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**Review of Selected Reports on Family  
Planning/Maternal and Child Health  
Phase V—August 1998**

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## Acronyms

AMPF	Association Marocaine de Planification Familiale
ARI	Acute respiratory infection
ARCH	Applied Research in Child Health
AVSC	Association for Voluntary and Safe Contraception (Project 936-3068)
CA	Cooperating Agency
BASICS	Basic Support for Institutionalizing Child Survival (Project 936-6006)
CCP	Center for Communication Programs (Johns Hopkins University)
CDA	Community Development Agents
CE	Continuing Education
CHU	Centre Hospitalier Universitaire
CNFRH	Centre National de Formation en Reproduction Humaine
CSM	Contraceptive Social Marketing (Project 936-3051)
CYP	Couple Year of Protection
DA	Division de l'Approvisionnement
DELCM	Direction de l'Epidémiologie et la Lutte Contre les Maladies
DEM	Direction de l'Equipement et de Maintenance
DF	Division de la Formation
DHS	Demographic and Health Surveys (Project 936-3023)
DHSA	Direction des Hôpitaux et des Soins Ambulatoires
DIEC	Division de l'Information, Education, et de Communication
DIM	Division de l'Informatique et des Méthodes
DP	Direction de la Population
DPRF	Direction de la Planification et de Ressources Financières
EU	European Union
EVALUATION	Evaluating Family Planning Program Impact (Project 936-3060)
FP	Family Planning
FPLM	Family Planning Logistics Management
FPMD	Family Planning Management Development (Project 936-3055)
GIQua	Gestion Intégrale de Qualité
GOM	Government of Morocco
GP	General Practitioner
IEC	Information, Education and Communication
IFCS	Institut de Formation en Carrières de Santé
IMCI	Integrated Management of Childhood Illnesses
INAS	Institution National d'Administration Sanitaire
INTRAH	International Training in Health (University of North Carolina)
IPPF	International Planned Parenthood Federation
IR	Intermediate result
IUD	Intrauterine Device
JHPIEGO	Johns Hopkins Program for International Education in Reproductive Health
JHU	Johns Hopkins University
JSI	John Snow Inc.
KAP	Knowledge, attitudes and practices

MCH	Maternal and Child Health
MIS	Management information system(s)
ML/LA	Minilaparotomy under Local Anesthesia
MOH	Ministry of Health
MSH	Management Sciences for Health
MSP	Ministère de la Santé Publique (previous name)
MSR	Maternité Sans Risque
NTCHR	National Training Center in Human Reproduction
NGO	Nongovernmental organization
OMNI	Opportunities for Micronutrient Interventions (Project 936-5122)
OR	Operations research
ORS	Oral rehydration salts
PEI	Polio Eradication Initiative
PHR	Partnerships for Health Reform (Project 936-5974)
PMI	Protection Maternelle et Infantile
PNFP	Programme National de Planification Familiale
PRIME	Primary Providers' Education and Training in Reproductive Health (Project 936-3072)
QC	Quality of Care
QM	Quality Management
R4	Results Review and Resource Request (submitted to USAID/W annually)
RAPID	Resources for the Awareness of Population Impacts on Development (Project 936-3046)
RH	Reproductive Health
SCOPE	Strategic Communication Planning and Evaluation
SEIS	Service des Etudes et d'Information Sanitaire
SIAAP	Service d'Infrastructure des Actions Ambulatoires Provinciales
SM	Safe Motherhood
SMI	Santé Maternelle et Infantile (See MCH)
SMSM	Société Marocaine des Sciences Médicales
SOMARC	Social Marketing of Contraceptives Project
STD	Sexually Transmitted Disease
TA	Technical Assistance
TL	Tubal ligation
TOT	Training of trainers
UNICEF	United Nations International Children's Education Fund
URC	University Research Corporation
USAID	United States Agency for International Development
USAID/W	United States Agency for International Development/Washington D.C.
VSC	Voluntary surgical contraception
WHO	World Health Organization

***Sustainability* is defined as the ability of the health system (public and private) to produce high quality family planning and maternal and child health information, products and services that are sufficiently well valued by the population so that adequate national resources are committed to their continued delivery. (USAID/JSI/Morocco Transition Plan, April 1996)**

## **Introduction**

In 1966, the Moroccan Ministry of Health (MOH) established the Family Planning/Maternal Child Health (FP/MCH) Program. In the early 1970's, the national program gained much ground when a pilot program was initiated utilizing *visites à domicile de motivation systématique (VDMS, systematic home visits)*. Also at that time, USAID became the principal external partner in these programs and has been providing assistance to this program to this day. In 1988, the expansion of the program in the private sector has increased this channel as a means of further FP/MCH taking some of the responsibility for FP/MCH services from the public sector.

The result of these initiatives was important improvements in demographic and health indicators. The total fertility rate was greater than 7 in 1962, 3.3 in 1995, and is now 3.1(1997, urban rate only 2.1). Contraceptive prevalence increased steadily from 19% in 1980 to 59% in 1997. Infant mortality decreased to 36.7 per 1000 live births—a significant decline from 92 per 1000 births in 1980. Another indicator measures increased access to services (98% of women live within 30 km of a health facility)<sup>1</sup>.

The public health system functions reasonably well in Morocco. Along with a strong technical component, the Ministry of Health should have the appropriate means to not only implement FP/MCH services but respond to problems and crises. However, despite all the significant improvements, challenges still remain and sustainability of some interventions will require more efforts in the future. USAID's April 1996 Transition Plan for the FP/MCH services in Morocco envisioned that the current bilateral phase (FP/MCH Phase V, No.608-0223, 1993-1999) would be followed by a post-bilateral period (beginning in 2000). In order to ensure maintenance of significant gains and prevent erosion of critical program elements, USAID supports a limited and focused post-bilateral program for the period 2000-2005, representing USAID's final contribution to the health sector of Morocco. As the bilateral assistance of USAID in the population, health, and nutrition sector is scheduled to come to a close, USAID's current strategy includes efforts to increase the use of quality FP/MPH services and to enhance the capacity of local institutions and the MOH to sustain the provision of FP/MCH services.

The present document provides a synthesis of several reports on the status of various

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<sup>1</sup>Figures according to the 1997 PAPCHILD study and 1980 DHS Survey .

USAID Phase V project components, determines if any progress has been made in addressing different recommendations, and assesses whether additional activities should be undertaken to resolve outstanding issues and concerns. The objective was to identify the most important elements on which USAID/Morocco should focus for the next year to ensure the smoothest and most effective transition from the final bilateral period. The synthesis report is forward-looking and will feed into the design of the post-bilateral transition phase of the program.

The author of this report reviewed several documents (evaluations, trip reports, assessments, see bibliography) and summarized the salient points of each, noting omissions or need for further study, as necessary. The report is organized following the structure of the "Implementation Priorities for USAID/Morocco's Population/Health Transition Plan" document, January 1997. The integral summary reports of each document reviewed are contained in Annex I.

### **Transition Plan: Development and Organization**

Developed in 1995 and 1996, the USAID/Morocco Transition Plan, *Achieving Sustainability in Family Planning and Maternal Child Health*, was the result of the collaborative efforts of many participants. A core team of Health, Population, and Nutrition officials from USAID/Morocco and USAID/Washington worked with input from the Moroccan Ministry of Health, USAID cooperating agencies, and other bilateral and multilateral donors active in Morocco. Project components and objectives were reviewed, revised, restated, and/or resituated based on the changing environment for USAID's development assistance which stressed achieving results and promoting sustainability.

The framework developed for the Transition Plan is as follows:

- **Strategic Objective:** highest level result (intended measurable change) that USAID, along with its partners is trying to affect and is willing to be responsible for.
  - to reduce fertility
  - improve health of children under five and women of child-bearing age
- **Result:** change in the condition of the host country.
  - increased use of quality family planning/maternal and child health services
  - increase sustainability of family planning/maternal and child health services
- **Intermediate Result:** key result which must occur to achieve the strategic objective
  - greater access to quality FP/MCH services responsive to client demand
  - improved policy environment supporting expansion of FP/MCH services
  - reinforced capacity to manage FP/MCH programs with particular emphasis on decentralized approaches responsive to client demand
  - increased diversification of the resource base supporting the private sector

### **Intermediate Result I: Greater Access to Quality FP/MCH Services Responsive**

## to Client Demand

Project activities to strengthen FP/MCH service delivery include three priority interventions: 1) promotion of long-term FP methods (voluntary surgical contraception, or VSC, intrauterine devices, injectables) and optimum method mix; 2) improving maternal health, specifically emergency obstetric care; and 3) ameliorating child health, specifically through integrated management of childhood illness (IMCI).

As emphasized in the Implementation Priorities document, there is a clear rationale for targeting these areas. In regard to FP, the method mix in Morocco is skewed with heavy reliance on the pill, concurrent with an unmet demand for long-term FP methods as evidenced by long waiting lists for VSC. In regard to maternal health, Morocco has high maternal and neonatal death rates, higher than other North African and Mediterranean Arab countries. As for child health, over half of the children <5 mortality rate is attributable to diarrheal disease and acute respiratory infection (ARI), and both are complicated by malnutrition. The Moroccan IMCI program targets all three areas.

The service delivery constraints which impede progress in these three areas are not insurmountable. Existing services are often unexploited because of client misconceptions or lack of awareness. In other cases, facilities are not easily accessible, are ill-equipped, or do not have adequately trained providers. Standards of care and quality of services also can be improved. Experience in Morocco has shown that many of these constraints can be effectively addressed through training, IEC, operations research, and provision of basic equipment.

### *Family Planning*

Three of the documents reviewed were relevant to FP. One study, by Tulane University, has been on-going for several years. The *Dynamics of the Moroccan Family Planning Program: Key Findings from Evaluation Research* summarizes the findings from research on the FP/MCH program in Morocco from 1992-1997. Another evaluation was administered specifically to review the Norplant® Program, *Evaluation des Performances du Programme Norplant*, done by John Snow International in June 1998. Finally, AVSC assessed the status of Morocco's voluntary surgical program in May 1995 (*AVSC Evaluation of voluntary surgical contraceptive program*).

The key ideas which emerged from the Tulane study are:

- under-utilization of maternal care services (even after several years of increasing usage, maternal care services are still underused).
- importance of provider training (demand for good FP/MCH services exists and all health providers should be adequately trained).
- provider bias on contraceptive method (heavy emphasis on oral contraceptives, a short-term and non-sustainable method).
- women do know what they want.

Raising as many questions as it attempts to answer, the Norplant® study did not meet its objectives. It was supposed to analyze acceptability of the method, yet the recommendations suggest additional acceptability studies be done. It is unclear

whether Norplant is too costly or if it is even available anymore. The study claims that it is too costly but then recommends that costs should be reviewed. Overall, the study is not useful in its present form. JSI should complete a more thorough evaluation of Norplant® and its acceptability in Morocco.

The VSC study makes several important recommendations about program management, service access, improving existing and developing new services, trainings, and supplies. The key recommendations are as follows:

- MOH, NTCHR, and USAID/Morocco officials need to agree on roles and responsibilities for the VSC program.
- Management of the expendable supply system should be transferred to the MOH
- Coordination meetings should be scheduled quarterly or semi-annually.
- Need to increase the number of tubal ligation's done to keep up with the increasing demand and waiting lists (e.g., schedule additional trainings to increase number of personnel working on the VSC program, schedule tubal ligation procedures twice a week at sites with heavy demand, integrate minilaparotomy under local anesthesia into the maternity and postpartum services increasing availability and access to services, simplify certain logistical procedures for the clients should be simplified, etc.)
- Inform service providers of current eligibility criteria and apply this criteria systematically to all potential clients.
- Reassess the function of the referral centers within the health/family planning infrastructure (each center should at least offer all temporary methods and VSC whenever feasible).
- Do not use VSC laparoscopy teams for large numbers in a short period of time.
- Include training in laparoscopy and ML/LA in the curriculum of all residency programs in gynecology and obstetrics.
- Organize infection prevention workshops to assure that all staff working on the VSC program know correct procedures.
- Counseling in all family planning methods needs to be improved, assessment of the counseling training capabilities should be made, and refresher trainings should be scheduled.
- Relocate or rearrange the VSC operating room at Ben M'Sik immediately (VSC unit in busy maternity section of hospital, operating room poorly located opening to a corridor, and insufficient number of beds for TL patients).
- Conduct a study of the acceptability of ML/LA in the immediate postpartum period,
- Conduct activities to overcome provider bias against ML/LA and correct misunderstandings among service providers.
- Develop and disseminate clinical and service delivery guidelines.
- Conduct additional training in counseling and management of side-effects for personnel where IUDs, Norplant®, and injectables are being introduced.
- Increase follow-up and supervision where Norplant® and Depo-Provera are being introduced and investigate immediately the number of clients who report problems with these
- Make plans to better integrate program management and service delivery for tubal ligation and long-acting methods,
- Increase the number of training centers and consider development of regional training center
- Conduct training in family planning counseling at existing and new VSC sites

- Organize workshops in infection prevention in all provinces and technical supervisors should conduct follow-up visits
- Link all regional training centers and referral centers to provide better opportunities for practicums.

