

PN. ABC 304
25790 ~~304~~
~~304~~

UNICEF/GOVERNMENT OF MOROCCO
PLAN OF OPERATIONS: MATERNAL
HEALTH CARE, 1992-1996

June 17-July 5, 1991

Ms. Victoria Hammer Wylie
Consultant, John Snow, Inc.

Document Prepared for
UNICEF Regional Office
Contract #MENA 91-022

**UNICEF/GOVERNMENT OF MOROCCO PLAN OF OPERATIONS:
MATERNAL HEALTH CARE**

TABLE OF CONTENTS •

TABLE OF CONTENTS	i
ACRONYMS	iv
I. UNICEF/GOVERNMENT PLAN OF OPERATIONS: MATERNAL HEALTH CARE, 1992-1996	1
A. Problems being Addressed/Justification	1
B. Courses of Action	4
1. Education (ICC) on Maternite Sans Risques (Maternal Health Care)	4
a. Information and education of the accoucheuse traditionnelle	4
b. Training of health workers in communications techniques	6
c. Development of ICC/maternal program structure	7
d. Development of program strategy	7
e. Development of advocacy	9
f. Development of review and evaluation component	9
2. Strengthening of Maternal Health Care Services	11
a. Improvement of service instruments	11
b. Study of use of the dossier d'accouchement	12
c. Strengthening of supervision	12
d. Upgrading of provincial maternities	13
e. Continuation of in-service training for health workers in maternal health care	14
f. Strengthening of basic education in maternal health care	14

g. Strengthening of sage-femme professionals	14
h. Special studies	15
II. ACTIONS AND BUDGETARY IMPLICATIONS	16
A. IEC on Maternal Health Care	16
1. Information and Education: Women assisting at delivery	16
2. Training of health workers in communications techniques	16
3. Development of project structure	17
4. Development of project strategy	17
5./6. Development of messages/materials	17
7. Development of advocacy activities	17
8. Preparation/analysis of maternal health component of 1992 ENSP	18
9. Identification/development of studies	18
B. Strengthening Maternal Health Services	18
1. Improvement of service instruments	18
2. Study of use of the delivery dossier	18
3. Strengthening of Supervision	18
4. Study of provincial maternities (hospitals, maternities, centers with maternity beds)	19
5. Support to in-service training	19
6. Support to basic education	19
7. Strengthening sage-femme	19
8. Identify special studies	19

III. CRITICAL ASSUMPTIONS/OUTSTANDING ISSUES LIST:	20
A. IEC in Maternal Health Care	20
B. Strengthening of Services	20
IV. MATERNAL HEALTH CARE--UNICEF/GOVERNMENT OF MOROCCO: SUMMARY OF OVERALL PLAN OF OPERATIONS	21
V. APPENDICES	23
Appendix 1 Notes of Discussion	24
Appendix 2 Comments on Guide des Activites de Surveillance de la Grossesse	36
Appendix 3 Report to UNICEF: Consultancy on Maternal Health Care	39
Appendix 4 Briefing Report for UNICEF	43

ACRONYMS

ENSP	-	National Health and Population Survey (1987)
FP	-	Family Planning
IEC	-	Information Education and Communication
INAS	-	National Institute of Health Administration
MCH	-	Maternal and Child Health
MHS	-	Maternal Health Services
TT	-	Tetanus Toxoid Immunization
TBA	-	Traditional Birth Attendant
VDMS	-	Integrated FP/MCH Programme

I. UNICEF/GOVERNMENT PLAN OF OPERATIONS: MATERNAL HEALTH CARE, 1992-1996

A. Problems Being Addressed/Justification:

Maternal mortality: National data on maternal deaths are not available. Given low coverage of services and conditions of poverty, especially in rural areas, it is known that rates are high. Also, the causes of maternal deaths in Morocco have not been systematically studied; it is assumed that the main direct causes are the usual (universally recognized) obstetric causes (ie. hypertensive diseases of pregnancy, hemorrhage, infections, obstructed labor,) and indirect medical and social causes (complications of malaria, tuberculosis, diabetes, etc.; and low status of women, inaccessibility to services, inadequacies of services, etc.). Anaemia is known to affect well over half of the pregnant women in developing countries; it is an important contributing cause of death. The prevalence in Morocco is not known, and plans have been made for a study. Malnutrition in pregnancy is a problem not only for the pregnant women themselves, but also for the growth and development of their infants.

Maternal mortality risk factors include previous complication (eg.caesarian), pregnancy at early or late age, low stature, multiparity. With regard to the latter, the 1987 National Health and Population Survey (ENSP) noted that 53% of married women had 4+ children, The Study also noted that although 98% of women interviewed knew about family planning, only 37% used contraceptives. The problem of meeting contraceptive needs is addressed as part of the family planning programme, which receives a high level of financial and technical support and is of direct concern to this maternal health care project. Family planning is one of the most critical preventive measures in maternal health care; integrating activities is desirable, and mutually beneficial. The Moroccan programme is based on an integrated approach, and efforts are made to strengthen integration through service instruments/"tools" used and training.

Coverage of women by prenatal care and assistance at delivery is extremely low, particularly in rural areas: According to the 1987 ENSP only 42% of all women (mostly urban women) received any assistance at childbirth by trained personnel: approximately 75% are home deliveries. In rural areas, it is estimated that there are approximately 95% home deliveries. The Study found that 75% of women did not have one prenatal visit; in urban areas, the rates are higher, indicating negligible coverage in rural areas. The INAS study on the utilization of services in 4 provinces showed that the coverage of prenatal services in urban areas may be reaching a plateau, and that although figures are much lower in rural areas, they are increasing. Furthermore, the study showed that 55% of women interviewed stated that they did not go for prenatal care because of a "lack of information".

It is assumed that by increasing the coverage of women with prenatal care (minimum of 3 visits), women of high risk would be detected and referred for treatment/management, and risks reduced for a substantial proportion of women.

This assumption however rests on others such as : nurses with 2-3 years of basic training can and will be trained to detect risks, and carry out basic treatment; nurses can educate women on appropriate care during pregnancy (eg. nutrition, hygiene, etc); higher level health personnel can be available and trained to treat/manage high risk cases; health facilities can be supplied and equipped adequately to prevent or manage obstetrical emergencies; women will want to and/or be able to use maternal health care services. There are numerous financial, social and technical issues related to these assumptions which require resolution if prenatal care is to be effective and have a substantial impact on the reduction of maternal mortality.

These issues, particularly financial ones, are serious constraints at the present time in Morocco. The government, for example, has ceased recruitment of new nurses, though this is to be resolved within the next year.

The problem of insufficient numbers of female personnel for maternal health care, and for family planning is important: there should be 2 MCH female nurses at health center level, and at dispensaries. In rural areas, there are no female workers at base dispensaries and few in dispensaries. There are no outreach (itinerate) female workers. Experiences of the VDMS program showed that male itinerate workers encountered problems in rural areas of meeting with women in their homes when their husbands were away. Furthermore, cultural factors dictate the need for female health worker to do prenatal examinations and certain family planning interventions.

It is assumed that improving conditions at childbirth both at home and in institutions is required to reduce risks. The long-term aim is to improve institutional capacities to be able to provide institutionally attended births for all those at risk, at potential risk, and for those wanting such assistance. However, as a shorter term strategy, the aim is to continue home births for normal deliveries, supervised by a trained ("qualified") person, and to transfer risk cases into institutional care.

The main issues in this scenario are: what is the definition of qualified person (what level of training is considered acceptable) for assistance at childbirth, and what quality of care is acceptable at the different levels of referral. These critical issues must be resolved before basic and in-service training content can be defined, before upgrading of facilities can be defined, or before referral systems can be established. The Government is studying the status of midwives (sage-femme) in terms of regulations, training, etc. with the view to increasing the numbers of sage-femmes in the country, practitioners who can assist women in home deliveries independently, as these health professionals are essential for improving maternal health care in Morocco.

The institutional capacities of provincial hospitals are key to the functioning of a total referral system, and to the credibility of the education program and the prenatal care services. If risk cases cannot be managed, then the message that prenatal care will bring about "maternity sans risques" is not valid. Preliminary data from an inventory of hospitals reviewed in the INAS study of obstetric interventions show that a high proportion of institutions lacked some basic equipment for complicated

deliveries, and that there is a deficiency in obstetric interventions at both urban and rural areas, though deficiencies are four times as great in rural settings. The Ministry recognizes that there are major deficiencies in the rural maternities in provincial hospitals as well as other locations; however more information is required for precise identification of need, as well as for reconsideration of approaches and methodologies if required.

Lack of education: Prenatal care, by nature, is self-care (prior to and during pregnancy); women's diet, hygiene, rest, etc. cannot be given by a service. It is assumed that providing women with information about their self-care can result in improved maternal conditions and thus prevent many of the complications and problems during pregnancy, childbirth and post partum periods; information would enable them to detect problems in a timely manner to prevent more serious consequences, by seeking early treatment. Educating women about self-care is critical in any circumstances, with or without good services. In the current situation in Morocco, where access to services is so limited, emphasizing direct education to women is considered a potentially effective, acceptable and feasible approach.

