conservation and the application of correct conservation protocol
- 3) Develop advanced strategy vaccination activities
- 4) Review and revise EPI messages taking into account lacks observed in the study
- 5) Accompany education messages with visual aids (such as posters, pamphlets) that can be handed out to mothers and if possible, organized collective listening sessions (rural audiotape libraries)
- 6) Collaborate with public health and welfare personnel in disseminating the same messages in non-project villages in the same conditions
- 7) Increase the possibility of vaccination follow-up of children after their first year of immunizations
- 8) Increase the possibility of document storage at the fixed centers and improve health personnel's knowledge of record-keeping and storage
- 9) Improve the quality of the equipment and logistics of vaccination services to include updating immunization materials and light motorcycles, maintenance
- 10) Use political, administrative, religious and traditional authorities as well as schools for disseminating health information in general and EPI information, in particular.

APPENDIX I

A detailed listing of all recommendations (per section of the report) made are listed below:

3.1 Planning and Design

1. The project should consider the time aspect in their educational approach, by indicating how long period a village may be classified as "training" or "maintenance" phase.

2. If the project adds new villages, staff should expand their selection criteria to sufficiently reflect priority health indicators. This would involve closer discussions with Macina Health Center personnel in terms of identified health priorities which are also consistent with MCHP's funding mandate.

3. The project should explore the possibility of providing technical/training support to the Macina public health structure. This might include financing short-term training for Macina Health Center staff or assisting in the renovation of the Circle's maternity.

4. Indicators for project objectives need to be examined and expanded to better reflect project activity.

3.2 Human Resources

1. CARE Administration should review its ten month contract policy in light of its potential negative impact on project activities. A more in-depth investigation of health project personnel resignations would help in clarifying the issues and provide insight into potential solutions. Additionally, it might also be useful to determine if differences in knowledge level and practice can be found between villages with low and high HP turnover.

2. Given current personnel resources and workload, village expansion is not suggested unless the project phases out of some of its existing target areas or increases the number of HPs. In any case, MCHP staff need to review all possible options.

3. Project should consider reducing the frequency of supervisory visits if supervisor responsibilities in program planning and design continue to increase.

4. Project is also encouraged to explore the possibility of decentralizing the meeting process and holding district level (small group) supervisory meetings. This might be one way to reduce the amount of supervisor travel to individual villages but still respond to HP needs.

5. Given increasing data analysis needs and reporting requirements, more formal training should be provided in the areas of database construction (DBASE 3+) and statistical testing (EPIINFO). Personnel targetted for this training should be the Field Coordinator and the Administrative Assistant.

6. Refresher Bambara literacy course should be considered in the next three week staff training program. This would serve as a complement to the initial training received by health promoters.

3.3.1 Nutrition

1. Project staff should document how current KAP survey findings in the districts of Kolongo and Monimpé will be used in planning future nutrition activities and designing/tailoring specific nutrition education lessons. Exploring the possibility of seeking additional funds to conduct follow-up nutrition KAP study in these districts is encouraged. Such information would allow the project to document in a concrete manner any changes that occurred.

2. Project staff should periodically review material supports and educational materials and tailor them to reflect specific target audiences such as male villagers and young children and village-specific nutritional needs.

3. The project should also explore the possibility of incorporating of simple nutrition messages in Child-to-child program activities. These could focus on identifying locally available foods that are healthy and various combinations which produced balanced diet or introducing them to new foods (in areas where agricultural interventions exist through the ADDZ Project).

4. More emphasis on the counseling aspects of the nutritional home visits is needed. As such, a certain number of these visits should be programmed per village and counted as one of the three activities required of all health promoters.

3.3.2 Immunization

1. Project staff should review and expand EPI educational materials (such as posters, pamphlets) that can be handed out to mothers and audiotape cassette recordings that could be used in group listening sessions.

2. MCHP is encouraged to explore the possibility of sponsoring selected training programs for health personnel in vaccine conservation and document storage procedures.