→Unfortunately, most of the above have not been acted upon. The immediate recommendation regarding the VSC aspect of the FP program is for USAID and JSI to update this list because most are still relevant today.

### *Maternal Health*

Only one evaluation was reviewed which related to MH, *Evaluation of Basic EOC Refresher Training*, by Elisabeth Anne Goodburn, MB Bch, DROCOG, PhD, in May 1998. This study looked at the effectiveness of the "Safe Motherhood" pilot project to improve emergency obstetrical care as a first step to reducing maternal mortality. It was concluded that the EOC needs some fine tuning and JSI should focus on the technical recommendations suggested:

- Establish a standard global training plan which logically links all parts of training process.
- Integrate EOC training into the CE strategy with involvement of the Regional IFCS.
- Increase length and reduce frequency of training courses.
- Include teaching practice in the TOT.
- Have all trainers participate in a TOT.
- Standardize protocols with input from CHU culminating in a 2nd edition of the MOH manual.
- Reinforce and build on the practical aspects of the training.
- Develop and use standard lesson plans.
- Continue use of Carnet de Stage.
- Develop standard competency-based procedure checklists and assessments.
- Adhere to the criteria for selection of trainees.

### *Child Health*

The child health component has several evaluations in the past year. In a collaborative effort by the U.S. Peace Corps and JSI, the nutritional status of Moroccan children is discussed in the *Exploratory Study of Behaviors Impacting the Nutritional Status of Children in Rural Morocco*. JSI also evaluated regional child survival trainings in *Evaluation de la Formation Régionale Combinée en Matière de LMD, LMC, et Immunization: Étude Comparative*. Finally, BASICS provided three evaluations regarding the Integrated Management of Childhood Illness by Serge Manoncourt, Lamine Thiam, Elizabeth Gold, and Allan Kulakow.

These child health studies all raised the problem of micronutrient deficiency in Morocco. A workshop was held in June 1998 to present the results of a regional study on Vitamin A deficiency, give the current situation of other micronutrients, discuss prevention strategies for micronutrient deficiencies, particularly Vitamin A, and elaborate an overall IEC strategy for Morocco against micronutrient deficiencies (see workshop summary in Annex II).

### Key Recommendations

- Develop a micronutrient deficiency program (focusing on vitamin A) using a three pronged intervention program with the collaborative efforts of the Ministries of Agriculture, Health, and Education.
- Continue nutrition education for different target groups: health workers, food buyers, women of child-bearing age, school children, and mass media.
- Child survival trainings should continue and should combine diarrhea and micronutrient deficiency prevention, and immunization promotion.
- Emphasize the importance of diarrhea case management at home and good communication skills of the health professionals to the mothers, particularly on teaching the mothers about signs of illness severity.
- Continue assistance for all IMCI activities especially project development, replacing vertical programs, and funding procedures.
- Develop a systematic approach to nutrition that puts accent on nutrition as an integral part of a medical consultation.
- Develop a supervised integrated approach emphasizing the vaccination of mothers and their children.
- Investigate the possibility of having all vaccinations available every day and if not, then implement a system to look for the children who are not there at vaccination time.
- Improve coordination between the preventive and curative health staffs within every health facility.
- Exploit the results of the foodbox practice trial to revise the strategies already developed by the MOH for other health needs.
- The two aspects of the IMCI program—community-based interventions and information and educational supports—should be fully integrated.
- Community-based projects that will meet the criteria established by the central level IMCI committee and approved by BASICS and USAID should be given immediate attention (e.g., criteria include lack of access to health facilities, existence of widespread child health problems, presence of local competence to carry out the project, etc.).
- All proposals should include plans for IEC support or for the development of IEC support strategies and should follow proper submission procedures (as listed in the BASICS report, *Integrated Management of Childhood Illness Project: IEC Community Approach Morocco*).
- Baseline studies of knowledge, attitudes, beliefs, and practices and resources of the primary target groups and those who influence them (secondary target groups) in each community should be conducted as a first step in design of each community project.
- An assessment of training and technical assistance needed by each community-based program should be conducted as soon as the project is approved and continued periodically. All projects should be monitored every 3 months and evaluated externally under the guidance of the IMCI central program.
- Other major NGO's should be utilized to develop national interest and support for IMCI, to supplement the resources of central and local IMCI programs, and to help expansion to other sites .
- Health worker needs to spend more time with each child and mother in examining, diagnosing, treating, and counseling with a continuous working day to help stagger the patient flow.

- The IMCI program should creatively educate the women waiting in the waiting room.
- If interest is expressed by the community, a full-time health educator should be designated to serve also as a liaison and trainer to the community.
- Assessment should be made of the effectiveness and appropriateness of the IEC materials (cassettes, flipcharts, leaflets, etc.).
- Agadir and Meknes teams should develop an action plan for improving counseling and interpersonal communication to be implemented as soon as possible and ideally starting in advance of the IMCI training course.
- Once the food box adaptation is completed and approved (final report received May 1998), the IEC animateurs from Agadir and Meknes should work (in consultation with the provincial IMCI teams) to begin adaptation of the mother's card (using other country cards as examples).
- Every effort should be made to coordinate with JSI's activities in support of the MOH (including images for the mother's card, radio time for health programming, working with women's NGO's).
- An *aide-memoire* for the health workers needs to be developed (with a checklist of the key messages for mothers and a glossary of local terms needed to communicate clearly) but should be delayed until the IMCI training course.
- An information packet on child health issues and IMCI should be created as well as a bimonthly "IMCI Update" bulletin giving progress reports.
- Itinerant nurses should also receive training in IMCI, as deemed appropriate for their work.

Based on all the above evaluations, USAID's support/promotion of the IMCI approach is justified, IMCI is still a relatively new concept in Morocco, and from all indications, continued support from donors is necessary in the short-term.

## **Intermediate Result II: Improved Policy Environment Supporting Expansion of FP/MCH Services**

Until the year 1999, the Phase V Project will assist the MOH in developing its capacity to formulate health strategies and policies and to take the measures required for an effective advocacy of FP/MCH programs. The guiding principles and objectives of USAID's policy work are (i) to address and identify constraints to the provision of quality FP/MCH services, (ii) to encourage increased participation of the private sector in the provision of such services, (iii) to promote decentralization of FP/MCH services structures and decision-making, (iv) to plan and implement a progressive phase over of budgetary support for project-financed contraceptive commodities from USAID to the MOH, and (v) to identify and address other health care financing issues as feasible.

Activities relevant to Immediate Result II have been grouped into three major components: 1) Contraceptive financing phase-over (which overlaps with Immediate Result III under "contraceptive logistics"), 2) Information and analysis and 3) Advocacy tools. Only one report was reviewed which was relevant to policy work.

### *Contraceptive Financing Phase-Over*

The phase-over plan aims to ensure that the Moroccan MOH will be able to obtain its own contraceptives and to maintain an appropriate logistical management and procurement system. As discussed in the evaluation report, *Logistics System Sustainability Plan*, the MOH has made significant progress in strengthening its own in-country system of distribution. However, despite such expansion, the MOH does not believe that the contraceptive procurement will be totally self-sufficient by 1999.

The key issues that are presently being worked on by the MOH and JSI and should continue to be addressed during the transition period include the MOH's:

- ability to manage the distribution and storage of contraceptives,
- ability to manage the Logistics Management Information System (LMIS),
- ability to accurately forecast contraceptives,
- awareness of the requirements for contraceptive procurement,
- ability to manage the custom process if contraceptives purchased off-shore, and,
- ability to estimate the cost of procuring contraceptives.

Finally, contraceptives should have their own budget line item to give FP activities more freedom.

Because of the need to ensure reliable and continuous contraceptive financing and logistics, USAID, JSI, and the MOH should continue to search for a realistic and reliable strategy for the procurement of contraceptives by the public sector and reach a consensus on sources and means to supply contraceptives after the year 2000. A conference is scheduled in late September 1998, to discuss phase-over and market segmentation in regard to provision of FP in the country.

### **Intermediate Result III: Reinforced Capacity to Manage FP/MCH Programs in a Decentralized Demand-Driven Mode**

As discussed in the Implementation Priorities document, to ensure the continuation and expansion of quality, client-oriented FP/MCH services, service providers' and administrators' skills must be strengthened, particularly at the provincial primary health care level, to effectively employ and benefit from a variety of program support systems which currently exist but are in different stages of development. Support systems include: (i) IEC, which is poised to more professionally design and effectively communicate messages to change behavior and promote FP/MCH services; (ii) Quality Management which is still in a nascent stage and requires greater focus on priority services and on the primary health care level; (iii) Training and Continuing Education which require strengthening in order to address skill deficiencies and quality of care issues; (iv) Contraceptive Logistics which has benefitted in the past from considerable assistance from USAID and CAs and requires modest assistance between 1997-99 to ensure that the GOM will be able to meet public sector contraceptive requirements upon termination of USAID bilateral assistance; (v) Evaluation and Monitoring which is very weak and not conducted systematically nor used effectively for program decision-making and planning; and, (vi) the MOH's Management Information System (MIS) which is characterized by a plethora of reporting forms, manual tabulations at the provincial level, and lack of feedback to providers.

These systems are currently in place in Morocco, but require updating, streamlining, and strengthening to be fully effective. Reports on IEC, training, contraceptive logistics and MIS were reviewed and are discussed below.

#### *Information, Education, and Communication*

A major thrust of USAID's IEC assistance involves the development and reinforcement of capacity within the *MOH/DP Division de l'IEC* to plan, develop, implement, manage and evaluate IEC activities in support of FP/MCH programs. USAID's assistance in IEC will continue through 1999 (end of Phase V).

Evaluations have been completed on the quality of IEC presentations (*Projet de Recherche—Action pour l'Amélioration de la Qualité des Présentations IEC*); the health videos shown on public transport buses ("*Tous Pour la Santé*" avec la CTM-LN: *Evaluation du Projet*), and quality of radio health messages (*Étude "Evaluation d'Audience" Rapport de Synthèse*).

The evaluation of IEC quality researched 4 pilot provinces: Tetouan, Taza, Tiznit, and Khémisset. This evaluation was somewhat vague and several recommendations were made (Annex I). However, the underlying recommendation is that the IEC, not only the quality, but the whole system, needs much work in Morocco. For example, enough materials for sessions should be available and organized, all health providers should support IEC efforts, more emphasis should be placed on recruiting women and assessing their needs, and a monitoring and evaluation system should be established.

The other two evaluations were both to measure the effectiveness, acceptability, and

impact of specific IEC projects. In general, the bus video project and radio messages were assessed favorably; however, by the nature of the media, these activities do not reach the most needy (i.e., those who cannot afford travel or radios). Another medium should be used to reach these people.

#### Key Recommendations:

- Reinforce capacity of the Division of IEC to design and produce quality IEC communication strategies and materials for the FP/MCH programs (purchase of equipment and training therein to improve technical capacity to produce video, audio-visual and print material).
- Strengthen human skills for the continuity of IEC activities in the field through the development of communication materials and facilitation skills of service providers.
- Focus some IEC activities to most needy.
- Identify very specific shortcomings for IEC already in place to use as reference for future IEC.
- Increase the participation of men (e.g., focus groups) and the private sector.
- Facilitate collaboration between the various *MOH* offices through team-building training
- Sponsor on-the-job training and specialized workshops on communications topics (such as counseling or IEC program development).