This approach is new ("untried") in Morocco; and there are few examples of national ICC programs from which to learn lessons concerning such approaches and strategies. Therefore, evaluation will be an important part of the ICC project.

The Ministry recognizes that given low coverage of women by health services, other channels must be used to reach women with maternal health care messages. However, there are many problems concerning weak organizational structures, especially in rural areas; few effective community organizations exist, especially those dealing with women or with women's interests, or comprised of women.

In addition the issues of women's accessibility (social, economic and cultural and logistical) remain. The problems related to the status of women in terms of education, schooling, employment, income, family roles and responsibilities, etc. are large and complicated. They underlie women's health and nutritional conditions in general and their maternal health in particular. The 1987 ENSP confirmed the correlation between women's educational levels and contraceptive use, prenatal visits, etc. ; for example, 54% of women with primary education had at least 1 prenatal visit. Women have a very low level of schooling in Morocco, and it is estimated that 85% of women are illiterate. The issue of enabling women is a broader socio-economic development one, though this project can be considered one small part. Linkages are to be established with women's development activities.

High neonatal mortality: The problem of neonatal mortality was highlighted in the Infant Mortality Study of 1987/88: over 40% of infant mortality occurred within the first 28 days of life. The causes of neonatal death are directly related to maternal conditions during pregnancy and childbirth; moreover, the high incidence of low birth weight infants is related to women's nutritional and health status during pregnancy. Improvements in maternal conditions are thus essential if infant mortality rates are to be substantially reduced.

Also, the fact that neonatal tetanus accounts for a large percentage of neonatal deaths (22%), indicates the importance of providing tetanus toxoid immunization (TT) for women. While training traditional birth attendants to practice good hygiene and cut the cord with a "clean" instrument is one positive action, the emphasis should be on ensuring full TT coverage to achieve a significant reduction in neonatal and infant mortality.

Infrastructural problems: In 1987, the Ministry reorganized the Division of Prevention, and established a separate service for maternal health care. Since that time, the service has developed a series of activities, including the restructuring of MCH/FP personnel at all levels, the equipping/renovation of rural maternities and prenatal services at health centers and dispensaries, development of service instruments, and in-service training. The Service at central level has limited capabilities for expanding activities too rapidly; consultant assistance is required for specific technical inputs, and for the increased workload indicated in the new program for 1992-1996.

Objectives:

- To increase the percentage of women covered by regular prenatal care from 25% to % by 1996
- To increase from 26% to 50% in 1996 the percentage of women receiving assistance during delivery at home and institutions
- To reduce the level of nutritional anaemia in pregnant women

Sub-objectives:

- to increase awareness about the importance of maternal health care by health and medical professionals and by the public at large
- to increase the public's access to information about maternal health care
- to strengthen the health services capabilities in providing good quality maternal health care

B. Courses of Action:

1. Education (ICC) on Maternite Sans Risques (Maternal Health Care)

a. Information and Education of the Accoucheuse Traditionelle

Notes: this activity is part of the overall educational program but described separately because initially it can progress independently; the preparations have already been made by the MHS in the past four year period. It is intended to feed into the larger project, and become part of it. It was originally a TBA training program but has been modified.

The accoucheuse in this activity are considered those traditional midwives (kablas) as well as other women in the community who are known to assist women in childbirth on a regular or occasional basis. Inventories of such women have been made in most provinces, and variations in the types of accoucheuse within and between provinces are known.

The MSP considers these women as a particular target group among others for messages concerning maternal health care and family planning; and aims to encourage their "recruitment"/involvement as community level volunteers for MCH/FP promotion as well as to provide them with minimum information to eliminate negative practices and assist women in having clean, home deliveries. This does not represent an attempt to train these women as qualified assistants for childbirth.

The women are to be trained by the local MCH nurse from the health center or dispensary level, as appropriate to the particular situation. Provincial level trainers and MCH animator will train the nurses to do training. The latter will receive training from Central level consultants, included specifically for the purpose of teaching communications skills to health personnel.

The content and general methods of training were prepared by the MHS in 1990-91. This project will include support for revisions in the communications aspects of the training methods and materials; and support at the provincial level for local adaptation of materials through special communications and technical consultants working at central and provincial levels.

The training scheme includes:

- 1) formation of a training group at MHS including sage-femme, communications consultant, artist, health educator, chief instructor, under the direction of the Chief of MHS
- 2) design of training protocols (including content and communications techniques) for orientation of and training of all levels included in the program (all levels of "Cascade")
- 3) preparation of prototype educational aids
- 4) finalization of training management plan, including five year training schedule, scheme for equipment supplies distribution, budgetary provisions, monitoring and evaluation schedules, etc.
- 5) selection and training of provincial responsible officers at central and regional level (including MCH/FP coordinators, trainers, health educators, special ICC trainers as required-feasible)
- 6) adaptation and production of mater provincial level, if required
- 7) training of community women

- 8) evaluation of program: including on-going monitoring and analysis, as well as final project evaluation
- 9) development of follow-up activities, including supervision of MCH nurses' contacts with the community women

The project will give specific support and emphasis to evaluation. Evaluation is to consist of

- evaluation of results (are women learning? are they changing behavior? are they maintaining contact with services? are more women coming for prenatal care? are the women using cleanliness techniques in deliveries?)
- evaluation of process (did events/activities take place as planned? were equipment/supplies disbursed? etc)
- evaluation of educational content and methods (how effective were training-communication techniques content and methods?): this aspect of evaluation is to receive special emphasis and will be planned and initially executed by special consultants. It will include observation at critical points in the training, according to a protocol, and assessment of results in selected areas. The purpose is to learn specific positive and negative points/aspects which can feed into the redesign/improvement of training, and feed into the development of the broader ICC program on maternal health care (messages and methods).

The training is to cover all provinces in the five year period; a priority list will be prepared, to ensure that "high risk" provinces (identified by INAS study) are included at appropriate times. The numbers of women to be trained in each province will be determined in the planning stage, depending upon the interest and capabilities of the provincial level staff. A minimum of x and a maximum of y will be included in this project for each province. The aim is to train and motivate the provincial level staff to conduct such a program in their province as part of their normal MCH/FP activities: so that subsequent training will reach larger numbers of women, as dictated by the particular circumstances within a province.

The numbers of persons involved include:

- provincial level
- MCH nurses:
- women

b. Training of health workers in communications techniques

Presently (July 1991), the Prevention Division is carrying out a course on training health workers in communications techniques, using family planning as

the illustration/example in course exercises. It is proposed in this project to prepare a set of exercises using maternal health care as the example, and to repeat the course for MCH nurses. The course is presently a two week course; when the course is a repeat, it will be revised to a one week course.

[Insert numbers of health workers to be trained]

c. Development of ICC/Maternal program structure

A special "cell" will be hired to develop the ICC program within the Prevention Division, in the health education unit. It would consist of a communications specialist, an artist, and support personnel. Its sole role will be the development of the ICC maternal program, under the technical direction of the MHS. The purpose of the "cell" is to propose program strategy options, including definition of target groups and approaches to reach the distinct groups; design and planning of activities for program implementation; preparation and testing of educational aids/materials; on-going evaluation of approaches/materials; assistance in coordination with other programmes in "Prevention", especially family planning, nutrition and immunization (TT); assistance in coordination with other Ministry programmes such as Education, Youth and Sports, Agriculture, with attention to programmes on Women and Development (eg. make arrangements for inter-program communications, contact persons, timings for introduction of new or revised messages, responsibilities re preparation/testing of materials, arrange adequate monitoring within those programs, etc.).

The decision-making for strategies and implementation of plans of action rest with the "Prevention" Director with technical direction of the Chief of MHS.

In addition, a committee, under the chair of "prevention" Director is to be developed to assist in programme development, to include Chief, MHS, head, education cell, Chief, Health Education Service, ... It would also include, at appropriate times during program development, representatives from Association of Midwives, Royal Society of OB/GYN, Family Planning Association, etc. as they are valuable partners in the education program.

d. Development of program strategy:

Target groups: The program intends to reach a variety of target groups, to be phased throughout time. These would include:

- 1) women already using maternal care services, with the aim of improving educational aspects of prenatal services, of recruiting women who use other health services for themselves (eg family planning) or their children (eg. PNI-immunization) into prenatal consultations.
- 2) women who have access to services but do not use them (eg. women with geographical accessibility, women who use other types of services, women with some means for using services); this group may

include more of the periurban women, and rural women living within an acceptable distance from health facilities with female nurses

- 3) women in general: women reached through existing public educational channels, including women of all ages who are or are potentially pregnant, women who influence pregnant women (mothers, -in-laws, etc),
- 4) young women: women at young ages are at highest risk from a medical point of view, but are also critical in terms of preventing future problems in pregnancy and promoting family planning
- 5) men in general: men reached through existing public education channels and programs (eg. agricultural extension); appropriate messages are needed to ensure that husbands/fathers are supportive of pregnancy self-care, of contact with services, etc.
- 6) community groups (men's/women's): with messages intended to involve such groups in developing community referral mechanisms (eg. transport, alert systems) for care of high risk and emergencies cases, as well as in raising community awareness and in disseminating information about maternite sans risques

Priority is given to:

- education of women in or potentially in contact with services (a. and b.) in the first phase of the program as it is more feasible initially, and as related activities have already been developed to build on or introduce maternal messages (eg. immunization programme's information campaign, family planning ICC activities). Starting at this point would help build the experience and expertise required for further program development.

education of women and men who are in contact with (or are target groups of) related programs in other sectors, which are on-going and successful programs, such as agricultural extension programs (PDX), youth and women's development programs, education/literacy programs, mass media campaigns of health education (eg. Facts for Life) etc., as carried out through governmental or non-governmental structures. The main task of the project would be the preparation of appropriate messages for use in these other programs. It should be noted that a maternal component is or may be already included in various women's health education activities; however these need review. They usually are limited to a "go for prenatal care" message, and do not convey the essential messages concerning women themselves knowing danger signs and preparing for a clean home delivery, for example.

