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BASICS
TRIP REPORT

Initial Assessment of Training Needs

Eritrean Health and Population Project

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Initial Assessment of Training Needs

Eritrean Health and Population Project

Asmara, Eritrea

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ACRONYMS

AFRO	African Regional Office (WHO)
CS	Computer Science
EHP	Eritrean Population and Health
ELT	Elementary Lab Technicians
EMP	Environmental Management and Policy
EPLF	Eritrean Peoples Liberation Front
HIS	Health Information System
IEC	Information, Education, and Communication
JLT	Junior Lab Technician
MPH	Master of Public Health
MOH	Ministry of Health
MSH	Management Sciences for Health
NGO	Non-Governmental Organization
PIO/P	Project Implementation Order/Participants
PP	Project Paper
PTS	Participant Training Specialist
SLT	Senior Lab Technician
WHO	World Health Organization

I. INTRODUCTION

The goal of the Eritrean Health and Population (EHP) project is to bring about a sustained improvement in the health status of the Eritrean population (with particular emphasis on improving women and children's health). This will be achieved through strengthening the health delivery system and making effective use of national resources. Several actions must be completed early in the project. Most of these actions would take place during the first two years. The actions relate to capacity-building at the central level and the four focused health provinces through: provision of substantial technical assistance to develop and strengthen management of decentralized systems; training of health care personnel in critically needed skills; increases in the knowledge and data base needed to rationalize the health delivery system with respect to drugs, human resources, and facilities; and the provision of a logistics infrastructure and medical supplies.

The EHP project earmarked a major portion of its budget to training in health services, logistics, health management information systems, supervision, non-governmental organizations (NGOs) and the private sector, planning and budgeting, and demographic and health information systems. The focus will be on increasing the capacity of the public health delivery system at the central level and in the four focus provinces. Increased capacity means better management of resources - finances, human resources, commodities, transport, facilities. A greater portion of the population can be provided with quality services on a sustainable basis.

Currently, the Ministry of Health (MOH) is emphasizing the need for personnel training. The MOH has drafted a training plan which sets forth objectives and priorities for training key categories of health workers. The plan specifies numbers and categories of overseas personnel to be given advanced training. One of the Ministry of Health's greatest assets in this process is a highly motivated and experienced health labor force. This labor force previously worked under the Ethiopian Ministry of Health before liberation.

In addition, the Ministry can draw upon a pool of 1500 indigenous health workers who were trained as medics during the war by the Eritrean Peoples Liberation Front (EPLF) health team. Differences in the basic training of these two groups of health personnel, as well as in the professional responsibilities assigned to them, has produced more than two categories of health workers. In some cases, the workers are performing the same task. The School of Nursing graduated 247 indigenous health workers who were immediately assigned throughout the country.

The Eritrean health care system suffers from both a lack of trained personnel in every specialty as well as an uneven distribution of health resources in the country. 97 percent of the medical doctors are in the Asmara province (as are 33 percent of the nurses, 59 percent of the pharmacists, 26 percent of the laboratory technicians, 50 percent of the X-

ray technicians, and 51 percent of the health assistants. In addition, 54 percent of the hospital beds are located in the capital. Only four of the 10 provinces have medium-sized hospitals and a few health centers. The MOH is developing a master plan for strengthening the health care delivery system at the periphery based on Primary Health Care concepts. There are plans to standardize the distribution of human resources to various levels of the health care system. This will take into account not only the category of health facilities, but also other factors, such as population density, demand for health services, and occupation rates at the hospitals. Although a human resources development strategy has yet to be completed, training is appropriate at this time to ensure that the proper type and number of health providers are trained to fill existing and future health facilities.

II. TRAINING NEEDS AND CONSTRAINTS

1. Training needs

The MOH drafted a training plan which defines objectives and priorities for training key categories of health workers at all levels. The plan also specifies categories of personnel to be upgraded either in-country, sent for additional training to the United States, or in a third country. Training needs are reflected in filled and unfilled technical and managerial positions.

Participant training will develop a critical mass of skilled personnel able to initiate and implement specific development activities, and prepare others to perform necessary tasks in the context of the EHP project objectives.