3. Given the volume and variety of EPI educational materials and messages developed in the project, MCHP staff is encouraged to share them with local public health and welfare personnel for use in disseminating the same messages in non-project villages.

4. As a means of continuing the momentum of EPI activities in Macina Circle and trend toward realization of the immunization objectives, MCHP logistical support for EPI activities should be continued to include updated immunization materials and ongoing light motorcycles maintenance.

5. MCHP is also encouraged to continue to explore the use of other channels of communication such as religious and traditional authorities and schools for disseminating EPI messages.

6. Parallel to MCHP activities to support EPI objectives, local public health officials need to more proactive in

- * seeking financial support for the expansion and renovation of fixed immunization center sites

- * providing refresher training to center personnel in the conservation of vaccines and the maintenance and storage of immunization records

- * exploring mechanisms to improve immunization follow-up after the first year of childhood vaccinations

3.3.3 Diarrhea Disease Control

No specific recommendations.

3.3.4. Hygiene and Sanitation

1. MCHP should add the sanitation objective stated in the USAID/Mali Grant Amendment to the overall project objectives and include well maintenance as another component. All elements need to be made operational.

2. Hygiene messages should be expanded to reflect the prevention of water-related diseases that are prevalent in project villages. Although these diseases vary according to each village community, the evaluators noted that both dermatosis and bilharziosis are perceived problems that could be addressed by the project.

3. The elaboration of the wells maintenance component should be continued in collaboration with the Wells Project. Special attention should be placed on improved use of water buckets as a health promotion activity.

3.3.5 Maternal Health

1. The project is strongly urged to continue sensitizing the villagers to the importance of financing and contributing to the establishment of TEA kits with minimum supplies such as cotton, razor blades and alcohol. The PHC needs to be more proactive in making these kits available with minimum delay after the VHW training has been completed.

2. Educational messages should be expanded to include other maternal health topics such as:

- gynecological infections and problems of sterility
- adolescent pregnancy issues (< 14 years)
- the importance of gynecological examinations.

This additional information would further complement current maternal health messages and should be offered on a programmed, systematic basis.

3. The project is encouraged to strengthen its educational sessions on maternal health which target men by offering them on a more systematic basis and tailoring the content to focus on their role as a support to women during periods of pregnancy and childbirth.

3.3.6 Birth Spacing:

1. Project should commence educational activities on birth spacing no later than September, 1992. This would ensure sufficient time to analyze the KAP data and develop concrete, educational messages and strategies over the summer.

2. To ensure practical application of survey results in developing interventions, it is imperative that the field coordinator is involved in the analysis of the KAP survey data. His full appreciation for the complexities of the data and possible interpretations would be a useful perspective combined with the day-to-day realities of intervening in the target area.

3. To complement the initial TEA training, the PHC (in collaboration with MCHP) should consider providing follow-up training and/or ongoing supervision to VHWs on family planning methods etc.

3.3.7 Malaria Prevention

1. Project accomplishments in this component will be heavily influenced by medicine availability (chloroquine etc.) which will be supplied by the PHC as an essential drug component. As such, implementation of this intervention should be closely coordinated with PHC activity in providing Village Pharmacy Kits.

2. MCHP is urged to reinforce the efforts of the Adult Literacy Project to accelerate literacy training for women and youth. This is a means of facilitating villager involvement in managing project activities, particularly in the area of malaria prevention.

3. The design and development of a malaria implementation strategy in the shortest time possible is needed. To ensure continuity, local health center personnel should be involved in the planning process. In addition, specific, measurable learning objectives should be established to guide the intervention process. Suggested topics include:

- . individual and collective preventive measures
- . malaria treatment
- . groups at risk.

3.3.8 Child-to-child

1. Project staff should consider expanding the health messages to cover basic topics in nutrition, simple first-aid treatment and other health issues of interest to children.

2. The use of children's theater is another animation technique that might be explored. It can serve a dual purpose: a) conveying health ideas to adults using child actors and b) reinforcing children's understanding and behavior practice. This could be combined in a Children's Day special event.