At the provincial level, the communication capabilities of health educators should continue to be strengthened through training so that they can better plan, carry out and evaluate local health education and motivation activities; mobile and fixed health facilities will be provided IEC materials to attract target audiences; and, community-based educational events will be supported.

#### *Quality Management*

In regard to program management, USAID, through JSI/Morocco and its subcontractor URC, will continue to support the development, implementation, and evaluation of a model for a consumer-driven quality management approach for FP/MCH services offered by facilities in selected provinces and at selected central sites (2 facilities each in Taounate, Tetouan, Taroudant, Rabat, Meknes, El Jedida, El Kalaa).

An evaluation (1st draft) was completed in August 1998 by Norma Wilson, *Internal Evaluation GIQua Project*. This document reviews the results of quality improvement activities in the 14 sites mentioned above. The key recommendations were to:

- extend awareness of the GIQua approach and desired behaviors to all levels and to all Directions within the MOH, including team building and management skills.
- use available local technical support to provide assistance to the teams in data collection, analysis, presentation, and evaluation ensuring adequate training on indicator development, data collection and analysis, and the logic of data use in problem identification and solution during training and coaching sessions.
- continue with quality management trainings.
- transfer the placement of the GIQua program from the Division of Ambulatory Care to sit directly under the Director of the DHSA (most preferable) or outside of the Directions entirely, under the Secretary General (would facilitate coordination but may distance program from operational activities). As the MOH quality management program extends into hospitals as well as ambulatory care services, the central

functions are more appropriately placed in a position of broader perspective.

- develop a strategy and a transition plan for expanding and developing a quality management program at the national, regional, and provincial levels.
- review and revise, if necessary, the GIQua implementation strategy to meet the needs of the national, regional, and provincial levels with particular attention paid to defining the role of the central level vis-a-vis the regional level for quality management activities.
- prepare the central level for its role of leadership and support to the regions as they implement quality management.
- develop and implement quality design and quality monitoring in the MOH
- define the role of the MOH in ensuring the quality of health care and services provided in both the public and private sector.

### *Training*

An evaluation was conducted of the FP/MCH training for 6th year medical students. The *Evaluation du Projet de Renforcement de la Formation Clinique en PF/MSR dans les Facultés de Médecine de Rabat et Casablanca* reviewed the effectiveness of a revised 6th year curriculum which included FP and Safe Motherhood which is now integrated into Rabat medical schools (however, not yet in Casablanca due to internal problems at the school unrelated to the curriculum). Some suggestions for these trainings are to have refresher TOT's from time to time and keep an inventory of teaching materials so as to avoid inadequate supplies. The curriculum revision was successful and the majority of the professors and students felt that the new "hands-on" approach and adult interactive teaching techniques were much more effective than existing teaching techniques. The only major recommendation is to establish the program in the faculty of Casablanca.

### *Health Information Systems (or Management Information Systems, MIS)*

No specific evaluations have yet been done with the MIS, however, the protocol for a data quality study was organized in May 1998 (see JSI Trip Report April 20-May 2, 1998, Annex I) to be launched in late 1998. The consultant, Dr. Stanislaw Orzeszyna, finalized the protocol of the study with reference to the procedures proposed in the WHO guide "Assessment of Clinical Data" (based on findings in pilot studies in Morocco and three other countries), finalized the study questionnaire, and helped with training the personnel responsible to collect data.

An electronic system for data collection in health facilities was completed in July 1998 and is being tested in Mèknes and Agadir. Eventually, the system will be set up in other provinces and finally linked to the central level.

## **Intermediate Result IV: Increased Diversification of Resources for Financing FP/MCH**

As discussed in the Implementation Priorities documents, to fully achieve USAID/GOM public health objectives, additional human and financial resources are needed in Morocco. The private medical and pharmaceutical sectors are well-developed and represent untapped resources, as does the growing NGO sector, for addressing priority services concerns. With a minimum of investment, private sector entities can be co-opted to serve public health interests thus alleviating some of the burden on the MOH which could then focus more of its efforts and resources on under-served and economically deprived areas. The MOH needs to strengthen its advocacy tools and skills to be better equipped to lobby for additional resources—from the GOM, other donors, and the private and NGO sectors—for the purchase of all public sector contraceptives and to support the expansion and improvement of FP/MCH services.

Two documents were reviewed regarding the private sector. The first one, *Strategy Document for the Increased Diversification of the Resource Base Financing the Delivery of FP/MCH Services, Using the Private Sector*, reviews strategies to expand the number of preventive services provided by private doctors, in particular general practitioners (GP's). For the sake of cost and expediency, USAID limited the GP trainings to FP with an emphasis on IUD insertion. The main recommendation was that private sector entities should be co-opted to serve public health interests whenever possible. To accomplish this goal, Cathy Fort suggests that the FP/MCH project focus mostly on the private doctors and link up or create synergy with the contraceptive social marketing group SOMARC. Thus, the MOH could then focus more on under-served and economically deprived areas.

The other private sector evaluation was a market segmentation study, *Étude de Segmentation du Marché au Maroc*, June 1998. The study assessed the contraceptive method mix and necessary sources to ensure the sustainability for the program. The information collected from this study can provide a basis for future strategies to increase use of the private sector FP services.

The key recommendations are:

- to expand use of long-term methods (especially for older and/or poor women who want to limit their births),
- to eliminate the problem of unmet need (are the women getting the services that they need and want?), and
- to expand the role of the private sector to disseminate FP (the private sector target should target urban women, especially older women, for FP use).

## **Conclusion**

Even though Morocco has seen much progress in establishing viable FP/MCH programs, many areas are still vulnerable and are not self-sufficient. These areas must be addressed in the final years of the bilateral and post-bilateral period to maintain the gains of the past 30 years.

Not addressing these matters may have serious consequences for the Moroccan program in reaching sustainability. The Moroccan FP/MCH program is potentially vulnerable because of the predominant role of the government in providing FP/MCH services (as opposed to some help from the private sector), the heavy reliance on short-term contraceptive methods, limited access to and use of health services in rural areas, and concerns on the quality and acceptability of FP/MCH services.

Thus, USAID supports addressing these concerns by institutionalizing key interventions as discussed above which will facilitate sustainability of the health programs. Hopefully, with USAID's goals of focussing on contraceptive social marketing, increasing access to private sector services, and decentralizing management of FP/MCH programs, sustainability will be attained for Morocco. In further support, USAID will continue to provide selected technical assistance to the MOH to address problems which may arise in national FP/MCH program systems.

## **Annex I**

## **Dynamics of the Moroccan Family Planning Program Key Findings from Evaluation Research**

Scope of work: This report summarizes the key findings from the evaluation research on the MCH/FP program in Morocco by Tulane University in collaboration with the MOH and John Snow International, Inc. (JSI).

The EVALUATION Project, Tulane University, 1992-1997

### **Introduction**

This report measured the impact of the family planning supply environment on reproductive health behavior and contraceptive use. To measure this impact, the report aimed to increase the understanding of the program itself (access, quality, trends in output and outcomes), to identify barriers to use, including factors internal and external to the program, and to reflect the wide range of research and training activities that contributed to creating an evaluation culture within the MOH.

Morocco was one of the first countries to become a "focus" country for the EVALUATION Project and the idea was to concentrate substantial technical, financial and human resources for the purposes of upgrading the quantity and quality of family planning program evaluation in Morocco.

### **Results**

Some key findings were as follows:

*Access to contraceptive methods (fairly high)*

- 98% of women live within 30 km of a health facility which has family planning services; birth control pills are available almost everywhere and intrauterine devices (IUD's) are available in 2/3 of urban clinics and 1/3 of rural clinics

*The quality of family planning services*

- most have infrastructure, equipment, and supplies (certain pill brands and condoms usually available)
- inadequate supplies of Ovrette pills, IUD's, and IEC materials

*Under-utilization of IUD*

- despite much USAID and MOH investment, use only increased 1% from 1992-1995
- provider bias in favor of pills
- fear of side effects
- attempts made to improve service delivery for IUD use—refresher training in counseling and IUD insertion and IEC campaign to promote the IUD

*Program performance*

- development of interactive computerized system provides program managers with easy access to MCH/FP indicators

*Contraceptive use*

- measured the effect of FP service environment (the strength of the program in a given location)
- contraceptive discontinuation and failure due to desire for another pregnancy, IUD side effects, and failure of method (perhaps due to incorrect usage)
- three factors were found to affect women's contraceptive use: 1) her own fertility desires, 2) her perception of her husband's fertility desires, and 3) her husband's actual fertility desires
- women who used MCH services were more likely to adopt contraception than women who did not
- stated intentions are an important predictor of actual use
- favorable family planning supply environment facilitates contraceptive adoption
- increase in the necessity for nurse trainings is a good predictor of modern contraceptive use

#### *Reliability of the DHS calendar data*

(A panel design was used in these surveys, thus, the same women were interviewed in both years, providing an opportunity to examine the reliability of responses.)

- high reliability at aggregate level, low level of consistency at individual level
- reasons for discontinuation may be too unreliable to serve as the basis for policy or program changes without further validation from other sources (because of low reliability at individual level)

#### *Determinants of maternal health care use*

- use of prenatal care and assisted delivery low

#### *Household health care expenses*

- health care spending accounted for 7% of total urban household budget, 5% of rural

#### **Additional products of study**

- Interactive data base for monitoring MCH/FP statistics for personal computers and the Internet
- Chartbook of FP and MCH service statistics from 1992-1996
- Morocco-adapted handbook of indicators for MCH/FP program

#### **Recommendations**

- Consideration should be given to address the under-utilization of maternal care services
- Further development of tools to monitor quality of care
- A secondary analysis of PAPCHILD (Pan Arab Project for Child Development) data, to exploit this resource to the fullest extent for the benefit of the MCH/FP program and to further develop the data analysis skills of the MOH counterparts
- Continued promotion of IUD (will be necessary for phase-over period because IUD's are less expensive than pills and are a more "long-term" method)
- Consideration should be given to avoid inadequate supplies of pills, IUD's, and IEC materials

#### **Evaluation des Performances du Programme Norplant**

(Performance Evaluation of the Norplant Program)

Scope of work: This evaluation reviews the role of Norplant in the National Family Planning Program of Morocco and the future strategy after more than four years in six health centers.

JSI, June 1998

## **Introduction**

The Norplant program was launched in Morocco as a small-scale, experimental project in 6 health centers to test its acceptability amongst the population. The evaluation was based on information taken from forms filed by Norplant users at admission and every subsequent visit.

The final objective of this study was to assess the place of Norplant in the National Family Planning Program and look at the most frequent methods of contraception to determine a future strategy. The more specific objectives were to: 1) estimate the level of benefits, 2) study the socio-demographic characteristics of the users, 3) analyze the acceptability of Norplant as a long-term method, 4) determine the total of those who continue using Norplant and those who discontinue use and the causes, 5) estimate average duration of use, and 6) estimate the cost of the most used method and the average duration of use.

## **Results**

### *Profile of the clients*

- Average age 30.4 years, with 3.6 children (90% have at least 2 children)
- Before using Norplant, 75% of the women used the pill and 11% had never used any form of birth control; recruitment for the program was more effective with those who were already FP clients than with those who were not.
- Although weight plays an important role in the utilization of Norplant, weighing the clients was not systematically done after the initial visit which may potentially increase side-effects and failure rates.

### *Project performance*

- The sampling was inconsistent and was not correlated with the target population of the provincial level. Also, the manner of recruitment was not consistent from one health center to another. No standard sustainable programs exist to promote the use of Norplant.
- First 3 years showed a large increase in use (35 users in 1992 and 2159 in 1994), however, a decrease in use from 1995-1996 (1230 to 231 users).
- Insufficient or nonexistent education and supervision programs
- Average number of follow-up visits 2.44 per woman. Some centers recommended only one visit.
- Principal side effects were amenorrhea (27.7%) and irregular menstruation (7.6%) which were the primary causes for discontinuation.
- Total number of women who continue use is rather high (93.4%, 12 months after insertion, 80.1% after 24 months and 69.4% after 36 months) which is better than the pill and IUD continuation rates
- Inexpensive method if utilized to fullest extent. Monthly cost analysis renders it too

costly (often not used for long period because of this and thus considered costly)

- Norplant insertion and removal are surgical processes and thus must have trained personnel (difficult because health personnel move around a lot).
- Norplant is very effective (out of 4773 Moroccan women, only 11 became pregnant, 0.2%).