The Ministry of Health is going through a process of restructuring. A new proposal for its reorganization awaits approval. No foreseen impact, as yet, on the EHP project implementation plan can be detected. Nevertheless, one of the most important departments in the structure of the MOH, the Planning and Evaluation Unit, has an acute shortage of staff. Despite tremendous responsibilities, the Planning and Evaluation Unit has a limited number of staff. In order to assist the MOH in the development of the national HIS for planning, policy-making, and program implementation, the EHP project can provide support for personnel training in several ways. This support could include an epidemiologist (to facilitate the accuracy and timely reporting of information and data), training of policy-makers and program managers in the use of data for decision-making and evaluation, and a statistical training course for statisticians in the four focus provinces.

The Training Department has a newly-appointed director who recently returned from a training program abroad leading to a Master of Public Health degree. He is the only staff in the Department. He oversees all the training activities of the Ministry of Health.

Because of a lack of communication between different departments/units/services, he may not be able to coordinate and plan effectively. The MOH has proposed to hire one more staff member, a Training Advisor, who will be responsible for the systematic design and management of in-country training programs. The training institutions could possibly transfer from the MOH to the University of Asmara.

The Health Care Department has two subsections, the Medical Service Section and the Primary Health Care Section. The Department is currently engaged in extending the health care services to rural populations which have no services available. Construction of facilities have been scheduled and, in some cases, the MOH has been renting or converting regular houses to health stations to facilitate the delivery of health services to the needy communities. The restoration of health facilities which are run-down or damaged by war are also considered priorities. Identification of new locations for health facilities is based on detailed assessments of existing health units, the proximity of the villages and towns, and the availability of roads and transportation.

There are approximately 144 medical doctors, 15 physician assistants, 571 barefoot doctors, 40 pharmacists, 715 nurses, 909 health assistants, 174 technicians (Pharm, Lab, X-ray), and 236 non-specified workers in the health care services pool of the MOH. The Health Care Department is working closely with the Eritrean Medical Association Abroad and a number of western governments to finance the return of Eritrean physicians to the country. Germany is willing to pay two years salary for any Eritrean physician who would like to return and practice in a designated area of the country. Additional incentives are being offered to the Eritrean Diaspora (free housing, tax incentives, cost of living allowance, etc.).

Four focus provinces have been identified (see attached map of Eritrea). These provinces were chosen because they have been afforded a lower priority by other donors and they are the ideal place to model an improved and integrated health system for expansion to the rest of the country. According to the MOH's statistics, the combined populations of the selected provinces account for nearly half of the population in Eritrea.

Excluding the national referral hospital in Asmara, these four provinces are severely undeserved and the health care providers are not adequately trained. There is a need to control the ravaging effects of acute respiratory infections, diarrheal diseases, and malaria. There is also a need to improve immunization coverage in the provinces. Currently, there are no national policies, strategies, or protocols for malaria, Extended Program Immunization (Global Program Vaccination), or Control Diarrheal Diseases. These subjects are not routinely taught to medical or paramedical personnel.

In order to redress the situation, the project could support the development of specific training activities to heighten staff competency levels. Sustaining health worker performance requires not only initial technical and academic training, but continuous in-

service instruction. Training may be done on-site or in conjunction with training sessions organized for personnel from other health facilities. Training programs will be tailored to remedy deficiencies.

Approximately three 10-day training sessions per year for each Health Center can be organized by Clark Atlanta University/Office of International Training for the first three years of the project. Service providers could receive training in technical interventions (prenatal and postpartum care, safe delivery, care of the neonate, and well baby), integrated case management of the sick child, Information, Education and Communication (IEC), and client counseling skills. Selected personnel would also benefit from specialized offshore training and attendance at technical conferences (WHO/AFRO, WHO/GENEVA). Managerial and supervisory staff could, in addition, receive appropriate training in management, supervision, and evaluation techniques.

Effective implementation of this proposal requires the development of clearly defined, intervention-specific treatment protocols, as well as the adoption of workplans and targets at the central, provincial, and local levels.