3. Project staff is encouraged to continue to explore other motivational instruments that could be used in the child-to-child activities, such as preparing nutritional meals during a demonstration and serving them or awarding a packet of seeds.

3.4.1 Maintenance Phase and Sustainability

1. An alternate maintenance strategy for villages which are not programmed to have trained VHC/VHWs in the near future needs to be discussed. Project staff could build upon initial ideas which were formulated in the project proposal. For example, the TBAs seem to function quite well, even in villages without trained VHWs; perhaps they could be given priority for training. Also, more accent could be placed on household interventions and existing formal and non-formal village organizations.

2. Criteria for the performance levels within the maintenance phase need to be more clearly written with specific behavioral indicators which can be used to assess village progress to self-autonomy.

3. Educational strategies associated with maintenance phase villages need to be reviewed with the intent of minimizing redundancy and monotony. More emphasis on the application of health practices given day-to-day realities would involve: a) adapting learning objective, b) providing feedback on the village level, c) incorporating problem-solving approaches and d) developing special messages for specific target groups.

4. Innovative ways to retain knowledge at the village level should be a priority for maintenance phase villages. In addition to working closely with the Adult Literacy Project, MCHP might explore the use of radio cassettes and simple written materials.

3.4.2 Village Health Committees

1. MCHP needs to reconsider, according to its organizational potential, the number of villages for which it can guarantee selection, training and follow-up supervision of VHC/VHW. This involves re-examining jointly with the Primary Health Care project the feasibility of the projected strategy and pace for installing these committees.

2. PHC staff with MCHP assistance needs to re-examine the present approach to installing village health committees. More emphasis must be placed on the stage of sensitizing villagers to the concept of VHC and member selection. This entails using a very flexible approach to the composition of committee members as well as integrating already existing health teams and other traditional or modern organizations (such as Village Associations) in a more effective manner.

3. A separate training program for VHC organizers on non-formal education techniques should be considered by the Primary Health Care Project and MCHP staff.

4. The concept of village health committees should be introduced in villages after one year in the training phase. This would facilitate a slow organization building process coupled with a longer period (several years) of back-up assistance provided by the health promoters. One of the most difficult periods in VHC development is during the autonomy phase where unanticipated problems are often encountered. This proposed strategy would enable project staff to be available in a "consultant" capacity, offering suggestions and guidance as villages assumed total responsibility for health education and basic health care activities.

5. The necessity of the complicated bookkeeping system for medicine sales should be reviewed with the intent of simplifying this task.

3.4.3 Collaboration and Sustainability Issues

1. The project is encouraged to continue its reciprocal working relationships with government health personnel.

2. It would be useful if the project could explore ways to strengthen its collaboration with Project ADDZ. Perhaps, more systematic programming could be explored.

3. Despite the basic operating principle for joint collaboration between the Wells and Health Projects, it is an opportune time to re-evaluate the "piggy-back" strategy that is being employed. Decisions must be made as to whether or not MCHP will expand at the same pace as the Wells Project, given its resources and the amount of effort expended on each intervention.

3.5 Monitoring and Evaluation

1. Project should explore the addition of the statistical software program EPIINFO, which is compatible to DEASE 3+, to its information system. This program would permit different types of statistical analyses in the form of cross-tabulations.

2. Project staff should review its information needs (for the project, funding agency and local health officials) with the intent of streamlining the data collection and focusing data analysis. This would eliminate information that is unnecessary and allow for the concentration on the collection of more important data.

3. Where possible, the project should consider expanding its monthly report to include more statistically analyzed results with respect to project indicators and benchmarks. A mechanism for providing periodic reports to project villages should also be explored. This could include meetings with VHCs, other health teams and/or community members wherein health promoters present project findings.

4. Given that the supervisors play an important role in the data collection and verification process, the project should consider providing them with a brief training on the PIS so that they would have a better appreciation for its capability. Additionally, they should have some basic training in how to interpret the data and findings given their day-to-day role in conveying this information to the HPs.