### **Recommendations**

- It is desirable to complete this study with two others, perhaps in a focus group format: one on the opinions of women about this method and another concerning the opinions of health personnel, to better understand the acceptability and reasons for continuation or discontinuation.
- Review the increasing costs in financial and human resource terms. Norplant should not be used in the same manner as other methods. It should only be used in those centers where adequate infrastructure and competent personnel are in place. Also, Norplant should be reserved for only those women with contraindications to other methods.
- Should only have certain insertion centers where there is a university hospital to ensure a certain level of quality (Rabat, Casablanca, Marrakech, and Fes, however, Fes was not an original pilot site).
- Trainings should be done for the medical and paramedical professionals who will be distributing this method. They should be standardized and thorough presenting all the relative clinical and counseling aspects.
- Develop a supervision system of continuous training (refresher training) to keep the staff motivated and solve any problems as they arise
- Establish a follow-up system to encourage the women to come to periodic check-ups and to reduce the number of those who discontinue
- More education should be done to make people aware of this method to better establish this program

## **AVSC Evaluation of voluntary surgical contraceptive program**

Scope of work: The purpose of this report is to assess the current status of the voluntary surgical contraception program in Morocco focussing on the program's capacity to meet the demand for services, to administer and manage the finances, to address long-term sustainability issues and the future roles of various parties (MOH, USAID, etc.) and cooperating agencies.

AVSC International, May 1995

### **Introduction**

In addition to temporary methods of contraception, another part of the Moroccan family planning program includes tubal ligation as a long-term FP solution. The program, called the VSC (voluntary surgical contraceptive) program was initiated in 1982 by the National Training Center in Human Reproduction (NTCHR). Due to improved service availability and increasing demand, tubal ligation accounts for about 7% of the total contraceptive use in 1992.

From 1982 to 1990, the NTCHR was the primary provider of tubal ligation services. Working in collaboration with JHPIEGO, the NTCHR conducted training programs for Moroccan physicians, surgeons, and paramedical personnel on tubal occlusion using laparoscopy with conscious sedation.

In 1988, a midterm assessment was done on the VSC program and it was recommended that a pilot study of postpartum minilaparotomy be established, however, this recommendation was never implemented. In 1992-3, service providers went to a training on interval and postpartum minilaparotomy in the Dominican Republic; subsequent trainings were held in Fes and Agadir. Unfortunately, however, those efforts were unsuccessful in establishing services for either interval or postpartum clients. Even though physicians recognize that minilaparoscopy is less costly, most would rather perform laparoscopy and claim that the women prefer the laparoscopy when given a choice. Often the physicians only offer this service at their sites.

Another recommendation of the 1988 assessment was "to integrate the VSC program more fully into the structure of the MOH to better ensure its institutionalization in the long term." So, in 1990, AVSC began working more closely with the MOH to expand service availability. The program continued to rely on NTCHR for training, technical supervision, and management of expendable supplies, and development and management of the national VSC program was primarily to be the responsibility of MOH. The NTCHR, with JHPIEGO's assistance, began transferring administrative and technical responsibility to MOH. While a certain degree of institutionalization had occurred, the long-term sustainability of this program remained precarious due to financial constraints.

Thus, another evaluation was done early in 1995 to assess the status of the VSC program. It focused on the capacity of the program to meet the demand for services,

deal with financial management and administrative matters, address sustainability issues and future roles of the MOH and other agencies. As a result, a new VSC program will be developed based on the recommendations of the findings of this study.

The qualitative evaluation was conducted during a 3 week period making site visits to assess service delivery, equipment repair and maintenance, and discuss the project with the MOH and NTCHR. Also, cost analysis and referral system studies were prepared. The DHS (1992) was used as a reference as well.

## **Recommendations**

### *Program management*

- MOH and NTCHR officials need to agree on their roles and responsibilities for the VSC program before a new program is finalized.
- Roles of other participants, such as USAID/Rabat and cooperating agencies, should be defined.
- Coordination meetings should be scheduled quarterly or semi-annually.
- management of the expendable supply system should be transferred to the MOH.

### *Access to Services*

- Should schedule additional trainings to increase number of personnel working on the VSC program.
- Should schedule tubal ligation procedures twice a week at sites with heavy demand.
- Minilaparotomy under local anesthesia should be integrated into the maternity and postpartum services which would increase availability and access to services.
- Certain logistical procedures for the clients should be simplified (i.e., making appointments for tubal ligation).
- Inform service providers of current eligibility criteria and apply this criteria systematically to all potential clients.
- Reassess the function of the referral centers within the health/family planning infrastructure (each center should at least offer all temporary methods and VSC whenever feasible).
- Do not use VSC laparoscopy teams for large numbers in a short period of time.

### *Improve Existing Services*

- Train more gynecologists and surgeons in laparoscopy—identify priority sites and develop training plan.
- Organize infection prevention workshops to assure that all staff working on the VSC program know correct procedures.
- Counseling in all family planning methods needs to be improved, assessment of the counseling training capabilities should be made, and refresher trainings should be scheduled.
- Relocate or rearrange the VSC operating room at Ben M'Sik immediately (VSC unit in busy maternity section of hospital, operating room poorly located opening to a corridor, and insufficient number of beds for TL patients).

### *Develop Minilaparotomy Under Local Anesthesia Services*

- Integrate minilaparotomy under local anesthesia (ML/LA) into the VSC program, prepare a new strategy to introduce ML/LA.
- Conduct activities to overcome provider bias against ML/LA and correct misunderstandings among service providers,
- Conduct a study of the acceptability of ML/LA in the immediate postpartum period,

### *Long-Acting Methods*

- Develop and disseminate clinical and service delivery guidelines,
- Conduct additional training in counseling and management of side-effects for personnel where IUDs, Norplant®, and injectables are being introduced
- Increase follow-up and supervision where Norplant® and Depo-Provera are being introduced
- Investigate immediately the number of clients who report problems with Norplant® and Depo-Provera,
- Make plans to better integrate program management and service delivery for tubal ligation and long-acting methods,

### *Training*

- Increase the number of training centers and consider development of regional training center
- Include training in laparoscopy and ML/LA in the curriculum of all residency programs in gynecology and obstetrics
- Conduct training in family planning counseling at existing and new VSC sites
- Organize workshops in infection prevention in all provinces and technical supervisors should conduct follow-up visits
- Link all regional training centers and referral centers to provide better opportunities for practicums.

### *Expendable Supplies (At the time of this evaluation, the following had not yet been completed but have since been accomplished)*

- Revise list of expendable supplies removing emergency drugs (should be provided to the VSC units from the hospital pharmacies)
- Include expendable supplies required for tubal ligations in the phase-over plan for contraceptive commodities being developed by JSI

## **Evaluation of Basic EOC Refresher Training**

Scope of work: Evaluation of pilot project in emergency obstetric care  
JSI/Elisabeth Anne Goodburn, MB Bch, DRCOG, PhD  
April 26 to May 8, 1998

### **Introduction**

Despite nearly 20 years of donor inputs to prenatal care and improvements in other health indicators, the maternal mortality rate in Morocco has continued to be fairly high (330/100,000 in 1992). In 1995, the Ministry of Health of Morocco began a pilot project with funding from USAID/JSI in the central and north regions of Morocco. This project provided the funding for staff training, equipment, and infrastructure improvements. The initial focus of the Emergency Obstetric Care training was to improve quality of obstetric care and to extend the number of facilities providing basic EOC. The pilot project aimed to develop services for comprehensive EOC in 3 hospitals and basic EOC in 52 health centers.

The evaluation objectives were to 1) evaluate all aspects of the pilot's basic EOC training (organization, inputs, output), 2) study critically the didactic documents used in the training, 3) calculate the detailed costs of the training, and 4) make recommendations which will assist the MOH to standardize the training and replicate it in other parts of Morocco. For this study, the evaluators held interviews with organizers and trainers; reviewed reports, didactic training materials, and protocols; visited training and service delivery sites; and finally, did a cost analysis.

### **Results**

In general, the trainings were successful and all the planned sessions took place. The EOC concept was well understood and the trainers were motivated. The participants seemed to have had a positive experience and increased the scope and quantity of their work. The most successful feature of the training was the supervised practical experience in the major components of EOC.

The pilot was somewhat vertical and costs were high. However, many integration opportunities with the MOH "Strategy for Continuing Education" were identified. For example, regional IFCS's (Institut de Formation en Carrières de Santé) are expected to take an increasingly active role in continuing education and routine rotation of peripheral staff through referral level maternity units has already been started.

Overall, the quality of the training may have been affected because no global plan to standardize the training existed. The Training of Trainers (TOT) was intended to create a core group of trainers, however, only 30% went on to teach EOC training. The courses were too short and too numerous. They seemed to exceed the capacity of the local trainers. Also, no technical follow-up of trainees was done.

In addition to these problems, there were some communication problems in French and some of the trainees had little or no maternity care experience (which was required to participate in the training). Also, major discrepancies existed in some of

the didactic documents used. For example, some protocols were not compatible with the WHO recommendations or adapted for use in rural facilities.

### **Recommendations**

- Establish a standard global training plan which logically links all parts of training process.
- Integrate EOC training into the CE strategy with involvement of the Regional IFCS.
- Increase length and reduce frequency of training courses.
- Include teaching practice in the TOT.
- Have all trainers participate in a TOT.
- Standardize protocols with input from CHU culminating in a 2nd edition of the MOH manual.
- Reinforce and build on the practical aspects of the training.
- Develop and use standard lesson plans.
- Continue use of Carnet de Stage.
- Develop standard competency-based procedure checklists and assessments.
- Adhere to the criteria for selection of trainees.

## **Exploratory Study of Behaviors Impacting the Nutritional Status of Children in Rural Morocco**

Scope of work: The purpose of this study is to identify, for the MOH and other interested organizations, the behaviors that impact the nutritional status of rural Moroccan children, as well as the practices and beliefs that prescribe those behaviors. US Peace Corps and JSI, September 1997

### **Introduction**

In September 1996, a preliminary questionnaire was field tested by 10 Peace Corps Volunteers (PCVs) in rural areas of 6 provinces where the PCVs live. Based on the results, MOH, USAID, JSI and Peace Corps refined the questionnaire. The interviewers received instruction on interviewing techniques and language skills. Twenty PCVs then conducted interviews with the questionnaires and also inquiring about 24 dietary recall. They also agreed to conduct monthly marketplace surveys to assess availability and cost of certain foods. Within each site, the families were not randomly selected (chosen by each Peace Corps volunteer), the only common denominator was the presence of at least one child between the ages of 6 to 30 months at the onset of the study.

Although few problems arose during the implementation of the project, two bear mentioning. First of all, due to differences in interpretation of some questions, discrepancies arose between actual responses and perceived realities (i.e., responding to questionnaire that child is breastfeeding but breast milk not included when inquired about 24-hour recall). Secondly, typical logistical and technical problems arose such as the lack of standards with 24-hour recall portion size and also determining socio-economic status of the households. Finally, the villages that were used for study (PCV sites) are deemed by the MOH to contain serious health concerns and need further assistance in reaching members of these communities. Also, because they have higher health concerns, they are not necessarily representative of all rural Morocco (however, the qualitative data can be helpful as a reference for some concerns).

### **Results**

In the study, no difference was found between male and female children. The only factors that appeared to influence the child's diet were ownership of animals and a home garden. Despite differences in socio-economic levels, children seemed to have the same diets. However, significant differences were shown between children who were completely weaned and those who were weaning. The weaned children were at risk for deficiency because the vitamin A was not being replaced (from other food sources such as tomatoes, turnips, and onions) that they were no longer receiving from breast milk.