The first priority of the Central Health Laboratory is to upgrade the Elementary Lab Technicians (ELTs) to Junior Lab Technicians (JLTs). The ELTs are ex-combatants who were trained in the field to handle specific tasks. Unfortunately, this category is not part of the MOH national standard policy. The first training session is scheduled to take place in March 1995. An estimated 50 registered ELTs are in the provinces. 20 will be selected for the first training program, which will last six months. The remaining 30 will be trained in fiscal year 1996. The estimated cost per year is $28,000.

The second priority will be to upgrade the Junior Lab Technicians to Senior Lab Technicians (SLTs). This training will last one year (see training requirements). The maximum number of participants who can be trained at one time is ten, since there is limited capacity at the National Laboratory. This course is to be conducted from October 15 to August 26, 1996.

The third priority of the Central Health Laboratory is to provide training in the United States or a third country for ten Senior Laboratory Technicians in clinical hematology, immunoserology, quality control and laboratory safety procedures, entomology, and histology. Unfortunately, however, there is no financial allocation for the National Laboratory System in the EHP project's illustrative cost estimate/financial plan.

The Pharmacy Department is staffed by twelve members: six pharmacists with BS degrees, two pharmacist technicians, and four dispensers. The Pharmacy Department, through the Pharmacy Technician Training Program, has scheduled a series of training courses to upgrade the level of the 80 or so dispensers in the provinces to the standardized

level of pharmacy assistant. One six-month training session is scheduled to start in March 1995. The other will take place in October 1995. The estimated cost is $55,348.

Training needs were identified by:

- reviewing project papers that involve training;
- interviewing cognizant MOH officials concerned with human resources development;
- interviewing officials of in-country training institutions and technical programs;
- interviewing representatives of major donor agencies;
- interviewing USAID mission officials.

Categories of training were identified to meet the training needs of personnel at varying levels of competence and at different stages of the project.

Academic training

Academic training is a program in an accredited institution of higher learning leading to a degree. There is a "training gap" separating positions at all levels of the MOH. The target group proposed for the participant training program is composed of personnel and staff in the focused provinces and at the central level. Eleven degree programs in various health-related disciplines have been proposed for FY95 (and five for FY96) at universities in the U.S. and in other countries. The estimated duration of the training programs is one year, plus an additional six months for the participant to settle into the position that was trained for.

Number of participant months projected

Year	Number of participant months	Estimated training cost
1995	156	$482,000
1996	72	$217,000

Academic training proposed

In an academic training program, the degree is usually not the true objective, but simply a measure of the capability level to attain. When the participant returns to his/her home country, it is a sign of responsibility.

- **Master of Public Health, Boston University, School of Public Health**
  The overall objective of the program is to prepare public health professionals to draw on the knowledge and skills from a variety of disciplines to define, assess, and resolve public health problems.

- **Master of Health Science Program in Biostatistics, Boston University, School of Public Health**
  The goal of the program is to provide a focus for the academic aspects of the theory and techniques of collecting, analyzing, and interpreting quantitative data. Current activities include: investigations in health planning; decisions in terms of impacts on hospital use; reliability of causes of death statistics; survival analysis; factor analysis; incomplete data.

- **Master of Public Administration, Harvard University, School of Government**
  The overall objective of the program is to train students for leadership roles and to contribute to the formulation and implementation of changes. The department is concerned with the effective, efficient, and equitable use of societal resources for the purpose of improving and maintaining the welfare of the population.

- **Master of Arts in Health Economics, Boston University**
  The goal of the program is: to provide sufficient knowledge and skills in alternative financing strategies and approaches to health-sector analysis and planning; to develop methods for expenditure-based health sector analysis; to explore recurrent costs and insurance concepts; to analyze health regulatory systems; to learn about quality assurance; and to analyze cost/quality trade-offs and decision-making.

- **Master of Science in Epidemiology, Hebrew University**
  The purposes of the program are to identify factors relative to humans and their environment which influence or determine the occurrence of disease, and to provide a basis for public health programs.

- **Master of Science in Environmental Management and Policy, The University of North Carolina at Chapel Hill, School of Public Health**
  The goal of the EMP program is to prepare students for professional careers in which they must recommend, choose, and implement environmental protection policies. These careers require a clear understanding of relevant scientific and technical questions. Equally, they require strong grounding in economic, legal, behavioral, and political considerations. These careers demand the ability to make complex

decisions under conditions of scientific uncertainty and political value conflict.