As the program develops, other target groups are to be included; however, reaching the priority groups could make an important impact in building credibility and in increasing service coverage (i.e., it may take the services much longer to be able to serve women in remoter rural areas).

The strategy is to use existing channels which are more feasible and successful at first, and then to expand in more experimental ways, as this is the first concerted effort for ICC in maternal health care, and capabilities within the existing health structures need to be built.

Messages: Messages are to be prepared which are simple, direct and non-technical; they will be messages which primarily concern women's own behavior during pregnancy. For example,

- danger signs of pregnancy=
headaches/blurring
bleeding
swelling
"these are not normal"
- have a clean delivery: clean hands, clean sheet/mat, clean cutting
- get TT

In addition, messages are to be developed which aim at the "recruitment" of community-based agents who can provide support for community actions in support of Maternite sans risques, such as providing transport for transferring risk mothers, getting information to trained health workers that a woman is going into labour, providing clean materials for women in special need, etc. The development of special messages for school curricula is to be included at a later stage.

Materials to convey messages are to be prepared that are attractive, symbolic and long-lasting. Investing more in this aspect has proved effective in other ICC activities such as immunization programs, and special attention is needed. Specific expertise and inputs are to be included in the project to give the required back-up.

e. Development of Advocacy:

Activities are to be developed to sensitize and motivate high level decision-makers in national government and non-government/private sector programmes. Also activities will be geared to influential health professionals, particularly obstetricians/gynecologists, and other influential persons in public and private sectors who can provide support to the program as a whole. The main actions will be calling meetings at opportune times, but also The Prevention Division will organize a Journee de la Mere in 1994, to highlight the importance of maternal health care.

f. Development of review and evaluation component

The education cell together with the MHS will review existing information. There is a need to review existing information on birthing practices and other related topics within the Moroccan context, as well as information on women's roles and behavior which affect their utilization of maternal health care

services and their ability to carry out self-care actions during pregnancy and childbirth; information on educational approaches to women (successes and failures); etc.

The program manager will institute an on-going monitoring and evaluation system for the implementation of the program, to enable adequate baseline data, feedback into the development of approaches, and evaluation of results and impact.

In 1991, the MHS began the development of a component on maternal health for the 1992 National Health and Population Survey. This preparation will continue, and be followed-up as the Survey is carried out, and then analyzed. This component will contain questions pertinent to women's perceptions, practices and use of services, and thus be a pertinent adjunct to this project.

The MHS and the education cell in the HED unit will arrange for the identification and development of surveys or studies on particular program approaches, such as

- educational approaches to men on Maternal Health
- community actions for support
- approaches within school education
- approaches to measuring impact of education program on women's knowledge and behavior
- focus group discussions on such topics as women's perceptions in maternal health care, and reasons for underutilization of prenatal services, preferences for assistance during delivery, constraints concerning maternal nutrition, rest during pregnancy, etc.

2. Strengthening of Maternal Health Care Services

Since 1987, the Prevention Division, MHS, has aimed to strengthen existing services through the up-grading and/or development of maternal health care services, including prenatal, delivery, and postpartum care:

- provision of supplies and equipment, renovation of premises, building of new facilities; this included 40 rural maternities and 200 other facilities.
- retraining (recyclage) of MCH nurses and other related staff, with approximately 4000 staff being trained at different levels
- development of service instruments, including a fiche (maternal health care card), a mother's immunization care, a guide, service norms/tasks, a delivery dossier, etc.

Further, a Maghreb Seminar on Maternite sans Risques is being held in Morocco in September 1991, to highlight the problems and approaches in maternal health care. It is meant to heighten awareness of the topic as well as learn from the experiences of the other Maghreb countries.

These efforts require consolidation and further development. An evaluation/review is to be carried out, with the assistance of a WHO consultant towards the end of 1991.

The project will include:

a. Improvement of service instruments:

The MHS, with consultant support, will evaluate the utilization and effectiveness of the maternal health record (la fiche) and the service guide for prenatal care (guide) as one activity with two distinct parts; the results of the evaluation will feed into the in-service training programme, as well as other aspects of programme evaluation:

a.1. Improvement of "fiche de surveillance de la grossesse" (prenatal card): the fiche, with instructions on its use, was developed by the MHS in 1989, and printed/ disseminated (10,000 copies) in 1990-1991. It is a card, kept in the clinic, for each woman who comes for prenatal care. A review of in 1990 showed that...% filled it out well, ...% used it.

The fiche and the instructions will be evaluated in 1992; the evaluation will focus on the effectiveness of the card in the detection of risk, rather than on how they fill up the card. It will look into the use of the card by nurses in terms of its link with the health information system, the time it takes, and the change of behavior resulting from the card's use. It will then be revised, taking into account the results of the evaluation, the new health information system being implemented, and experiences of other countries in the use of the Home-based Mothers' Record (HBMR). The project will provide for printing of the revised cards in 1993.

a.2. The service guide (la guide des activités de surveillance de la grossesse): The guide was prepared by the MHS in 1989; 4000 copies were distributed in 1990. The MHS will evaluate the use of the guide in 1994, and prepare a revision in 1995-6. The revision will be based on the evaluation, on the results of the evaluation of the fiche, on the development of educational messages prepared as part of the IEC project, on service evaluation results, etc. A special consultant will assist the MHS in revising the text, and funds will be provided to the Health Education Unit's production unit, to prepare the guide in a working manual format, with long-lasting, durable materials.

b. Study of use of the dossier d'accouchement (delivery record with partograph):

The MHS prepared a dossier in 1991 which will be ready for distribution in early 1992. The project will monitor its introduction and use in the rural maternities, health center maternities, and in the provincial hospitals. While it is important to test this instrument as an end in itself, the study will also serve as a means of sensitizing hospital staff to provide better care, and will provide additional information in assessing the quality of services provided in these institutions.

c. Strengthening of supervision:

The Ministry in general is concerned with the improvement and strengthening of supervisory systems in general, and for MCH/FP in particular. The Prevention Division is carrying out activities to this end (fill in).

The services for maternal health care pose a special problem: the supervisory staff at provincial level are not technically competent to provide technical backstopping for delivery (this is not part of their training). Therefore a system is required for linking the MCH nurses with provincial hospital staff concerning deliveries; this linkage would establish both a technical supervisory and referral mechanism. This is a critical link in the overall referral system.

The MHS will review the possible means of developing and instituting such a linkage as part of other actions concerning a) supervision of the broader MCH/FP program, b) provincial hospital capacities, c) development of adequate referral for maternal health care; d) sensitizing of provincial level staff; e) the use of information system within the referral mechanism, and will make specific recommendations by 1994.

This review will form a component of the other activities concerning development of the referral system for maternal health care.

Moreover, systematic supervision by MCH supervisors is needed to cover the other aspects of maternal health care: prenatal care, contacts with TBAs, post partum care, integration of family planning, IEC activities, links with other programs, etc. The MHS will prepare a supervisory checklist for MCH

supervisors to include review/analysis of records/fiche; observation of services provided; referrals; IEC; community activities.

d. Upgrading of provincial maternities:

The provincial level hospital is the referral point for the management of risk cases for maternal care, yet it is known that they are not capable of handling many of these cases because of deficiencies in skills, equipment, supplies, etc. A systematic review of these capabilities is required; the MHS will carry out this review in 1993-1994. It will include

- a) inventory of equipment and supplies (including data collected as part of the INAS study of obstetric interventions, completed in 1991) for essential obstetric functions
- b) review of obstetric technologies and techniques used in maternities (including observation of case management/deliveries)
- c) review of knowledge and skills of nursing and medical staff, and training needs
- d) analysis of hospital records/record-keeping concerning numbers and types of risk cases treated, case management, from where/whom referred, flow of information about cases, etc.
- e) review of referral mechanisms used: review of availability of transportation attached to health facilities, public transportation, transportation possibilities attached to community organizations, etc.; review of times/distances; information sources; people's knowledge of services; as well as review of the functions-effectiveness of the rural maternities, possible linkages with family planning regional centers, etc.