Although the mothers knew what kinds of foods to introduce during weaning, they usually were also giving tea which can inhibit vitamin absorption. They usually were not giving a wide variety of vegetables (which are available in most markets) to supplement the decrease in vitamins from breast milk.

## Recommendations

- Development of a micronutrient deficiency program (focusing on vitamin A) using a three pronged intervention program with the collaborative efforts of the Ministries of Agriculture, Health, and Education.
- Provision of material (seeds and initial livestock) and educational support for families to improve their nutritional knowledge and practices.
- Education should focus on several levels:
  - health workers*—train to recognize vitamin A deficiencies and know proper diets reflecting food availability
  - food buyers*—educate on how to budget and select food to optimize the nutritional value of child's food intake
  - women of child-bearing age*—educate one-on-one about weaning practices and general nutrition
  - school children*—target specific behaviors such as school garden as part of agricultural extension or other participatory projects
  - mass media*—reinforce other educational interventions (should not be main focus of program)
- Supplement with vitamin A capsules should only be used to augment a program and provide treatment to children at high risk of ocular disease (mostly a short-term solution)
- Fortification not best option due to a lack of single widely used food (if used, should fortify multiple food items)
- Feeding programs not preferred because no behavior change necessary and cause dependency on a commercial product. Also, many vitamin A rich foods are available in every region.

## **Evaluation de la Formation Regional Combinée en Matière de LMD, LMC, et Immunization: Etude Comparative**

(Evaluation of Regional Combined Training in Different Aspects of Child Survival  
Diarrhea Prevention, Micronutrient Deficiency, and Vaccinations:  
A Comparative Study)

Scope of work: This study was administered to evaluate the combined child survival trainings in Morocco, including diarrheal disease, micronutrient deficiency, and immunizations, particularly polio eradication.

JSI, March 1997

### **Introduction**

In 1996, the Moroccan MOH organized several trainings and retrainings on child survival. These sessions included 1200 health professionals from 30 different provinces and prefectures in Morocco. An evaluation was done to measure the quality of the trainings and also to measure some impact. The objective was to evaluate and compare a group of health professionals receiving a vertical training in each area separately vs. a group receiving a combination training of all areas together on their knowledge and practices of diarrheal disease management, growth monitoring, detection and management of malnutrition, and epidemiologic surveillance of polio.

### **Results**

Those health professionals who received the combination training of child survival subjects were much more apt to assure a "global" approach to diarrheal disease. At the questioning stage, they were more likely to research the potential causes, and associated problems. Also, they inquired more frequently about the vaccination and nutritional status of the child and in the case of dehydration, they more accurately classified the level of dehydration of the child. Those who had the combined training, also were more accurate in assessing nutritional status and management of malnutrition using better interrogation and anthropometric techniques. Finally, and perhaps most importantly, they seemed to have better communication skills with the mother on all of these subjects.

On the subject of polio eradication, the trainings served to relaunch the active research in the provinces and prefectures. The knowledge of the doctors on polio eradication was sufficient; however, the nurses need to have a refresher course.

### **Recommendations**

- Generalize the training combination of all the aspects of child survival in the provinces and prefectures.
- Generalize the medical, eradication-of-polio training courses to all the provinces and prefectures and train more health professionals (the courses should be updated from time to time based on the national and regional evaluations).
- Make the trainings as practical as possible.
- Emphasize the importance of nutritional status evaluation using the latest

malnutrition detection techniques and "thinness" diagrams.

- Emphasize the importance of diarrhea case management at home and good communication skills of the health professionals to the mothers, particularly on teaching the mothers about signs of illness severity.

**Enquête au Niveau des Formations Sanitaires Sur la Prise en Charge  
de l'Enfant Malade dans les Provinces D'Agadir et Meknes**  
(Study of Health Facilities and Integrated Management of Childhood Illness  
in Agadir and Meknes)

Scope of work: The purpose of this report was to collect information on the quality of the integrated management of the most frequent childhood illnesses on morbidity and mortality of those under age 5; the availability of medicines, materials, and equipment; and the organization of treatment facilities. This study will serve as the baseline data for the two provinces.

BASICS: Serge Manoncourt, MD, MPH; August 25, 1997

## **Introduction**

This study was completed with the Ministry of Health in 20 health facilities in Agadir and Meknes—18 health centers, 1 health clinic, and 1 "non-medical" health clinic (142 children and 140 mothers interviewed). The data acquired from this study will serve as the baseline data before implementing the IMCI strategy and will be used to test the efficacy of this approach. This study attempted to meet several objectives: 1) determine the knowledge and actual practices of the health personnel while consulting, 2) determine the knowledge, attitudes, and practices of mothers at home regarding the responsibility of child care, 3) determine the main obstacles of integrated management, 4) evaluate the appropriateness of the training and supervision of health personnel, and the appropriateness of the available equipment, supplies, medicines and vaccinations of the health facilities. The results of these inquiries will be used as monitoring and evaluation tools to measure progress compared to baseline data, to define priorities and plan organizational, personnel and equipment improvements for target facilities, and to improve training for health personnel.

## **Results**

It was found that in general, integrated management of childhood illness is not practiced globally by the health workers in Agadir and Meknes. This concept of an integrated approach, including systematic elements of questioning, clinical exam, diagnosis and medical advice, is not practiced. Most programs and health systems are central and vertically organized. By attempting to change the health care system to a more participative, preventive and organized approach, the Ministry of Health will hopefully be more efficient and effective.

Based on the results of the study, several indicators were chosen for monitoring the quality of integrated management of childhood illnesses (for example, proportion of children with severe disease symptoms, or duration of symptoms, or proportion of children whose mothers were taught how to correctly administer medicine at home)

## **Recommendations**

### *Clinical examination of the child*

- Introduce the concept of integrated management of childhood illness to all health workers.

- Elaborate an integrated management guide and develop the supervision principles to replace the existing vertical programs.
- Encourage the coordinators to participate in all aspects of child health management.
- Discuss obstacles and propose a more appropriate organizational system with the health staff. Redefine the responsibility of the existing staff so that the integrated system will be most effective.

#### *Nutritional consideration of the child*

- Develop a systematic approach to nutrition that puts accent on nutrition as an integral part of the consultation.
- Discuss with the staff obstacles and solutions to problems with growth monitoring and systematic recording of weight on the MCH growth chart.
- Improve the coordination between the MCH unit and the doctor and regularly use the thinness diagram in the consultation.
- Systematically look for the clinical signs of micronutrient deficiency, specifically iron, iodine, and vitamin A.
- Incorporate these principles during the continuous training sessions and for all the coordinators of the vertical programs at the time of their supervision.

#### *Vaccinations*

- Develop a supervised integrated approach emphasizing the vaccination of mothers and their children
- Investigate the possibility of having all vaccinations available every day and if not, then implement a system to look for the children who are not there at vaccination time.
- Improve coordination between the preventive and curative health staffs within every health facility.

#### *Diagnostic*

- Encourage participation of the health personnel, physicians and nurses, responsible for management of child illness, in a decentralized training program of integrated management of childhood illnesses and monitoring through periodic supervision involving program trainers as well as pediatricians (to prevent possible conflicts among non-practitioner supervisors)
- Delegate more responsibility to the nurses to succeed at a more accurate paramedical consultation before sending the children to the doctor (more time will be spent by the doctors with children who were referred).
- Reorganize staff tasks so that they are more evenly distributed.

#### *Treatment*

- Explain the importance to the health agents of correctly explaining the prescribed treatment and assuring that the mother understands.
- Improve coordination between the doctor and the distributor of the medicine at the health facility.
- Educate the private pharmacists on the importance of clear and sufficient information about medicines.
- Develop simple communication techniques on how to take medicines, management of illness, and signs of disease severity to look for at home.

### **Integrated Management of Childhood Illness Project: IEC Community Approach Morocco**

Scope of work: The purpose of this report was to work with the integrated management of childhood illness (IMCI) program of the Santé Maternelle et Infantile (SMI) Division of the Ministry of Health (MOH), Morocco, to determine and recommend strategies for developing and strengthening health service facilities and community-based actions.

Elizabeth A. Gold, Allan M. Kulakow

BASICS, December 1-20, 1997

## **Introduction**

The IMCI program is being pilot tested and evaluated in Agadir and Meknes in 10 health facilities in each province. The first training was scheduled for spring 1998. The strategies recommended by the BASICS consultancy focus on improving family and community practices in support of the IMCI initiative, concentrating on early recognition of danger signs, appropriate care seeking, care at home, and overall health promotion at the household and community levels. The tasks included 1) identifying existing and potential community-based structures to promote initiatives in support of health facility programs and community health needs and 2) assisting in finalizing a plan and schedule for developing mother's card and other appropriate media support for the key caretaker behaviors and messages in the IMCI program. BASICS recommended for a short-term IEC strategy for IMCI to strengthen the counseling and interpersonal communication (IPC) performance of health staff and to test several community-based approaches to the introduction of the IMCI.

## **Results**

Results of the study found that community-based strategies to support IMCI is strong in Meknes and Agadir (much more in Agadir, however). They both have defined community-based projects that involve realistic opportunities to develop community activities in close collaboration with health facilities. Also, the Ministry of Agriculture has been working with Public Health in training *vulgarisateurs* (local health workers) and is interested in expanding its collaboration. To be certain of a community's sincere interest in development, each community must make a contribution of labor, cash, agricultural products, or other expressions of commitment and must demonstrate that a community organization exists or will be established before support from Agriculture is forthcoming.

Another observation was that the health facilities are overflowing with mothers and their children in the morning but empty in the afternoon. The walls are covered with inappropriate posters of vertical health programs and nutritional posters of foods the women do not know or can not buy. The health workers often did not make eye contact or offer a seat to mothers because they were too occupied with paperwork. Also, most workers said they led group education sessions on family planning and vaccinations but not on a regular basis.

## **Recommendations**

### *Community-based Approach*

- The two aspects of the IMCI program—community-based interventions and information and educational supports—should be fully integrated.
- Community-based projects that will meet the criteria established by the central level IMCI committee and approved by BASICS and USAID should be given immediate attention (e.g., criteria include lack of access to health facilities, existence of widespread child health problems, presence of local competence to carry out the project, etc.).
- All proposals should include plans for IEC support or for the development of IEC support strategies and should follow proper submission procedures (as listed on page 13 of this official BASICS report).
- Baseline studies of knowledge, attitudes, beliefs, and practices and resources of the primary target groups and those who influence them (secondary target groups) in each community should be conducted as a first step in design of each community project.
- An assessment of training and technical assistance needed by each community-based program should be conducted as soon as the project is approved and continued periodically. All projects should be monitored every 3 months and evaluated externally under the guidance of the IMCI central program.
- Other major NGO's should be utilized to develop national interest and support for IMCI, to supplement the resources of central and local IMCI programs, and to help expansion to other sites .
- Two representatives from each of the Agadir and Meknes health teams and two from the IMCI central program should visit the IMCI community-based programs in Madagascar.
- A full-time BASICS manager should be assigned in January, 1998 to work with SMI, JSI, and USAID to assist project development and funding procedures (N.B. An expert came to Morocco early in 1998 precisely for this purpose).

### *IEC Support for IMCI*

- Health worker needs to spend more time with each child and mother in examining, diagnosing, treating, and counseling with a continuous working day to help stagger the patient flow.
- The IMCI program should creatively educate the women waiting in the waiting room.
- If interest is expressed by the community, a full-time health educator should be designated to serve also as a liaison and trainer to the community.
- Assessment should be made of the effectiveness and appropriateness of the IEC materials (cassettes, flipcharts, leaflets, etc.).
- Agadir and Meknes teams should develop an action plan for improving counseling and interpersonal communication to be implemented over the next nine months and ideally starting in advance of the IMCI training course.
- Once the food box adaptation is completed and approved (final report received May 1998), the IEC animateurs from Agadir and Meknes should work (in consultation with the provincial IMCI teams) to begin adaptation of the mother's card (using other country cards as examples). Because of low literacy rates, mother's card should be as simple as possible using Arabic and pictures whenever possible. It should be pretested with target mothers and health workers and included in the new *carte de santé* as it will be more sustainable in the long term.
- Every effort should be made to coordinate with JSI's activities in support of the MOH

(including images for the mother's card, radio time for health programming, working with women's NGO's).