- **Associate Degree in Computer Science (CS), Massachusetts Bay Community College**
  In computer science programs, students learn the fundamentals of structured programming languages, data structures, algorithm design and analysis, and an understanding of the internal machine structure. Students also complete mathematics courses required of a computer science major.

The nature of the EHP project indicates that the completion of training and the prompt return of the participant to a job in the country are required. Also, a program limit of two years is needed (unless a longer period is justified). Prolonged absence of too many participants may be prejudicial to the implementation of the EHP project.

Technical training
Technical training is a program which does not have an academic degree as its objective. Training may be long-term or short-term at a university or academic institution. Three diploma courses in third country training institutions have been proposed for long-term technical training in 1995 (and five courses have been proposed for 1996).

Number of participant months projected

Year	Number of participant months	Estimated training cost
1995	60	$65,000
1996	168	$190,000

Proposed training description

- **Diploma in Community Health, AMREF**
  The main objectives of the course are to: 1) enable students to become agents of change and to develop leadership skills which they will use as health team members in their respective duty stations, and 2) to be able to plan, implement, manage, and evaluate community-based primary health care programs in their areas of work.

- **Diploma in Anesthesiology, Addis Ababa University, Sub-specialty**

- **Diploma in Operating Room Technology, Hebrew University**
  Short-term technical training generally consists of institutional or observational programs where participants have the opportunity to learn about or observe first hand the operation of their foreign counterparts. It can be highly effective when focused on a specific development need. Such training is often appropriate for middle and high-level officials and others with substantial professional experience who need to be updated or exposed to new ideas and technologies (but cannot be away from their jobs for extended periods of time).

Number of participant months projected

Year	Number of participant months	Estimated training cost
1995	48	$98,000
1996	48	$166,000

Proposed training description

- **Effective Drug Management, MSH**
  This course prepares pharmacists to take a systems approach to the provision of drugs and medical supplies for primary health care programs. Included are such topics as estimating drug requirements, developing a formal plan, managing procurement, exploring financing alternatives, designing and managing information and inventory systems, and implementing changes in logistics systems.

- **Senior Managers in Government, Harvard University**

- **Financing Health Care in Developing Countries, Boston University**
  This twelve-week course addresses the practical application of economic and financial-management principles in the public and private health sectors. The course is taught in a seminar/workshop format, and provides up to 16 credits toward the Master of Public Health (MPH) degree at Boston University. Sixteen credits represent 33 percent of the MPH degree requirements.

- **Health Care in Developing Countries, Boston University**
  This twelve-week course stresses the practical application of principles and techniques essential in the planning and delivery of health-care services in resource-constrained environments. The course provides up to 16 credits to-

ward the Master of Public Health (MPH) degree at Boston University. Sixteen credits represent 33 percent of the MPH degree requirements.

- **Family Planning Program Management, Clark Atlanta University, Office of International Training**
  The aim of this three-week course is to promote efficiency in the management of integrated family planning services and hospital-based clinical services. The seminar\workshop is intended to provide participants with practical skills for planning and managing family planning services as well as prepare them for a role as trainers.

- **Management of Health Services, Projects and Programs, Clark Atlanta University, Office of International Training**
  This six-week health management seminar aims to reinforce the capacities of the health sector to improve administrative performance through the implementation of coherent action plans and the utilization of tools and adequate techniques of public management.

- **Training Design in Management, University of Connecticut**
  This program is designed for faculty, professional staff, and managers of national or regional administrative staff college, institutes of management, and staff development centers. It also includes a planning workshop in which participants apply their practical skills in training program design. Visits to a variety of public and private training organizations are scheduled in the Washington, D.C. area to enable participants to compare classroom concepts with current training and management practices.

- **Pediatric Nursing in Communities, Tel Aviv University**
  This program is directed toward meeting the physiological, psychological and social needs of pediatric patients. The course will cover: theories in child growth and development; common problems in children (cognitive, motor, social and emotional); pediatrics illnesses and manifestations, including infectious diseases; nursing care plans for children in the community and in the hospital; pediatric nursing care in the Intensive Care Unit; the chronically ill and the terminally ill child.