The study will be executed by INAS, including medical specialists and sage-femme, statisticians, interviewers (skilled). A specialist OB/GYN consultant (foreign) will be recruited to assist in the development and analysis of the study, with special reference to the review of obstetric technology and techniques used.

The study will cover a sample of MOH provincial hospitals (low, middle and high performers), and a sample of rural maternities and health centers with maternity beds within the same provinces; and of private hospitals/maternity clinics, both in urban and rural areas.

This may lead to a future project for support to the strengthening of provincial level maternities as referral centers.

e. Continuation of in-service training for health workers in maternal health care

The Division gives high priority to the continuation and strengthening of in-service training. The training covers MCH and family planning care. The program of training has been on-going for 2 years; it is decentralized to provincial level.

The Division will evaluate the on-going training programme with the aim of assessing the persons trained, the progress of activities (including management of courses, etc.), the content of training.

The training component concerning delivery has not been structured. The MHS will develop this component in 1993, with consultant assistance; there are special considerations to be studied for this component, particularly on numbers of normal and complicated deliveries required for practice, where training can take place, who trains, how, housing of students, scheduling of students through the next several years, and so on.

The project will provide funds for the continuation of the in-service training as follows:

[insert numbers/types of health workers by year]

Project funds will be complemented by those from other agencies.

f. Strengthening of basic education in maternal health care:

The basic training of nurses and midwives has been undergoing changes within the past few years in view of financial crises in the government. Current economic constraints has forced a suspension of recruitment of nurses into the system, though steps are being taken to modify this situation for the future. In the meanwhile, the training of infirmiere-accoucheuse has been suspended.

Note: UNFPA provides support, and is likely to continue such support, for the training of nurses in MCH/FP; thus the project will not include specific activities, though UNICEF support through advocacy is important..

g. Strengthening of sage-femme professionals:

The Ministry will continue to promote the important role of professional midwives in public and private services. Actions are being taken to clarify and up-date government regulations concerning their practice.

Note: I understand that USAID will provide support to the Association of Sage-Femme, and UNICEF funds may not be needed, but its advocacy is desirable.

h. Special studies:

- to be developed (see VH assignment report)
- also to add: operational study of alternative emergency transportation for transfer of women in labour.

II. ACTIONS AND BUDGETARY IMPLICATIONS

Note: Actions described are primarily those requiring project budget inputs. This does not represent a summary of the government's programme as described in the plan of operations.

A. IEC on Maternal Health Care:

1. **Information and Education: Women assisting at delivery**
 - a. design of training protocol, management plan:
 - external consultant - 1 month
 - internal consultant - 1 month
 - b. preparation educational aids
 - internal consultant/artist - 1 month
 - production materials
 - c. training provincial level trainers
 - per diems, travel
 - course costs
 - d. adaptation/production of materials: provincial
 - funds to provinces
 - e. training sessions in communities
 - costs in x number of provinces for 2 years
 - f. evaluation
 - external consultant: design/implement: 2 months
2. **Training of health workers in communications techniques**
 - a. preparation of maternal health care illustrations for course materials
 - consultant (?external/internal)
 - materials production

- b. repetition of communications' skills courses (1 week)
 - course costs for x number of courses

3. Development of project structure

a. recruitment of consultants/staff

- external consultant for overall programme development for 2 years (this is to be discussed with UNFPA, Govt re overlap or not, re need in view of UNFPA approval of 2 year IEC consultant for MCH/FP)
- local consultant/artist
- staff support for project (secretary?)
- supplies and equipment for consultants (office equipment & supplies, paper, etc.)

b. provision of supplies and equipment

- supplies and equipment needed for project implementation.

4. Development of project strategy

(the work of the consultants, MHS, Health Ed unit, etc.)

a. orientation meetings/groups: per diems/travel meeting costs

b. review of existing information, studies, IEC programs

- documentation costs (documents, collection)

5./6. Development of messages/materials

different messages/materials will be developed at different times, depending on target groups and stage of programme

- funds for formative research, development, testing, production

7. Development of advocacy activities

a. conferences of health professionals/influential persons

- costs of conferences

b. preparation of leaflet (public relations)

- payment writer/artist
- production costs

c. preparation of Journee de la Mere

- production costs for materials

8. Preparation/analysis of maternal health component of 1992 ENSP

- consultant fees (external) - 6 weeks

9. Identification/development of studies

- study costs
- costs of evaluations: consultants for preparation and implementation (contract to institute??)

B. Strengthening Maternal Health Services

1. Improvement of service instruments:

1.1. La fiche

1.2. La guide

- consultant (external) 1 month to develop review protocol
- review costs (travel per diem reviewers, preparation report)

2. Study of use of the delivery dossier

- review costs

3. Strengthening of Supervision

a. review existing supervisory practices/mechanisms

- consultant (internal) -4 months

b. preparation of supervisory checklist

- cost of production of checklist

4. **Study of provincial maternities (hospitals, maternities, centers with maternity beds)**
 - a. recruit external expert: 2 months (separate times)
 - to prepare protocol
 - to carry out technology aspect of study
 - b. carry out study
 - study costs to institute
 - reporting costs
5. **Support to in-service training**
 - a. course support to provincial levels: X provinces
 - cost of courses
 - b. preparation of delivery component
 - consultant costs -4 months (internal)
6. **Support to basic education**
 - coordinate with UNFPA-funded project
 - may be no budgetary requirements
7. **Strengthening sage-femme**
 - coordinate with USAID
 - may be no budgetary requirements
8. **Identify special studies**
 - a. In as operational studies on application of risk approach study costs
 - b. focus group discussions on women's perceptions
 - costs of specialists in focus group method
 - c. evaluation: mainly work of MHS though funds should be available for consultants in particular areas.

III. CRITICAL ASSUMPTIONS/OUTSTANDING ISSUES LIST: (for input to plan of action)

A. IEC in Maternal Health Care

- the emphasis should be on directly providing women with information on self-care during pregnancy and preparation for delivery, including recognition of danger signs and appropriate responses once recognized.
- inadequate service coverage; underutilization of maternal health care services
- insufficient numbers of visits amongst women coming for prenatal care
- problems of nurses' communication skills
- importance of self care during pregnancy
- channels for reaching women are limited; need for using existing program structures
- high female illiteracy rates and strong social constraints in reaching women in rural areas; need for developing innovative methods and devising culturally acceptable approaches
- need to sensitize and educate men about maternal health care: why its important, and what needs to be done; women need support of husbands to take required actions

B. Strengthening of Services

- inadequate coverage of services in general and maternal health care in particular
- inadequate numbers of female health workers in rural areas
- inadequate knowledge and skills of MC nurses including risk detection, simple management of risk cases, and communications with women
- need to define level of technical skills considered acceptable for a "qualified" assistant at delivery
- importance of up-grading referral centers to handle risk cases, obstetric emergencies
- the need to establish technical supervision of MCH nurses for complicated pregnancies and deliveries.

IV. MATERNAL HEALTH CARE--UNICEF/GOVERNMENT OF MOROCCO: SUMMARY OF OVERALL PLAN OF OPERATIONS

The problems of maternal and neonatal mortality are serious in Morocco, and have not until recently been considered priorities within the national health service. Their importance for overall infant mortality reduction is now recognized, and steps to redress the health service deficiencies in maternal health care have been taken.

The Ministry aims to improve maternal health and reduce maternal and neonatal mortality. The strategy combines a public educational approach with a series of activities aimed at strengthening the health services to provide more and better prenatal, delivery and post partum care.

The MCH Division will launch an IEC program on maternal health (Maternite sans Risques). Assistance is needed to build the institutional capabilities within the Ministry to develop and carry out the program; details of strategies are required, target groups selected, messages devised, materials produced, intersectoral contacts made, etc. The program will initially give priority to women and men who already have, or who potentially have, contact with related services and programs in the health, educational, agriculture, etc. sectors. The program will also introduce maternal health care messages within general health mass media campaigns such as Facts for Life.

Community organizations such as women's organizations will be used to the extent possible, though presently their penetration into rural areas is limited.

Advocacy activities will be developed, geared to government and private sector decision-makers and influential persons, including medical specialists (OB/GYNs), women leaders, heads of civic groups, and program directors in all sectors.

The program will emphasize directly providing women with messages about self care during pregnancy and preparation for home delivery, especially to teach women the danger signs of pregnancy, so that they are able to detect their own risks and to seek assistance early. One component will be directed to women who assist other women in deliveries, to encourage the preparation of clean deliveries, and to enlist them in the long-term as community agents for maternal health promotion.

The program will include studies and focus group discussions on women's own perceptions, including reasons for not using services, preferences for assistance, and problems they face in improving maternal conditions. Intensive and on-going evaluation will be undertaken, as this is a new approach.

The MHS will also continue its efforts at improving service tools prepared specifically for maternal health care, such as a maternal record; a service guide on prenatal care, managing complications of pregnancy and childbirth,

and post partum care including family planning; a delivery dossier for improving care during childbirth at rural maternities and provincial hospitals.

In order to strengthen the referral system, the Ministry will carry out a study of selected institutions, both public and private, to determine needs regarding a)obstetric technologies and techniques, b)knowledge and skills of staff, c) equipment and supplies, d)referral and supervision mechanisms.