- An *aide-memoire* for the health workers needs to be developed (with a checklist of the key messages for mothers and a glossary of local terms needed to communicate clearly) but should be delayed until the IMCI training course.
- An information packet on child health issues and IMCI should be created as well as a bimonthly "IMCI Update" bulletin giving progress reports.
- Itinerant nurses should also receive training in IMCI, as deemed appropriate for their work.

**Integrated Management of Childhood Illness  
Adaptation of the Subsistence Advice (Foodbox)  
Results of the First Practical Attempts to Improve the Effects  
in Agadir and Meknès, Morocco**

Scope of work: This report describes the results found from the research and analysis of available food resources, languages and dialects, literacy levels, etc. by the BASICS project and the MOH in the implementation of the Integrated Management of Childhood Illness (IMCI) approach in two provinces, Agadir and Meknès. It reviews the work done to prepare the foodbox adaptation (adapted from the original format developed by the World Health Organization) including research methodology, USAID debriefing session notes, constraints, recommendations, and numerous annexes.

BASICS, Lamine Thiam, December 1997

## **Introduction**

Since February 1997, the MOH has been engaged in testing the IMCI strategy developed by WHO and UNICEF in collaboration with the USAID/BASICS project in Agadir and Meknès, Morocco. The first research to be done was a literature review to accomplish the following objectives: 1) to identify the source and type of available data, 2) to identify the main problems linked to child nutrition in Meknès and Agadir, 3) to analyze the constraints that may keep mothers from changing their behavior relative to the feeding of children, and 4) identify any missing information.

After the literature review, data collection instruments were developed including guides to evaluate knowledge, attitudes, and practices of mothers and the staff of the Ministry of Health and the Ministry of Youth and Sports in Agadir and Meknès relative to child feeding. Guides to counseling and recommendations were also developed.

The next steps were to train the researchers and do the exploratory research. Training included increasing their interpersonal communication capacities, familiarizing them with the maintenance manuals, enhancing their analysis skills, and testing the data collection instruments. Then, they held extensive, non-structured interviews to collect information that may have been missing from the literary review. Based on the results of these interviews and the literary review, they elaborated some preliminary recommendations for different age groups (0-24 months) and tested these recommendations. (Note: The actual report goes into great detail about the results.)

## **Results**

It appeared that most of the mothers in the 2 provinces were ready to try at least one of the recommendations.\*\* The mothers felt empowered because they are directly involved with the feeding of their children and were implicated in the choice of a suitable solution to better nourish their children. They also received encouragement from those people that were close to them to adopt a new practice, and the team

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\*\*The recommendations were typically advice on proper breastfeeding, weaning practices, and child nutrition.

working on the project used simple arguments for motivation.

However, several constraints were found:

- The agents from the Ministry of Youth and Sports in Agadir participated in the training session for consultative research in October, but not in the exploratory research session in November.
- Because of a lack of nutritional knowledge, certain agents from the Ministry of Youth and Sports in Meknès had some difficulty with data analysis and formulating specific recommendations for the mothers.
- The logistics in Meknès were sometimes disorganized.
- Because of recruitment problems and the short amount of time allotted for the trial period, the sample size of sick children was reduced.

### **Recommendations**

- Share the results of the exploratory research and the practice trial with the other members of the national IMCI commission .
- Test and develop nutritional information cards that could serve as memory aids to the health agents or the coordinators in the community in counseling sessions.
- Test a multisectoral approach to nutritional education in the communities of Agadir and Meknès.
- Analyze the results of the research to continually revise the training module and for refresher trainings.
- Exploit the results of this practice trial to revise the strategies already developed by the Ministry of Health for the promotion of breastfeeding and prevention of micronutrient deficiency.

## Logistics System Sustainability Plan

### Introduction

The main goals of the phase-over plan requires the Ministère de la Santé (MS-- Kingdom of Morocco, Ministry of Health, MOH) to obtain its own contraceptives and to maintain an appropriate logistical management and procurement system. In general, the MOH has made significant progress in strengthening its own in-country contraceptive logistics management system. Approximately 2800 health providers have been trained in new, more efficient inventory control procedures (600 more will be trained in 1998), and contraceptive stock levels seem to be in balance throughout the country. Previous problems such as oversupply, stock expiry and stockouts have been eliminated. Forecasts of contraceptive requirements are more accurate than ever before.

However, even though the MOH is expanding its services, the outlook for the conclusion of the phase-over raises some serious concerns:

- The MOH does not believe that the GOM can fully fund contraceptive procurement beyond 1999. Although some sources have been suggested (the IPPF and UNFPA), no adequate alternative sources for contraceptive supply for the MOH have been identified to be in place by 1999.
- Although the decentralization effort has been successful in reducing supply imbalances and in preventing stockouts and product expiry, if adequate security stock is not maintained, system will fail.

### Recommendations

As recommended by the Logistics System Sustainability Plan, an informally established Task Force (consisting of members of USAID, JSI, and appropriate staff from the MOH, Direction de la Planification Familiale, Direction de la Planification et des Ressources Financières, Division de l'Approvisionnement, and Direction de la Formation) was formed to look at these issues. Continuing evaluation is being done by the PHR Project to address these urgent problems by focusing on specific goals for 1999. Key issues include:

#### • Ability to manage the distribution and storage of contraceptives

The MOH has formally agreed to the phase-over host-country contribution (HCC) and has allocated funds for its own contraceptive program needs in even larger amounts than originally suggested by the HCC. The logistics system is still being analyzed with some delay, however, field visits so far have shown that the system is successful.

At the moment, the shortening of the commodity "pipeline" (the sum of all the maximum stock levels) which is 27 months, is being discussed. Forecasts have been done considering a 24-month pipeline, but no changes have occurred. Three ways have been suggested: 1) reduce storage levels, 2) increase the frequency of deliveries, or 3) increase the reliability of deliveries so that safety stock levels can be reduced. Given the phase-over, a larger pipeline may be currently seen as by

the MOH as desirable.

Another issue regards the integration of the new warehouse for contraceptive storage. Presently, the warehouse in Casablanca is superior and good storage practices are in place. The new warehouse in Salé has just been made operational and there is some question as to which warehouse will distribute to different parts of the country.

- **Ability to manage the Logistics Management Information System (LMIS)**

A new ordering and shipping form, new stock cards, and new stock register have been designed, tested, documented, and implemented nationwide. Also, the consumption database from the Système National d'Information Sanitaire (SNIS) is regularly used for forecasting contraceptive commodity requirements and software has been developed and implemented to automate the family planning portion and the central-level analysis of LMIS data.

Some issues to be addressed here mainly concern adequacy of the forms and reports filed at all levels of the system. These include: 1) staff errors in filling out the reports (i.e., calculation errors, etc.), 2) two of the forms, the Fiche de Stock and the Registre de Produits, record the same information, 3) feedback reports have not been designed or implemented, 4) the order and shipping documents are not submitted on a regular schedule, 5) system losses are not recorded, and 6) central warehouses in Casablanca and Salé are not automated.

- **Ability to accurately forecast contraceptives**

One main accomplishment here is the fact that the MOH provincial staff is more involved in forecasting and it is taking into account existing stock and using consumption data. This has resulted in fewer stockouts and product expiry and improved inventory control. Unfortunately, only one MOH staff member is completely familiar with the forecasting process. A workshop is planned (Fall, 1998) to resolve this issue.

- **Awareness of the requirements for contraceptive procurement**

The MOH has procured and received its first contraceptives under the phase-over plan. Thus, it seems that the local budget, procurement, and quality control procedures are in place and functioning. However, the process is long and the MOH's experience in purchasing large contraceptive quantities is new. Also, two major issues need to be addressed. The first, identification of sufficient financial resources to meet public sector program needs by the end of the phase-over process, has already been discussed as the most urgent issue. In addition to the obvious financial needs, a condom quality assurance capability for routine testing and monitoring of the quality of products in storage at all levels has been identified as a potential concern at various levels of the country.

Another issue that the task force is planning to investigate is the "lead time" required for contraceptive procurement. The MOH estimates that the all levels need 18-20 months worth of stock. The Division de Planning Familial and the

Service d'Administration de la Population is planning to administer a small survey to verify the lead time from forecast to actual delivery of product.

- **Ability to manage the custom process if contraceptives purchased off-shore**

Relief from the import duties on contraceptives and raw materials should be sought, both to facilitate the MOH's own procurement and to further encourage expanded commercial provision of contraceptives. Work to achieve this is currently underway through PHR. In addition, the customs process has been an on-going problem. The delay at the Casablanca harbor is usually 2 to 4 months. This delay may cause a decrease in the quality assurance for the contraceptives. This problem may be eliminated if products are purchased locally (however, only pills can be locally purchased). JSI is also working with the MOH to identify potential action which would improve this problem.

- **Existence of a budget line item for contraceptives**

Presently, the MOH has only two lines to use for contraceptives, "medicines" for the birth control pills and "supplies" for condoms, IUD's etc. Contraception should have its own line to give family planning activities more freedom.

- **Ability to estimate the cost of procuring contraceptives**

Contraceptive procurement has been done by the Ministry of Health for each product. An estimated price for each product is now available. Procurement options still need to be presented to the MOH. Also, a local market segmentation study was completed in July 1998.

In addition to the above issues, long-term strategies have been suggested and should be investigated. One strategy is to implement a cost-recovery plan in the public sector. Several initiatives are currently underway for another option, transferring clients who use the public sector to the private sector. These two plans would lessen the financial burden of the government of Morocco which would hopefully allow the sustainability of the program after the phase-over.

**Projet de Recherche—Action pour l'Amélioration de  
la Qualité des Présentations IEC**  
(Research Project—Action for Quality Improvement of IEC Presentations)

Scope of work: This report was done to evaluate the impact of ongoing research, in 4 pilot provinces, that has been in place since 1993 to help improve the quality of IEC.

JSI, July 1998

## **Introduction**

Since 1993, the IEC Division has been researching 4 different pilot areas to define the ways to improve the quality of IEC (Tetouan, Taza, Tiznit, Khémisset). To accomplish this larger goal, the objectives were to research how to initiate a continuing education activity, plan IEC activities at the fixed structural level, involve the provincial health education coordinator in the research and decision-making process, reinforce communication in the health education process, and encourage behavior changes to improve peoples' health. To measure progress, indicators were the total participating in the education discussions and the motivation of the participants and recruiters.

The rationale behind improving IEC was based on observations that no health education activities were planned, that health education was perceived by providers as an "overload" of work, and that objectives for health education were not being met in such a work environment. Other obstacles were vertical management of health education programs, lack of information and trainings for health professionals, and a lack of supervision and feedback.

With the goal of improving the quality of IEC, the specific objectives are:

- the Division of the IEC should supervise and conduct trainings every 2 months and follow-up visits to the pilot structure every 3 months.
- provincial coordinators should be in charge of continuing training for staff, supervision of the sessions, and the adaptation of the sessions according to needs.
- target population should be able to repeat at least 60% of the information correctly concerning the themes from the sessions.

Two target populations were chosen for the evaluation—health professionals and women who participated in the education sessions.

## **Results**

The study showed several strong points:

- existence of dynamic IEC activities at the provincial and health center levels,
- organization of independent health education sessions by doctors who saw a certain need for sessions on FP, MCH, and hygiene,
- participation of other health providers (nurses, doctors) in organizing materials and recruitment,
- sessions seem well received by the participants and women seem eager to follow advice given, and

- women are more likely to listen to messages when they are directly involved and have a better appreciation of IEC.

Points that need improvement:

- organization of material for the sessions (should ensure that enough materials for sessions are available, that they are organized, and that they are in one place)
- quality and quantity of support (from all health providers),
- recruiting women (often not enough information collected about patients to assess IEC needs),
- monitor and evaluation system (non-existent),
- environmental and social adaptation of the messages, and
- procurement of audio messages.