- **Integrated Postgraduate Training, Sackler Faculty of Medicine, Tel Aviv University**
  This program offers doctors practical training for a period of three months. The training is conducted daily in hospital departments affiliated with the Sackler Faculty of Medicine. Each physician trains in a specific chosen field within his/her specialization. The physicians are awarded a graduation certificate upon completion of the training.

- **Health Care Administration and Hospital Management, Carmel Medical Center, State of Israel**
  This program is designed for experienced managers in health and health-related organizations in developing countries. Participants in the program will address a wide range of problems encountered by health managers, physicians, and administrators. They will gain perspectives on the problems faced by their organizations and will learn new methods for dealing with such problems. Taking the point of view of senior management, participants will analyze actual managerial problems, propose solutions, and discuss the implications of different approaches.

- **Managing Projects, Project Appraisals: Tools and Techniques, Arthur D. Little**
  Managing Projects will introduce highly-effective tools and procedures for defining projects, tracking and controlling costs, scheduling, and measuring performance. The program will emphasize the practices that work best in contemporary business. Project Appraisals is a course designed for managers with at least five years of professional experience. It teaches essential managerial accounting and finance skills and helps the participant to develop the ability to use the personal computer effectively as a tool for financial analysis. The curriculum focuses on the skills needed to formulate, prepare, and evaluate projects in a way that will protect stakeholder interest.

Selection criteria
Project specific criteria for selection insure that the candidates: are employed by the Ministry of Health; have a clear understanding of the EHP project goal and a strong personal commitment to the planned training; understand clearly that they are obligated to return home after training and work in a position where the training may be effectively utilized; and are fully aware of their responsibilities as participants.

All participant training programs are expected to provide opportunities for women. AID affirms that all training programs are expected to give attention to means of ensuring substantial participation of women. Where relatively few women are expected to participate, there must be indications of initiatives being taken to increase the number of women in participant training programs. Indicators will include the following information:

1. number of men and women included in participant training program;

2. constraints to women's participation;

3. opportunities for enhancing women's participation;

4. candidate's employment status.

Language requirements
AID policy states that all participants (prior to departure for training in the United States or a third country) whose training is conducted in English and who will not be accompanied by an interpreter demonstrate a level of English language proficiency at or above the AID minimum acceptable scores for Call Forward for academic and non-academic training. Mission is to ensure that all participants have obtained the minimum required proficiency scores for Call Forward prior to departure. Mission is responsible for arranging language training in the host country to enable participants to reach the AID minimum acceptable Call Forward scores for academic and non-academic training, and (if feasible) to meet the requirements of specific training institutions if these are higher than the AID minimum scores.

2. Training constraints

- **Market forces (availability of trained personnel to achieve training objectives)**
  An acute shortage of qualified personnel compared to the amount of training to be undertaken in a third country and in the United States may be prejudicial to the successful implementation of the training plan.

- **Political patronage, nepotism**
  A variety of external factors which are at variance with achievement criteria can contribute to ineffective personnel selection. Political patronage artificially limits the pool from which personnel are chosen. When personnel selection is based essentially on ties between job holders and public officials, it may be difficult to bridge the performance gap within the organization. Se lection criteria cannot be replaced by patronage or seniority lists which are frequently politically motivated rather than created in response to identified development needs.

- **Socio-cultural factors**
  Personnel selection can also be complicated by social and cultural factors over which training has little or no control. Sometimes cultural norms restrict certain groups to undesirable jobs. Conversely, some highly-valued occupa tions are reserved for higher status groups.

- **Absence of an articulated human resources development strategy**
  The MOH needs to determine appropriate training goals and objectives and how new knowledge and skills will be implemented in the organization. De

velop appropriate data on how and what type of training will most benefit the developmental goals. Evaluate the probability of success of a particular candidate in a selected training category. Develop a plan for re-entry once training is completed.