Many problems remain concerning the lack of female health workers at the basic peripheral levels, and their insufficient numbers at other levels in rural areas. Also, training of MCH nurses in the inservice is critical to improve the quality of care: they are to be trained in providing quality prenatal care, assistance for normal deliveries in rural maternities and homes, and post-partum, including family planning care.; training in communications skills will also be provided to enhance education to women objectives. Project assistance will focus on the development of the practical training for MCH nurses in delivery care.

A maternal mortality and maternal care component is to be prepared for the 1992 ENSP. Assistance will be given for the analysis of this and other pertinent data to provide baseline information for developing the program as a whole, and for evaluating its impact.

Studies will be supported, aiming to improve the quality of maternal health care, as an integral part of MCH/FP activities. The studies will be operational, and focus on the application of the risk approach for the planning and management of services; the organization and strengthening of referral systems, including supervisory functions; and modalities for increasing participation of women in maternal health care services.

V. APPENDICES

APPENDIX 1

Notes of Discussions: UNICEF Consultancy: Vicki Hammer-Wylie (John Snow, Inc.)

Monday - Wednesday 17 -19 June 1991: Arrival in country and discussions with Mr Akadiri and Prof. El Jai concerning objectives of assignment and review of background documentation. It was agreed that the main aim of the assignment was the preparation of a draft of the plan of operations for the Maternal Health Care portion of the UNICEF-Government Programme of Cooperation.

Note: Mr Akadiri would be absent from Saturday 22 June - 4 July; Prof. El Jai would be absent 26 June - 30 June (later, through 1 July).

Thursday, 20 June 1991

Meeting: 9:30 - 12:30 MME Moumena BENAMAR, Chef de Service, Protection de la Santa de la Mere, Division de la Sante Maternelle et Infantile, Population Section, Ministry of Health, Morocco

We discussed the development of services and supportive activities carried out in her service since 1987. She has been the chief since that time; in 1987 there was a restructuring of programmes, and was the beginning of a maternal health (as distinct from MCH) programme.

The main activities undertaken have been:

1. construction/renovation and equipping of rural maternity centers (UNICEF support) and prenatal sections of health centers and dispensaries
2. recycling of female nurses to MCH activities, with orientation (training???) in peripheral levels: 4000 personnel
3. preparation of service tools:
 - la fiche de surveillance de la grossesse, and instructions for use
 - la carte de vaccination et de sante de la mere, with instructions for use
 - un guide des activites de surveillance de la grossesse
4. development of a training guide and materials for training of traditional birth attendants (meant for kabla plus others); not yet completed

The National Institute of Health Administration (INAS) carried out a study out on the utilization of services in 4 provinces. The results indicated that women do not get information about services from the services themselves, and they do not come for prenatal care because of "lack of information".

Utilization studies have also shown that prenatal services have reached a plateau in urban areas, while there is a slight increase in rural areas (though coverage levels in urban areas remain significantly higher than in rural areas).

In terms of future needs, she indicated priorities as follows:

1. development of educational programme to mothers themselves in highlighting pregnancy risks and improving conditions for home deliveries: to be directed to persons who assist at home deliveries (eg. kablas, relatives, neighbors) a training guide has been prepared, which is intended for the animaters at provincial level, for them to organize the adaptation of materials and training at local level.
2. training of nurses at health centers and dispensaries in prenatal and delivery care: she emphasized this area as the most urgent and critical one.
3. reenforcing the training and profession of sage-femme
4. improving existing services through better use of mother cards for provision of service, and for referral purposes; she specifically indicated that she wanted an evaluation of la fiche (It was not clear to what extent she has used the WHO reports on their work in the HBMR)
5. stimulating interest and appreciation of the importance of maternal health care for women and infant survival at decision-making levels in the government

We agreed that I would prepare some drafts of project outlines for a further, more detailed discussion on Tuesday, 25 June at 9:30 (after the holiday weekend).

Friday, 21 June:

9:30 Meeting between UNICEF (Mr Akadiri, Prof. ElJai, myself) and MOPH, Division of Prevention (Director, Dr Mechbal and staff):

The meeting concerned the preparation of the UNICEF-MOPH strategy and development of plan of operations re health sector programmes in Maternite sans risque, nutrition, etc. (EPI, CDD had been discussed previously): the objectives and general areas for programme development. The Director began by noting the need for strengthening the capability of the Directorate in

health education, and not assuming that health education can be developed within each programme without such expertise. He urged that this be highlighted in the description or listing of health programmes. He also stated that high priority must be given to including health topics within the school curriculum, and that this also needed visibility within the programme strategy and plans of operation.

He described the importance now given to Maternite sans Risques within the MOPH, and the need to give these activities priority. He described the maternal mortality study carried out by INAS, the results of which are currently being analyzed. The study covers hospital data on Caesareans, etc. and is not a community-based study, but nevertheless should give some interesting information on causes of death. It would also show priority zones (geographical) for action. Another study on maternal mortality would be carried out following the "sister" methodology.

He described the general strategy being developed now:

- formation-cyclase of staff, to improve prenatal care and supervision
- introduction of risk approach
- training of TBAs.

In addition, he emphasized the need for education to mothers about reducing risk and improving conditions during delivery at home.

A long discussion ensued concerning the training of TBAs. Whereas he acknowledged the importance of looking long term at increasing institutional deliveries, he stated that in the short-term, it is necessary to train the TBAs. His staff, plus Prof El Jai argued against this approach, as a) the kabla doesn't normally attend many deliveries, b) they are not capable of resolving the problems, c) they are "dying out", etc. He stated that this is an activity that still should be supported.

I questioned the availability of female staff (nurses) in the services. He acknowledged the importance of this issue, and thought that the problem of non-replacement was in the process of being resolved. He did emphasize the need for training of existing staff to improve performance.

He suggested that I continue working with Mme Benamar in developing the projects, and that I visit some areas in the field. He set a date for a continuation of the discussion on 1 July at 11:00.

Meeting ended: 2:30

3:00-3:15: Meeting with Michelle Muloney, USAID

She described her impressions of the situation:

- the MOPH is giving importance to the problems, and is ready to give priority in programme terms

- there is a problem of who are to be the delivery attendants (sage-femme, infirmiere accoucheuse,)
- TBA training is problematic, but it is a reality in Morocco, (TBAs have been identified already, materials are ready)

USAID has supported the equipping of maternity centers (and health centers with maternity beds) by supplying UNICEF kits. They are supplying TBA kits (which are expected in September).

USAID is interested in further support for maternal care, especially :

- an assessment of the situation (MotherCare central funding)
- support to the Nurse-Midwife Association
- private sector support

USAID has supported the outreach activities of the "integrated family planning/MCH programme": VDSM. This was primarily door-to-door delivery of pills, condoms, ORS, iron tablets, etc.. It is now emphasizing mobile teams, and "points de contact" as the strategy. The workers are men, and thus do not do prenatal care per se, but should be referring women to dispensaries and health centers for prenatal care.

The nurses at the centers and dispensaries do not have any supplies for treatment of risks. The World Bank intends to do a study of supply needs.

She agrees on the need for in-service training, and for an evaluation of the use of the fiche.

5:30 Meeting with Mme Nafissa Zerdoumi, UNICEF Representative

Mme Zerdoumi requested me to prepare a paper stating the purpose of my assignment (object of mission), the strategy (summary of situation analysis in Morocco including statistics, plus main lines of strategies), mission accomplishments to date, persons met, things yet to be done.

She then stated that she would accompany me at meetings, and would make an appointment with UNFPA (which I had previously requested) and WHO.

Saturday 22 June:

9:00 meeting with Mr Akadiri: we further discussed strategy, in terms of support to TBA training--ie to consider it as part of education to public--I suggested that it could be an interesting example for MCH nurses in learning public education and training techniques.

10:00- 12:30: assistance to UNICEF in the translation of a document for the Ankara Breastfeeding meeting from French into English, especially in relation to technical terms (crisis moment).

afternoon: preparation of paper for Mme Zerdoumi

Monday - Tuesday, 24-25 June: Moroccan official holiday

- preparation of draft outlines for discussions with Mme Benamar
- review of additional materials received
- review/comments on service guide for maternal care

Tuesday 25 June:

- I was given a copy of the UNFPA Evaluation Report of its activities 1987-1991, carried out in October 1990, and reviewing it, the following are particularly relevant:
 - of \$10 million in this period, almost \$5m was for MCH/FP
 - the MCH/FP projects support integrated activities, including broad MCH technical assistance, supplies and equipment, and various MCH/FP projects.
 - pertinent projects include:
 - support to MCH/FP in 4 provinces:
 - Er-Rachidia, Ourzazate, Azilal, Tata
 - research and health information (SEIS)
 - renovation of health centers (75 centers)
 - support to basic training of nurses and midwives
 - IEC in MCH (not yet started)

The evaluation report emphasized the need for supporting maternal health care, and encouraging integration of services. It recommends operations research (anthropological) on causes of weak utilization of services of MCH/FP, including prenatal care and delivery; maternal mortality; and acceptability, viability of different scenarios for cost recovery in FP.