## **Recommendations**

### *Health center level*

The medicine-chef (head doctor) and the provincial coordinators are the most appropriate to do the work for the local implementation of the IEC activities:

- Elaborate an annual program for IEC activities integrating independent health education sessions, audio time, periodic displays, and individual counseling.
- Assure that the trainings and programming of IEC activities are what the clients really want and are continually revised based on their changing needs.
- Assure that all staff participate in the programming, administering, and individual counseling of health sessions.
- Continually evaluate the health education program.
- Schedule sessions once per month according to the availability of the clients with 6-10 women lasting about 10-12 minutes.
- Use adequate support (visual aids, etc.) during the sessions.
- Procure posters and other visual aids necessary.

### *Provincial level*

- Educate all people involved at the provincial level about IEC.
- Give responsibility to the provincial coordinator for IEC and involve the other educators in the health programs to improve the quality of the IEC.
- Ensure the supply of materials for support and supply any lacking elements.
- Ensure that the clients know what resources they have.

### *Central level*

- Create regional "sectors" at the central level.
- Ensure good and correct advice is given at all health education and individual counseling sessions (train health educators well).

## **"Tous Pour la Santé" avec la CTM-LN: Evaluation du Projet** (**"All for Health" with the CTM: Project Evaluation**)

Scope of work: This study was done to evaluate the effectiveness, acceptability, and impact of the video health messages that are shown on the CTM buses across the country. Also, the study helped estimate the socio-demographic profile of the travelers so that the messages can be modified if necessary. JSI, July 1998

### **Introduction**

The project "Tous pour la Santé" was started in 1996 with the distribution of video cassettes for the CTM buses. The objectives for the program were to educate and inform the population of the scope of maternal mortality in Morocco, increase awareness about how all pregnancies and deliveries increase risks of maternal morbidity and death, and especially educate men about how they can help avoid these problems.

The evaluation was collected through interviews of 379 randomly selected passengers using a questionnaire. The objectives of the evaluation were as follows:

- to measure a representative sample of the target population the recollection of the educative messages from the video, "Aide Toi, le Ciel T'Aidera" (Heaven helps those who help themselves),
- to ascertain if the CTM is an appropriate channel for transmitting health messages,
- to evaluate the degree of comprehension of the messages by the target population,
- to evaluate the interest, attractiveness, and acceptability of the messages,
- to identify the eventual expectations of the population vis-à-vis this educative action,
- to evaluate the relevance of the themes,
- to evaluate the retention of this new knowledge, and
- to identify the socio-demographic characteristics of the target population.

### **Results**

As a result of the study, it was found that the profile of the population was young (44% aged 20-30) and gender mixed, with a fairly high education level (mostly students and civil servants) from urban areas. Knowing this socio-demographic information, the videos can be more targeted to their needs. Concerning the impact, 60% claimed to have acquired new information concerning maternal morbidity and mortality and understood the necessity of the husband's role in dealing with maternal health issues. However, based on the evaluation, the aspect of male involvement and responsibility did not seem to be personal (the respondents answered as though they were talking about someone else).

Another area that did not seem adequately learned was that of the direct causes of maternal morbidity and mortality. Very few of the respondents mentioned hypertension and infection as causes and these are the most prominent causes of

maternal death in Morocco. Attempts are being made to reconcile these gaps in knowledge by deciding on changes in the videos shown stressing causes of maternal morbidity and mortality.

This study has also shown that the majority of travellers are in favor of showing health films on the buses. However, the films should be carefully scheduled to avoid having frequent travelers see the same film many times.

## **Étude "Evaluation d'Audience" ("Evaluation of the Audience" Study)** Rapport de Synthèse (Synthesis Report)

Scope of work: This evaluation measured the impact of audio media campaign for general hygiene and prevention of illness which has been on-going since 1993. JSI, MOH (LMS Marketing), June 1998

### **Introduction**

Since 1993, the Ministry of Health in Morocco has been working to educate the public about hygiene and illness prevention with a radio and cassette program. This report evaluates the impact on the target population and its behavior. The target population was defined as both males and females aged 15-60, living in urban or semi-urban areas in Marrakech, Larache, Rabat, and Méknes (sample size, 600). A quantitative questionnaire was used as the evaluation tool.

The objectives of this evaluation were several:

- determine the proportion of the target population which has heard the messages on the radio,
- determine the number of times that each person has heard the message,
- measure how much people have actually retained from the message and what were the most retained messages,
- measure the comprehension determine how the message was interpreted,
- measure the appreciation and appeal of the messages,
- measure the acceptance of the messages, and
- explore the media habits of this population.

### **Results**

Out of the entire sample population, 51% had at least heard one of the health broadcasts, programs, or messages on the radio. Out of those who have heard the "Pour une meilleure Santé", 7% said they heard it only once, 39% 2-5 times, and 54% heard messages over 6 times.

Similarly for other radio clips, 4% heard them one time but 40% claimed to have heard them 2-5 times. Fifty-six percent heard them more than 6 times.

With the spot "Pour une meilleure Santé", 10-30% recalled some of the themes (safe motherhood, family planning, and nicotine addiction were the top three). However, the most interesting messages, according to the sample, were safe motherhood, general hygiene, and nicotine addiction. The other clips fared slightly better with 17-42% recalling themes such as vaccination, AIDS, and again nicotine addiction.

As far as comprehension is concerned, 40% said the messages were very easy to understand, 48% said they were easy, 7% claimed they were more or less understandable, 3% said difficult, and 2% said that the messages were very difficult to understand. Also, 85% liked the messages (33% liked them a lot) and only 1% disliked them. The most appreciated aspect was the variety of themes and 95%

felt that they were effective at educating the public in general hygiene and the prevention of illness.

The population was also queried about suggestions to improve the radio spots. Twenty-three percent suggested that the times slots be changed to reach more people (Most people listen before 9 a.m., 97% and from 9 a.m.-1 p.m. and 11 p.m.-12 a.m., 38%-53%. They also suggested that the length of the spots be increased.

Another aim of this study was to research media habits of the population. The researchers measured the proportion of people who watched television and listened to the radio within a 7-day period. Eighty-eight percent watched at least once (95% were aged 15-25 and were mostly women). Seventy-six percent listened to the radio at least once a week.

### **Conclusions and recommendations**

This evaluation seemed to attain its objectives and almost 100% of the sample population has heard the messages at least once. The messages also seemed to be well retained and understood. Also, because people listen to the radio so often, it is a good media for health messages.

Some key recommendations:

- continue broadcasting existing messages, revising and adding new ones as need arises.
- change time slots to more appropriate times (in the morning and late at night).
- try television as a health message medium because many people have and watch television.

## **Internal Evaluation GIQua Project (Draft)**

Scope of work: The purpose of this evaluation was to review the results of the quality improvement activities implemented in 14 different health sites in Morocco in January 1997 and assess the process of implementing quality assurance programs. Norma Wilson, JSI, August 1998

### **Introduction**

The GIQua Program, funded through the Phase V Project, is a horizontal and inter-directional quality management program situated in the Direction of Hospitals and Ambulatory Care of the MOH. The GIQua approach is based on the concepts of integrated continuous quality management. In November 1996, 7 provincial "coaches" and 14 quality improvement team leaders from each of the health sites participated in a standard introductory quality management training. The training content concentrated on the integration of quality management concepts, team building, and management skills.

After the seminar, the leaders went back to their sites and created quality improvement teams which then selected a specific problem on which to conduct a quality improvement cycle. Working through the cycle was considered a practical training experience. The coaches provided technical support as each went through the cycle.

Accurately assessing quality is difficult. Gathering data through interviews (based on an open-ended questionnaire), focus groups, and written documentation (project implementation records), evaluators wanted to learn the results of the aforementioned activities implemented at the health sites and assess the GIQua Program training and implementation process. This information will be integrated into the planning and implementation of the next phase of the GIQua Project.

### **Results**

Thirteen of the 14 teams had started an improvement cycle, and 11 of those 13 had actually completed the quality improvement cycle. As a result of their activities, 4 teams showed quantitative improvements, such as reduced rates of incorrect or late medications and increased rates of satisfaction with welcome to medical site. Seven teams were in the process of implementing and evaluating solutions chosen for their problems. Two provinces had extended the approach to neighboring health centers and 2 others were involving their health educators in the process.

Not only were these processes being put into place, but the teams seemed very motivated and enthusiastic to conduct the quality improvement activities. They found that the method of working in teams created a new, positive atmosphere in the workplace and a mutual respect for each other. The teams accurately followed the cycle and used the tools appropriately to solve problems. However, several teams expressed a need for additional training in the use of data analysis to solve their problems.

## **Recommendations**

### *Sustain changes in attitudes and behavior*

- Extend awareness of the GIQua approach and desired behaviors to all levels and to all Directions within the MOH.
- Continue to include team building and meeting management skills in the GIQua training courses.
- Foster inter-site visits by team members, especially between hospitals and health centers in the same areas.
- Establish a national quality of care conference to disseminate activities, solutions, learn of new quality improvement approaches and to develop networks.

### *Quality Management Technical Skills*

- Decide on and develop the necessary number of technically expert coaches (based on need) so that adequate technical support is available to the teams.
- Ensure adequate training on indicator development, data collection and analysis, and the logic of data use in problem identification and solution during training and coaching sessions.
- Use available local private and public technical support to provide assistance to the teams in data collection, analysis, presentation, and evaluation.

### *Training (a MOH committee should oversee these activities)*

- Continue with the standard 2-week training for coaches and team leaders.
- Include training skills in the training for team leaders.
- Prepare a coaching plan for supporting teams during the 1st cycle to ensure availability of adequate number of coaching visits to support new teams when planning training programs.
- Prepare a recommended "profile" of desired criteria to guide selection of personnel as coaches, trainers, and team leaders.
- Provide a course, particularly in the coordination and management of a quality management program to regional and provincial orientation committees.
- Develop an abbreviated standard introductory course in quality management for team members.
- Clarify the roles of the 3 participating Directions in the training of regional coaches for quality management.

### *Roles and Structure of the GIQua Program*

- Clarify roles and responsibilities among the participating partners for the conduct of the GIQua Program and those responsible for the planning and execution of the GIQua activities.
- Create a unit of quality management specialists at the central level to work full time on quality management activities in the MOH.
- Transfer the placement of the GIQua program from the Division of Ambulatory Care to sit directly under the Director of the DHSA (most preferable) or outside of the Directions entirely, under the Secretary General (would facilitate coordination but may distance program from operational activities). As the MOH quality management program extends into hospitals as well as ambulatory care services, the central functions are more appropriately placed in a position of broader perspective.

*Strategies and Plans for the Future*—the GIQua and the MOH should:

- Develop a strategy and a transition plan for expanding and developing a quality management program at the national, regional, and provincial levels.
- Review and revise, if necessary, the GIQua implementation strategy to meet the needs of the national, regional, and provincial levels with particular attention paid to defining the role of the central level vis-a-vis the regional level for quality management activities.
- Prepare the central level for its role of leadership and support to the regions as they implement quality management.
- Develop and implement quality design and quality monitoring in the MOH
- Define the role of the MOH in ensuring the quality of health care and services provided in both the public and private sectors.

**Evaluation du Projet de Renforcement de la Formation Clinique en PF/MSR  
dans les Facultés de Médecine de Rabat et Casablanca**  
(Project Evaluation of the Clinical Training in Family Planning/Safe Motherhood in  
Medical Schools in Rabat and Casablanca)

Scope of work: This evaluation reviewed the competence and confidence of Moroccan medical students about to start their 7th year after studying under a revised 6th-year curriculum which included a practical training on family planning and safe motherhood.

JHPIEGO, May 25-June 13, 1998

### **Introduction**

The rationale for the revised reproductive health curriculum was that medical students were not getting enough practical training for family planning issues nor were they learning how to insert intra-uterine devices (IUD's). These trainings now have been integrated into the medical school in Rabat.

The objectives, then, for the evaluation were to measure and document if a sample of 6th year students were capable of executing competence in family planning and safe motherhood techniques, and to complete an evaluation of the entire process of the project (the revised curriculum). The questions to be answered are 1) are the students ready for their 7th year, 2) how do the trainers perceive the new curriculum, 3) what are the essential elements for the support of the project, 4) can the project be expanded, and 5) what are the recommendations to perpetuate the process if money from outside sources is not available?