- **Need for English language skills and academic credentials prior to training in the U.S. and third country**

- **High risk of change**
  Training can be an insufficient use of resources when it is applied to situa tions in which unpredictable policy decisions and frequent changes in per sonnel and organization are likely to play a dominant role.

- **Lack of an effective system of incentives and rewards**
  Risk of losing trained personnel to better pay job opportunities. Possibility that non returnee may opt to remain in the United States or third country beyond the training program termination date or may depart to and stay in another country to delay or avoid returning to the home country.

III. TRAINING RESOURCES

1. In-country

Currently, the MOH has only three training schools and about six training programs in a number of technical specialties (pharmacy assistant program, X-ray technician program, laboratory technician program, eye technician program, dental technician program, operating room technician program, and the nurse anesthesiologist program). Under consideration is a plan to place all of the training programs under the responsibility of University of Asmara Training Center.

The EHP project will promote and support the revision of academic and in-service curricula to reflect national priorities and to emphasize public health needs. In addition, the project will provide badly-needed equipment, material and books; build in-service training into project 's activities where appropriate; conduct workshops for upgrading the skills and knowledge of many health personnel; and sponsor a considerable number of key health personnel for short- and long-term training in the United States and third countries.

- **The Asmara Nursing School**
  Established in 1955 with the help of the United States, the school had a four-year curriculum which included midwifery and public health. After the revolution in 1974, the curriculum was changed from four to two-and-one-

half years and no longer included midwifery. The first priority of the School after liberation was to train the EPLF indigenous health workers, enabling them to qualify as nurses and health assistants according to the national standards and policy of the Ministry of Health. They have recently upgraded to approximately 247 EPLF health workers. The school will reopen as early as January 1995 with a new group of students. The curriculum was revised from the special program to a three-year program. Asmara Nursing School is staffed by twenty well-qualified nurse tutors who have previously received training in Asmara, Addis Ababa, Germany, etc. All tutors have training in pedagogical methods and some have been trained in specialized areas. The School of Nursing is in a lamentable state, urgently needing a new roof and equipment. A list of requested furnishings, equipment, and books is provided.

- **The Asmara Midwifery School**
  The Midwifery School was established in 1989 with financial assistance from Redd Barna. The curriculum focuses on providing post-basic training to nurses in midwifery. Training includes pedagogical methods and family planning. Selection priority is given to nurses with work experience in the delivery room and in providing maternal and child health services.

- **The Asmara Health Assistants' School**
  The Health Assistants' School was established in 1965 and provided one year of training as elementary dressers to ninth graders. After three years of practical experience, graduates could be given an additional year of training to become advanced dressers. The School has seven tutors (including the director) and currently enrolls about 100 students per year.

2. Other donor training activities and Plan for Training

WHO/AFRO has earmarked close to $260,000 for training for FY95. UNICEF recently sponsored a Management Training Workshop for government personnel.

3. Recent and ongoing activities and resources to support and strengthen in-country training institutions and programs

WHO/AFRO is financing the contract for the assessment of the construction needs of the Training Schools and the rehabilitation of Ghegeret Hospital. A comprehensive study of training facilities has been completed by Dr. Antonio Gabrielli.

IV. ERITREAN HEALTH AND POPULATION PROJECT INITIAL TRAINING PLAN

1. Plans for supporting and strengthening in-country training institutions and programs

The EHP project will provide support for the Ministry's training programs by: providing equipment, materials, and books updating teaching curricula; building in-service training into the project activities where appropriate and meaningful; and sponsoring health personnel for long and short term overseas training and study tours. Initially it was envisioned that the EHP project would support the rehabilitation of the three existing training schools. However, the MOH questions if this is the best option for the long term and has proposed instead the establishment of a new training complex for all health services.

2. Plans for development training

The first two years of the EHP project relate to capacity building at the central and the provincial levels so that the system will be able to more effectively use and absorb the project assistance (as well as other donor's assistance) in providing more people with better quality health services. The first phase of the project will focus on training personnel in critical skill areas, participant training to upgrade the capacity of training schools, and management capacity for implementing decentralization.

3. Management activities

Selection and use

All participants in a Master training program should have a Bachelor degree in a respective field of study, at least three years experience in the health industry, be an employee of the Ministry of Health, and be guaranteed his/her position after training.