9:00-930 discussion with Prof El Jai: we discussed the different possibilities for UNICEF support, including support for consultants to work on the educational project, having total process projects in a few provinces (ie project which provide inputs to whole process of maternal care: from education to people (incl women who assist deliveries), to prenatal care (including training of MCH nurses), to assistance at home or rural maternity deliveries by trained nurse, to referral systems, to provincial hospital deliveries (incl provision of equipment, training as required). We also

discussed the possibilities of small studies, such as one on the use of antibiotics by MCH nurses (for cases of suspected infection).

10:30-2:30: meeting with Mme Benamar at UNICEF (government holiday) to continue discussions on proposed programme:

- discussed with Dr. Zerdoumi, the importance of improving education de base (basic training) of health personnel; the need to support the profession of nurse midwife; in-service training; and public education/communication. It was agreed that development of guides, isolated from a larger process, was not effective. Dr Zerdoumi suggested that Mme Benamar organize a "brainstorming" meeting of people from the field, sage-femmes, medical personnel, etc. to discuss the issue of traditional birth attendants; afterwards, I discussed with Mme Benamar that it may be more advantageous to discuss the problem of personnel for maternal care. The MSP must decide on the level of "qualified" that they want, before other activities such as training can be designed in detail.
- Mme Benamar and I continued to discuss one project on Education in Maternite sans Risques, as per the outline I prepared. In general, she agrees with the outline, and will continue to provide the details, requirements. One aspect which I had suggested was involving community volunteers and/or community organizations in educational and service projects; she stated that this would be difficult within the Moroccan setting: both national and community level organizations (including and especially women's organizations) are weak or non-existent, and therefore providing education through these channels would not be feasible. Also, she thought that recruiting local, community volunteers for maternal health care was not feasible, though the project may try to involve the TBAs for this type of work.

It was agreed that a "cell" of qualified communications consultants would be needed to help design the overall educational strategy according to target groups defined by the project, to develop activities to train trainers in communications techniques, and to establish a materials production facility.

Wednesday, 26 June:

UNICEF: Mme Cherifa A.....: Officer in charge of activities for women & development: we discussed the possibilities of including maternal care messages within existing programmes targeted to women. She described the projects in the Ministère de Jeunesse et Sport: the "foyer de femme"; there are 256 projects in all of the provinces, with trainers who give courses in various subjects, including health. The activities related to education of young girls is another channel for such education. She noted that the activities with the Ministry of Agriculture were most interesting, particularly the UNFPA/FAO project in Meknes, which involves the agricultural extension workers (there are nationally 1700 men and 150 women workers), who identified the need for providing information about health and nutrition. The

evaluation of the pilot phase showed the success of this education in terms of retention of information, increase in family planning acceptance, increased school attendance. The evaluation did not look at prenatal care attendance, though it was included in the education.

1:00-3:00: Meeting with Mme Benamar

We discussed the programme on education; she noted that in 5 years, it would not be possible to accomplish too much; there are many insufficiencies in the "institutional capacity" of the Central and provincial services. We discussed the need to be concrete about actions which were feasible, given the resources.

We discussed the draft I prepared for a service programme, including work to be carried out on

1. la fiche (evaluation, extension to a carte de sante de femme, as "passport" to services)
2. le guide (evaluation of use)
3. in-service training: continuing for MCH nurses

She emphasized the government's strategy to start 1) where women already touch the health services, or potentially can touch the services (ie accessibility in its broadest sense), and 2) where MCH nurses are already in place. We discussed the importance of this for increasing prenatal coverage and risk detection, and referral : since the proportion of those not covered is so high, reaching these women can make a significant difference overall, even though they may not be the women at "highest" risk (ie women who have no access to services). For the short term, this strategy may be the most feasible, and is also acceptable (includes periurban women, rural women within certain accessibility of service...accessibility in terms of distance to health facility and availability of MCH nurse to provide service).

We also discussed the fact that certain educational activities could also be carried out in the short term, to reach a broader "audience": these would include the preparation of appropriate maternal health care messages to be introduced within existing programmes in other sectors, such as those of the Min of Agriculture, and Jeunesse et Sport.

3:00 - 7:00: Ms Elin Ranneberg-Nilsen, UNFPA

UNFPA has a large programme of about \$10 million for 1987-1991, and are in the process of preparation of the programme for 1992-96. An evaluation of UNFPA projects took place in October 1990, which made several recommendations. However, she stated that negotiations with the government concerning the MCH/FP aspects were not completed, and UNFPA was not fixed about future support.

She described the problems encountered with the large IEC programme in MCH/FP, which has not, to date, started. A major problem was finding an appropriate consultant (IEC expertise) to design and "direct" the programme, in addition to the problems within the health education unit in the Division of Population. It is likely that they would continue support for the 4 Provinces project (integrated MCH/FP), for improving basic training, in-service training, providing supplies and equipment, technical consultancies (through the Universite Libre de Bruxelles. They will continue support of maternal health care, within the concept of an integrated MCH/FP programme.

Thursday, 27 June:

Meeting with Dr Mechbal about project submission to UNICEF:
10:00 - 12:00

We discussed the preliminary conclusions of my discussions with Mme Benamar, and he agreed in general (with certain modifications...):

1. education programme:

He agreed with the need for an IEC cell, to work solely on the maternal health activities, but he "insisted" that it be situated within the health education unit. He agreed that international assistance may be required for the development of the strategy (though NOT like the Johns Hopkins model, already proposed in the family planning programme), the definition of target groups, preparation of messages, etc.

He agreed with the need to train health workers in communications techniques and suggested that a maternal health care module (for training exercises) be added into the communications course ready for implementation in July on family planning: ie. this two week course could be repeated for a shorter period of time for health personnel, using maternal health care rather than family planning as the concrete example of training exercises.

He agreed with putting TBA training under education programme, as they are one target group, and that evaluation would include evaluation of techniques of communication.

He agreed with the need for a survey of the focus group discussion type, to understand better, the reasons for underutilization of prenatal services.

2. With regard to service support, we discussed:

fiche: importance of evaluation concerning its effectiveness in the detection of risk (ie not just do they, can they fill it out), and its link with health information system (is it increasing info work of nurse too much?); that is, does it change behavior or not

dossier: need to evaluate in itself, but also as a means of sensitizing hospital staff to better maternal health care; evaluation has to look at care at this level, with a view towards improving hospital as referral center

supervision: the importance of involving the hospital staff in technical supervision of accouchement at health center, rural maternities, and MCH nurses in general---link with hospital level critical for credibility of maternal health care network (referral system as a whole), and reduction of risk (lower levels detect risk, can management some cases, but most refer management of risk cases)

need review (inventory) of sample of hospitals to judge capabilities for obstetric intervention: review 1)obstetric techniques, 2)equipment, 3) training needs.

He was interested in foreign consultant to help design this (especially re techniques).

He also noted the need for consideration of private sector.

12:00-1:00 Health Education Unit

Reviewed organization of unit: conceptual developments, administration/management, and production. This short review revealed some very basic weaknesses in term of artistic, marketing types of skills, and of originality of concepts of IEC.

1:00 -3:00 INAS Institut National d'Administration Sanitaire

The objective of the INAS is

1. long-term training : 2 year MPH (has MCH/FP, Nutrition specialty)
2. Short-term training: they do the in-service training in management of MCH/FP services (15 day course)
3. Research:
 - eg in MCH:
 - Etude sur le cause et circonstance de deces infanto-juve'lle(<4 yrs)
 - Etude sure les besoins en interventions obstetricals
 - Etude sure le surv de la grossesse et accouchement--prenatal coverage: this consists of students doing small studies on maternal health care as part of their studies
4. Expertise (eg help to 4 Provinces study)

Dr Laabid Ahmed: Etude...Obstetrical interventions

He described in detail the study---impressive coverage of public and private maternities/clinics where deliveries take place; retrospective study, of deliveries in 1989; mainly compared the difference between urban and rural levels (taux) of main obstetrical interventions; hypothesis that difference will highlight unmet needs in rural areas: highlight areas where support, etc. needed. He said that an inventory of personnel and equipment of hospitals was included.

The study was carried out since (?Oct 1990), and final analysis is expected by end July. A national meeting to present results is to be held in September 91.

INAS is interested in UNICEF support for 2 studies:

1. Efficacite de programme prenatal (similar to risk approach study: study of major risk factors detected)
2. Prise en charge de accouchement in hospital

They also need \$5000 for the final steps in preparation of report of Etude.

Friday, 28 June:

Field trip to Rabat health center, small maternity and dispensaries: I observed the clinic sessions. In general, there were not many "patients" and therefore it is not appropriate to make many comments on the flow of work. However, the following observations are made:

- very weak communication between MCH nurses and women
- unnecessary separation of prenatal/postpartum and accouchement
- lack of examination for post partum (consists of giving BCG and weighing baby)
- no health education given
- no apparent workplan for optimum use of 2 nurses
- positive impression of maternity: clean environment, interested midwife; no feeding bottles.

Saturday - Sunday (part-time) Monday, 1 July:

Preparation of main text of draft of plan of operations for maternal health care, according to discussions to date.