The evaluators administered a 10-page questionnaire for the students to ascertain their experience and confidence levels. Also, they reviewed case studies surveying a typical work place and following a difficult delivery. Finally, students had to insert IUD's and do an obstetrical exam (3rd trimester) on an anatomical model, and do other role plays.

### **Conclusion**

Despite difficult material conditions and a certain lack of concentration, the revised Family Planning/Safe Motherhood curriculum has existed now for one year in Rabat. However, the program is still rather new and fragile. Also, the medical schools in Casablanca have been delinquent in adapting this new curriculum and the faculty needs to be trained.

### **Recommendations**

- Design the training site in such a way that an inventory of all the didactic material distributed for the project can be easily and quickly done. See what material is available for the training. This material should also be computerized so that trainers can make their own visual aids and will always have access to it. Put a documentation service in place so that it is an accessible place for the teachers and students

- Have a technical training for the teachers:
  - "Reactivation" workshop for those that have not used their knowledge during the past year (2 days)
  - Week-long workshop to establish the training and the evaluation
  - Training for the teachers who have not been taught in adult learning for clinical training
- Give more encouragement to those trainers who seem to be losing motivation because the training situation is not improving (i.e., lack of teaching materials, financial problems, training site, etc.)
- Establish the program in the faculty of Casablanca using the experience and expertise of Rabat. Major service changes and a deep commitment to the new course will be necessary
- Create a committee for the curriculum that will be responsible for monitoring the training in all the services in Rabat and Casablanca, make and finalize the didactic instruments, and produce instruments to evaluate the clinical competence
- Spread the news that with this training the 7th year students have more competence

**Data Quality of Service Statistics**  
(JSI Trip Report Morocco April 20-May 2, 1998)

Scope of work: The objective of this consultancy is to finalize, together with the SEIS and the DP, the protocol of the MCH/FP data quality study, and to prepare its launching in the field as soon as possible.

JSI, Dr. Stanislaw Orzeszyna, May 2, 1998

**Introduction**

The routine data collection and processing for the MCH/FP programs by the MOH suffers from many problems at all levels: provincial, regional, and central. After review, it was found that excessive requirements exist for data recording and reporting (much of which is not complete, valid, or even used for planning, implementation, case and service management, monitoring, and evaluation). A data quality study has been scheduled by the Service des Études et de l'information Sanitaires (SEIS) and the Direction de la Population (DP) to determine how and what level errors, that negatively influence data quality, occur. The Ministry is attempting to improve the use of information by care providers themselves.

The objectives of this mission were finalized with staff from the SEIS and the DP. The consultant proposed the protocol for the MCH/FP data quality study, defined the target persons of the study, and prepared its launching in the field. Launching is now set for late 1998.

The activities to be done for this report were as follows: 1) finalize the protocol of the study with reference to the procedures proposed in the WHO guide "Assessment of Clinical Data" (based on findings in pilot studies in Morocco and three other countries), 2) to finalize the study questionnaire, 3) to train the personnel responsible to collect data, 4) to prepare a draft consultancy report, 5) to present the consultancy report during a debriefing meeting with MOH officials, and 6) to submit the final report at least two weeks after the consultancy.

**Recommendations**

*Design and plan the assessment*

- More work is required in preparing, pretesting and revising the assessment instruments and dummy tables on the clinical data assessment information.

*Prepare for field work*

- Confirm budget and availability of funds.
- Prepare training and field work materials.
- Create computer files and data base.
- Train and organize assessment team.

*Conduct field work, analyze data, prepare and disseminate report*

- Meet facility leaders, introduce team and methods.
- Conduct data collection activities
- Supervise data collection and solve field problems
- Initiate entry and tabulation of raw data



## **Strategy Document for the Increased Diversification of the Resource Base Financing the Delivery of FP/MCH Services, Using the Private Sector**

Scope of work: The purpose of this report is to review strategies to expand the number of preventive services provided by private donors focusing on general practitioners (GP's). Cathy Fort, JSI, September 1996

### **Introduction**

General practitioners were chosen to be targeted by the MCH/FP project to increase diversification of the resource base because they can aid in achieving the most impact with the lowest investment cost. They are found throughout Morocco, especially in the urban and peri-urban areas targeted by the project, and they serve the target population. In addition to these advantages, they are organized and accessible and seek new opportunities to raise their income levels by expanding their services. The intended results are to have the public-private partnerships allowing private sector participation in the achievement of specific public goals defined and to increase the participation of the private sector in advocating and/or delivering FP/MCH services.

The implementation strategy targeted the most commercially viable preventive service (i.e., a product that can be sold and is in high demand). Also, specific regions were chosen with many motivated GP's (Salé, Agadir, Safi, Casablanca, Fez, Meknes, Marrakech, Tanger, and Oujda).

Note that small grants approach targeting NGO's and other private sector entities had critically been used by the Private Sector component of the Phase V Project. Unfortunately, however, this approach slowed down the pace of implementation due to the extensive time involved with proposal selection and approval. The approach was abandoned.

### **Recommendations**

- Continue trainings (on IUD insertion, non-HIV/AIDS STD diagnosis and treatment, vaccinations, sterilization, and safe motherhood).
- Continue monitoring quality among the population of GP's trained under the project and develop quality care/assurance systems in the private sector.
- Use existing IEC materials and develop others in collaboration with SOMARC.
- Develop and promote a logo.
- Incorporate data and activities from the private sector for MOH planning and evaluation exercises.
- Allow fiscal incentives to promote investment.
- Authorize conventions between public and private sector doctors.
- Develop a simple instrument to collect baseline data and test material.
- Evaluate impact of promotional and advertising interventions.
- Conduct exit interviews with GP's trained under project to ascertain satisfaction level.
- Test promotional materials

## **Étude de Segmentation du Marché au Maroc (Draft)** (Market Segmentation Study in Morocco)

Scope of work: The objective of this study was to identify actual consumers in the family planning market, their choice of methods and procurement source, and to use this information to assure the sustainability of the program.  
The Futures Group, June 1998

### **Introduction**

In 1995, USAID and the MOH agreed upon a national progressive transition plan for family planning to become sustainable during the period from 1995-1999. This challenge can be realized on one hand by targeting public resources for the most needy and, on the other hand, by diversifying financial resources for FP, notably by increasing private sector involvement in delivery of FP services.

This report provides guidance for making the transition to a sustainable and self-sufficient FP program that is more effective and efficient. The information defines the method mix and necessary sources to ensure the sustainability of the program. This study attempts also to provide a basis for future strategies, specifically for increasing use of long-term FP methods, eliminating unmet needs, and increasing use of private sector FP services.

### **Results**

#### *User groups*

The study was limited to married women aged 15-49 who have an unmet FP need, those who actually use a method, those who are pregnant but do not want to be, or those who are pregnant due to contraceptive method failure. Five groups were used—two were urban and 3 were mostly rural. The older city dwellers (in the north-west and central regions) constitute 18% of the market. In general, they have at least 4 children (80%) and 65% feel the ideal number is 2 children and all the women wanted to limit their pregnancies. The younger urban women (20% of the market mostly middle class from the northwest, central north, and central regions) have at least 2 children (80%) and 94% want at least 4 children. They all use some method of FP and 99% want another child.

The third group, older women in the popular class, are rural and urban and make up 34% of the market (living in the northwest, central north, and central regions). Forty percent have more than 7 children; 80% want 4 children or less. Also, they all use FP and they all want to limit their pregnancies. The fourth group consists of poor women who have been using FP already (18% of the market and from the south central, Tensift, and south regions). Fifty-five percent have 3 children and 65% feel that at least 4 is an ideal number. Only 3% have never used FP techniques and 63% do not want more children.

Finally, the last group is traditional women (10% of the market from all regions). Forty-five percent have more than 7 children and 67% feel that at least 4 is ideal. They never use FP and 72% do not want any more children.

#### *Choice of method*

**Oral contraceptives** are the most popular with all the couples, the **IUD** exists but is under-utilized, and **female sterilization** is used by older women in all groups and poor women who have been using FP. Other methods such as **injectables**, **Norplant®** and **vaginal methods** are not readily available in Morocco. **Condom** use was seen in all consumer groups but mostly with the other urban women. **Periodic abstinence** was seen in all groups (except the traditional women) and because of the education about the body necessary to successfully use this method, educated urban women used this method more than others. **Traditional methods** were observed to have been decreasing.

### **The Moroccan FP market projection in 2005**

A projection exercise was done to evaluate the demand for FP services in 2005. The following hypotheses were made:

- the total contraceptive prevalence will be 65.1% (50.3% in 1995)
  - the total unmet needs will be 1.3% (16.1% 1995)
  - the role of the private sector will increase to 56% from 37% (1995)
- It is estimated that 3.4 million couples will be using FP methods by 2005.

### **Recommendations**

#### *Expanding use of long-term methods*

- Target the older urban and popular strata and the poor women who have been using FP because they do want to limit their births
- The private sector should encourage the older urban women and some of the popular strata women who have access to use the private sector for their long-term FP needs
- The older and younger urban women both should seek out the private sector even though they have different needs (the young may need information on birth spacing, oral contraceptives, etc.)

#### *Eliminating the problem of unmet needs*

- The public sector should target, as a priority, the young traditional women
- An analysis should be done to understand the reasons behind the behavior of traditional couples so that the constraints and potential can be used to the best advantage

#### *Expanding the role of the private sector to disseminate FP*

- Explain to the private sector the volume and demand, and analyze the constraints that explain the difference between real and potential demand
- Reinforce and motivate the capacity of the benefits of the private sector services with structures other than the pharmacies. The private medical doctors can constitute an efficient structure in the provision of long-term methods. Private hospitals could reinforce FP service delivery post-partum and voluntary surgical contraception.
- Continue to support the introduction of new contraceptive methods, especially less expensive ones
- The urban women (and popular strata) should be targeted for private sector use and the traditional and poorer women are the ideal women for the public sector.

## **Annex II**

## **Seminar/Workshop on Micronutrient Deficiency: June 22-23, 1998**

### **Introduction**

Following the recommendations of the International Summit on Children's Rights (New York, 1990) and The International Conference on Nutrition (Rome, 1992), the Moroccan Ministry of Health held a micronutrient seminar/workshop on June 22-23, 1998. Funded by USAID with technical assistance, the workshop was held to discuss the elimination of Vitamin A and Iodine deficiencies and reduce the occurrence of anemia due to iron deficiency by 30% by the year 2000. The objectives of this workshop were to: 1) present the results of the regional study of Vitamin A deficiency, 2) give the current situation of other micronutrients such as Vitamin D, iron, and iodine, 3) discuss prevention strategies of micronutrients, particularly Vitamin A, and 4) elaborate an overall IEC strategy for Morocco against micronutrient deficiencies. The participants included several people from the Ministry of Health, professors, doctors, and international consultants from OMS, OMNI, and Roche.

### **The current status of the micronutrient situation in Morocco:**

- The national prevalence of rickets due to Vitamin D deficiency in hospitalized children <2 years old is 2.5%. Two-and-a-half percent of those show 2 clinical signs and 2.1% show at least 3 clinical signs.
- The national prevalence of Iodine deficiency in children 6-12 years old is 22% (certain endemic zones are as high as 50-78%). A short-term supplementation strategy is in place and oil and salt are currently "somewhat" fortified but with limited regulations and quality assurance.
- More than 45% of pregnant women, and 33% of children 6 months to 5 years old, and non-pregnant women of reproductive age are anemic. The Ministry of Health has implemented an iron supplementation program for pregnant women and is currently doing a feasibility study on the fortification of sugar with iron.
- The "regional" prevalence (although some argue that it is truly representative of the nation) of Vitamin A deficiency (retinol level <200µg/l) in children aged 6-71 months is 41%.

### **Recommendations**

Participants, through group work, elaborated the main components of a national micronutrient strategy and proposed short- and long-term actions to address micronutrient deficiencies:

- Support the programs already in place as discussed, but also expand them.
- Increase of fortification and quality assurance of the fortificants.
- Find a solution to regulating the small salt producers.
- Integrate micronutrient deficiency concerns and education into all areas of public health.
- IEC should focus on the different target populations.

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