Tuesday, 2 July:

Meeting with Dr Mechbal, Mme Benamar, Dr Hajji (Nutrition), other MCH staff, Prof. El Jai:

I was asked to present the outline of the work accomplished to date on the projects, which I did, summarizing the draft plan of operations. I then posed the following questions which I thought needed further clarification:

1. what is the role/utilization of rural maternities now and in the future? (eg. services, staffing)
2. what are the linkages - integration with family planning? esp re IEC, services, Regional Centers (latter's potential role in maternal health care)
3. what is the plan for in-service training of MCH nurses in accouchement? (how? where?, who to train? etc)
4. what kinds of research is envisaged after the INAS obstetric intervention study? epidemiological studies on risk? (as requested by INAS)

Dr Mechbal responded:

1. The rural maternities have integrated MCH/FP responsibilities, with accouchement for women living in catchment area; however, the problem has been that women don't come, since the promotion aspects haven't been developed; the doctors haven't been trained or motivated to give the backup needed; and the integration of services has been weak. they are looking into ways of improving the situation. Better links are needed between the rural maternities and the hospitals.
2. Efforts are being made to "structurally" integrate family planning and MCH activities (eg. FP on fiche, dossier, etc.), particularly the inclusion of family planning in post partum activities. it is a complicated issue involving women's own demands, problems of women's accessibility, logistical problems, etc. They are aware of these: the question is how to resolve them.

He agreed that the Regional FP Centers can play an important role in maternal health care. To date, they have started training in educational techniques, communications, and management of training. It is intended to add in other aspects, such as maternal health care in 1993. Greater sensitization is needed to involve them in prenatal and accouchement activities. More documentation, for example, would be useful.

3. In-service training for most aspects of maternal health care are on-going; they are decentralized, being carried out at provincial level. The training in accouchement has not as yet been structured, and steps are to be taken to design such training. Assistance is needed in developing this module, including modalities for les "stages".

4. With regard to studies, he said that they did not envisage a large national risk study, but prefer smaller ones on specific problems identified; they should be operational studies on scenarios of implementation; in-depth studies on quality of care; how to organize/plan according to risk factors (how to use information about risk)

He also referred to our previous discussions about basic education of infirmiere accoucheuse and sage-femmes. He noted that the status of sage-femmes would be resolved, and that the numbers of practicing sage-femmes should be increased (i.e., not just the administrators) so that there would be personnel sufficiently trained in delivery so that they can work independently for home deliveries. The government needs to do the training, but not just for the public sector: the private also (this is new thinking in the government).

The group discussed these and other issues, eg. the problem of feedback (information on women delivering in maternities going back to local health facilities, for post partum follow-up). They discussed the "carnet de mere"...he is prepared to see a test for them.

He asked about the potential for UNICEF support in maternal health care: Prof El Jai said that there are possibilities for extra-regular funds, as well as a greater "share" of the UNICEF health budget.

He asked me to get for him a copy of the CDC training module on Risk for MCH/FP: for integrated planning, which I said I'd try to do.

3 - 4 July 1991: finalization of report and discussions with UNICEF:

De-briefing with Prof. El Jai

De-briefing with Dr. N. Zerdoumi:

I summarized my work with the Government. We also discussed the problems of baseline data; she requested me to call WHO/Hq to enquire about their possible assistance in this area.

APPENDIX 2

Comments on Guide des Activites de Surveillance de al Grossesse, Ministere des Affaire Technique, Santa Maternelle et Infantile

In general, the text of the guide is well-prepared: it is direct, concise and includes relevant, priority topics. The language is clear. Its format and design however could be reworked, to make it more attractive and useful as a practical manual (which may render it used more as well).

Arrangement of information: The guide is arranged according to three distinct prenatal examinations. This would be advantageous, IF three visits were a norm rather than a desire. It may be better to not break down certain core elements of prenatal care into three stages, since most women may only consult once, and perhaps twice. This is particularly relevant for the educational content, which cannot be split in three periods so easily as other elements (things to look for at different months of pregnancy). For example, information of danger signs is only given in steps for the 2nd trimester=2nd visit.

Also, there is no section on normal deliveries.

The post-partum section is separated, and not adequately linked to delivery: as most post-partum deaths occur within the first 48 hours of delivery, it is critical that a visit be made as soon as possible to check for actual and potential complications, and that this be included in the guide and/or work objectives

Language: Not knowing the language abilities (or Arabic translation???) of the MCH nurses, it is difficult to remark on this aspect. However, one would guess that it may be easily understood by better educated nurses, but less so by general nurses who have not previously had special Maternal training.

Format: The highlighting of key information in boxes is useful, but could have more consistency in terms of type of information in boxes.

Much of the text is too closely spaced, and could use an "artist's touch" to facilitate reading

Many key ideas and messages are described within paragraphs rather than in lists, eg. p35: education/preparation a la naissance: "le suivi de las grossesse qui permet de la mener a bien et de prevenir les signes essentiels de danger: eodemes des membres inferieurs, maux de tet, ecoulement liquide ou saignement vaginal" This may be better highlighted as:

Ensure the woman knows the DANGER SIGNS:

- swelling
- headaches
- bleeding/discharge

tell her to go to a health facility if she feels signs!

The Annexes tend to use this style better.

The use of Annexes to explain specific elements in more detail is useful as it permits scaling down the size of the description in each chapter. The specific technical content annexes (eg. "Alimentation au cours de las grossesse et de l'allaitement, anemie ferriprive, soins de seins, la vaccination antitetanique,) may be better placed in a separate section. As annexes, there is a greater chance of their being overlooked, which would mean omitting critical steps and/or information. I would think they could have a color of their own, and be called something like KEY ELEMENTS of CARE. I would add to this section, one on EDUCATIONAL MESSAGES: a short, "vernacular" checklist of messages to be given to mothers, eg.

- eat well: eat....(names of local foods)
- clean well, wear "shoes"
- know the danger signs:
 - swelling
 - headache/blurring
 - bleeding
 - disease (as relevant--eg. malaria)
- get TT
- prepare for a clean delivery:
 - clean hands of assistant
 - clean blade to cut cord
 - clean sheet to delivery on

The tables used to summarize tasks and recapitulate risks are quite good, and perhaps could be used for other issues such as educational messages. They could perhaps be designed with less verbiage and more spaces, and thus be more "checklist"-like.

The success of any guide, of course, is in its use. If the guide has been introduced systematically and as part of a strategy of re-training and supervision, then it will be used to a greater extent than if just sent to the nurses. Another assumption is that the more attractive the format and "packaging", the greater it will be used. Additional costs for these two aspects is definitely worth it, and justifies the initial expenditures for the development/reproduction of the guide.

It is not clear if the guide is accompanied by a list of job responsibilities/work objectives of MCH Nurses. apart from the contents of the guide.

APPENDIX 3

REPORT TO UNICEF: Consultancy on Maternal Health Care

Vicki Hammer-Wylie (John Snow, Inc)

OBJECTIVE: to prepare a draft plan of operations on maternal health care for the UNICEF-Government of Morocco Programme 1992 - 1996.

ACCOMPLISHMENTS: The draft of the plan of operations on a maternal health care project is attached. The draft represents the conclusion of discussions with the Government (Ministry of Health, Division of MCH, Maternal Health Service). Also attached are:

- a summary of the plan of operations
- a list of assumptions/issues for the plan of action
- a bar chart of activities, by year
- comments on the Service Guide for Prenatal Care
- notes of meetings held 17 June - 2 July
- note for the record, 24 June for Dr. Zerroumi
- a list of activities and budgetary implications

All attachments were put on a diskette in Word Star and left with Prof El Jai's office. I would appreciate it if copies of the attachments could be sent to Mme Benamar.

DISCUSSIONS SUMMARY:

In general, as agreed with Mr Akadiri and Prof El Jai, I concentrated my discussions on the program development on Mme Benamar, the Chief of the Maternal Health Service in the Division of MCH in the Population Section of the Ministry, and with her superior, Dr. Mechbal, the Director. These discussions were intensive and productive, and I would like to add, very enjoyable. My impression is that Mme Benamar lacks adequate support within the Service to carry out all the activities she thinks necessary and useful: support in terms of numbers, and quality. There is also lack of support from the point of view of preparation of materials in formats (including organization of content) which would maximize their usefulness; her content is very good. I would therefore recommend that technical consultants and other temporary staff be included in the budget.

Mme Benamar and I discussed various approaches and activities in general as well as for the UNICEF-Government Programme of Cooperation 1992-1996. We agreed that planning for too many activities in the next few years is not desired, in view of her Service's capabilities, those of related Services, and those at provincial levels. We discussed the need to consolidate and expand on existing activities, as well as launch the new IEC program, though the latter would have to be phased carefully.

In my discussions with Dr Mechbal, he was very supportive of increasing government activities in Maternal Health Care, and indicated the Government's interest in giving them higher priority.

I also had discussions with USAID (\$31 million in health and population) and UNFPA (\$10 million in health and population, with approximately \$5 million in MCH/FP) who are major contributors to the MCH/FP area. It should be noted that they both provide technical, as well as material, assistance, and that substantial amounts go to MCH, apart from family planning. UNFPA in fact provides more to MCH than it does to family planning services, though it provides this support within the overall integrated approach to MCH/FP. In this light, greater attention should be given to discussions and collaboration with the two agencies, particularly UNFPA. The October 1990 Evaluation Report's sections on MCH/FP contain information and recommendations relevant to UNICEF assistance; it may also be useful for UNICEF to have discussions with UNFPA on the preparation of project documents for the 1992-1996 period, which is currently under discussion with Dr Mechbal.

Particular attention should be given to coordination with UNFPA concerning the development of the project on IEC in Maternal Health Care, as there is overlapping with UNFPA's project on IEC in MCH. These two projects complement each other in various ways, and actually form part of the Ministry's larger health education programme. In particular, UNFPA proposes to support a post for two years of an international advisor in the Health Education unit, as well as supplies and equipment. This post does not replace that planned for the IEC in Maternal Health Care; however, coordination is necessary.

PLAN OF OPERATIONS:

The draft text for the plan of operations in maternal health care is attached. It was not possible to include any more details on activities such as numbers of persons to be trained, budgetary requirements, etc. as the Ministry did not provide this information. I understand that they will fill in the "blanks" as soon as possible. Furthermore, I was not able to work with Prof El Jai as he was absent during most of my assignment.

RECOMMENDATIONS:

1. WHO involvement: I did not have time to have discussions with WHO; however I noted in all my discussions in the government, the lack of knowledge of WHO reports, studies, materials, etc. in the area of maternal health care, particularly those concerning:

- studies on the risk approach
- studies on the Home-based Mother Records: WHO/MCH/89.8
WHO/MCH/89.12

- studies on the use of the partograph
- reports on approaches to studying levels of maternal mortality
- report: "Essential Obstetric Functions At First Referral Level" FHE/86.4
- studies of cold-chain and EPI equipment

There seems to be some "rediscovering of the wheel" in the Morocco program, which seems unnecessary. I would recommend that UNICEF assist in the flow of information from WHO to the government in the area of maternal health care, as there are no WHO advisers in this field here.

2. Issues for discussion:

Although the following were discussed with the Ministry, I think many of the issues have not been resolved and need further discussion:

- a. the definition of qualified birth assistant at the various levels of care: eg. performance expected from MCH nurse, or doctors at health centers, rural maternities, dispensaries, etc. for home or facility deliveries
- b. the role and utilization of rural maternities: content of care, staffing in MCH/FP: the concept of these health facilities needs clarification, as it is doubtful that they can be an effective means of providing maternal health care to a significant number of women. I think that they would be perceived by people to be health centers, and if they are not able to provide services to meet these expectations, then they will continue to be underutilized, especially for accouchement. Presently, they are not able to handle complicated deliveries because of lack of medical support; it is not clear how these centers will ever be able to do so. If they remain "maternity" centers, without providing a larger range of services, they may be wasteful of resources and manpower.
- c. the linkages between maternities (hospital) and Regional FP Centers (maximum utilization of trained personnel): the Regional Centers are developing expertise which is important for maternal health care (as well as equipment, supplies etc.), and their involvement in maternal health care services should be considered in future planning.
- d. the integration of MCH/FP activities, including integrated planning and management
- e. the evaluation and progressive development of in-service training, especially concerning the development of structured training in accouchement: as so much depends on the quality of the in-service training, attention should be given to monitoring of the government's evaluation activities.

- f. women's health: I think it is important to look towards a concept of women's health rather than maternal health. It is commonly noted that the health and nutrition of young girls affects their maternal health status; however, it is also necessary to see women's health and nutrition as a whole: during one pregnancy, and in relation to a series of pregnancies over a long period of time; the development of conditions and/or infections which affect pregnancies and which affect women's general health and well being. This approach would enhance a continuity of care for women, and perhaps increase women's confidence in the services, and thus the attractiveness and effectiveness of the services as a whole.

A lot more needs to be known about the levels of reproductive tract infections (including sexually transmitted diseases, but also other infections which slowly progress and which may effect contraceptive use).

3. Special Studies:

Although some of the following were touched upon, further discussions may be useful:

- a. effectiveness of routine iron supplementation
- b. routine use of antibiotics by nurses for postpartum infection
- c. linkages between women's activities/workload and pregnancy outcomes
- d. community-based survey of women's health (including birthing practices, abortion, treatment of "minor" female infections, etc.)
- e. use of "mother's card" (carnet) as passport to health services
- f. risk approach studies: INAS is interested in pursuing such studies, though I think a great deal of clarification is required before UNICEF commits itself to them. The INAS study on obstetrical interventions was very costly for such a narrow, limited area. I think WHO involvement in this may be useful (suggest reference to Dr. Mark Belsey, Programme Manager MCH, Geneva)

4. Programme Linkages:

Although obvious, the linkages between the maternal health care project and the nutrition project are not described in detail (Dr. N. Najji was out of town during most of my assignment): the anaemia study is one action mentioned, but not elaborated. The links with women's development activities are mentioned, but not detailed as per UNICEF inputs.

APPENDIX 4

Briefing Report for UNICEF:

Assignment: Vicki Hammer-Wylie (John Snow, Inc)

1. Objective: preparation of Safe Motherhood (Maternite sans risques) component of the UNICEF Strategy for the Programme of Cooperation 1992-1996

2. Strategy:

2.1. Situation Analysis:

- a) High maternal mortality: Although national data on maternal mortality does not exist, estimates put the maternal mortality rate at 585 per 100,000 live births, which is comparatively high for developing countries.

- causes of death:

medical/health: information lacking though haemorrhage, infections, hypertensive disorders of pregnancy, obstructed labour assumed main direct causes; abortions (information not available); poor nutritional status; grand multiparity (53% of married women in 1987): these are preventable through proper care.

Structural: coverage and quality of prenatal, delivery and postnatal care is low: 25% of all pregnant women consult; the % in rural areas is negligible: proper detection and referral of risk pregnancies could reduce maternal deaths 58% of women deliver without a trained assistant and high proportion, in adverse conditions (accouchouse using negative practices, unclean); high % (79%) home deliveries: improving conditions of home births for normal deliveries can reduce infections, haemorrhages; high risk cases require institutional/"trained" care; 40% of the population live more than 10 kms from a health facility; transportation in rural areas for transfer of emergency obstetric cases, a significant problem; scarcity of female nurses in rural dispensaries, critical problem.

Social: the low status of women (income, education, isolation-immobility, etc.), inhibits accessibility to services and improvement of conditions at delivery; pregnancy-childbirth not considered amenable to health service interventions

- b) Link with IMR : 40% of infant mortality occurs during first 28 days (neonatal); deaths directly related to maternal conditions in pregnancy and childbirth (esp neonatal tetanus): to significantly reduce infant mortality, attention to maternal health care is essential and effective.

2.2. General strategy:

- strengthening of pre- and postnatal services including
 - training of MCH nurses
 - improving procedures/tools
 - improving supervision
 - developing referral system
 - link with TT actions
- improvement of conditions of home and institutional deliveries
 - strengthening/training of "qualified" personnel for assisting deliveries
 - improving capabilities for emergency obstetric care at provincial hospitals
 - training of traditional birth attendants
 - (as part of educational programme below)
- improving nutritional status of young girls/women
 - study/action reducing anaemia
- strengthening of family planning programme
- development of programme of education in maternite sans risques
 - advocacy at national level
 - community education: within broader health ed
 - special target groups: TBAs/women who assist
 - young women
 - men
 - education through Women's Development activities
 - education through school curriculum
- strengthening programmes for women's development

3. Schedule of work:

Tuesday, 18 June: meeting with Mr Akadiri: clarification of assignment review of documentation at UNICEF.

Wednesday, 19 June: meeting with Prof El Jai meeting with Mr Akadiri/ElJai

Thursday, 20 June: meeting with Mme Benamar (Chief, Maternal Health, Section of Prevention MOH): discussion of current/planned programmes.

Friday, 21 June: UNICEF-MOH/Prevention meeting: program objectives, strategies, plan of work; USAID: meeting with Michelle Muloney: AID support to current programs; future interests

4. Persons met: Mme Benamar, MOH, Chef de Service, Protection de la Mere, Division de la Sante Maternelle et Infantile
Dr. Mechbal, Directeur, Department of Prevention
Mr. N. Hajji, Nutrition Service
Michelle Muloney, USAID

5. To do:

5.1. Meetings with Mme Benamar to prepare plans of action for projects for UNICEF assistance, including field trip if possible (as suggested by Dr. Mechbal):arranged Tues.

MOH strategy/project meeting scheduled: 11:00, 1 July

5.2. Discussions with INAS concerning maternal mortality studies (as suggested by Dr. Mechbal)

5.3. Meetings with pertinent agencies (eg. UNFPA) re their intended support

5.4. Meetings with relevant UNICEF programme officers re common project activities (Women's Development, Communications, Education)

5.5. Discussions in UNICEF re its contribution to programme note: preliminary discussions held with Mr Akadiri and Prof El Jai