Management and support

Training will be managed by a contractor, preferably Clark Atlanta University, Office of International Training. A Participant Training Specialist (PTS) will be overseeing the management of the participant training portfolio. He/she will ensure that every participant training program is conducted in accordance with the Project Implementation Order/Participants (PIO/P). Because of the acute shortage of staff in both the Training Department and the USAID Mission Asmara, and bearing in mind lead times, language refresher training, and other elements affecting programming, this PTS should be on board as early as March 1995.

Monitoring and assessment

Monitoring will focus on how and when training activities are implemented compared with planned schedules for training as well as keeping track of participants progress. Assessment will concentrate on the immediate and long-term outcome of training.

Follow up and recommendations

1) Make provision to hire a PTS to oversee management of the Participant Training portfolio and the maintenance of the training plan.

2) Identify subcontractor(s) who will manage the participant training program over the life of the project. (Clark Atlanta University/Office of International Training)

3) Meet Clark Atlanta University/Office of International Training Director to discuss what management mechanism will be most effective and what elements in the participant training process could be handled.

4) Develop specific criteria for selection of candidates and verify with MOH the actual availability of the participants.

5) Take into account the lead times needed to select and prepare participants for overseas training.

6) Develop benchmark to measure progress in implementing the training plan.

7) Develop strategies to overcome the constraints or make use of the opportunities.

8) Insure the availability of sufficient funds for the implementation of FY95 training plan.

APPENDICES

Appendix A: Checklist of Activities in the Participant Training Process/Eritrea Maps

CHECKLIST OF ACTIVITIES IN THE PARTICIPANT TRAINING PROCESS

NOTE: This list is not intended to be comprehensive. It is instead a basic framework from which all appropriate training project activities can be identified.

PRE-PROGRAM	MOH	Mission	BASICS	Contractor	Other
I. Recruitment, Including:					
o Media advertisement and training announcements	☒	☐	☐	☐	☐
o Visits to local agencies	☐	☐	☐	☐	☐
o Preliminary interviews	☒	☐	☒	☒	☐
II. Screening & Selection, Including:					
o Developing selection criteria	☒	☐	☒	☒	☐
o ELT language screening, testing, & other exams	☒	☒	☐	☒	☐
o Applications	☒	☐	☒	☒	☐
o Interviewing	☒	☐	☒	☒	☐
o Reviewing credentials	☒	☐	☒	☒	☐
o Committee	☒	☒	☒	☒	☐
III. Testing (Host Country and U.S.), Including:					
o TOEFL/ALIGU	☒	☒	☐	☒	☐
o Graduate Records (GRE)	☒	☒	☐	☒	☐
o Scholastic Aptitude (SAT)	☒	☒	☐	☒	☐
IV. Documentation (Host Country and U.S.), Including:					
o PIO/P and bio data	☒	☐	☒	☒	☐
o Transcripts	☒	☐	☐	☒	☐
o Test Results	☒	☒	☐	☐	☐
o Letters of reference	☒	☐	☐	☐	☐
o Medical exam (clearance)	☒	☒	☐	☐	☐
o IAP 66A (blue copy)	☐	☐	☐	☐	☐
o PDF – Establish record	☐	☐	☐	☐	☐
V. Programming (Host Country and U.S.), Including:					
o Analyzing credentials	☒	☐	☐	☐	☐
o Selecting training institution	☒	☐	☒	☒	☐
o Developing Training Implementation Plan (TIP)	☒	☐	☒	☐	☐
o Arranging for program termination and departure	☐	☐	☒	☒	☐

CHECKLIST OF ACTIVITIES IN THE PARTICIPANT TRAINING PROCESS

NOTE: This list is not intended to be comprehensive. It is instead a basic framework from which all appropriate training project activities can be identified.

PRE-PROGRAM (cont.)

	MOH	Mission	BASICS	Contractor	Other
VI. Placement (Host Country and U.S.), Including:					
o Negotiating participant's enrollment	☒	☐	☒	☒	☐
o Determining remedial training needs	☒	☐	☒	☒	☐
o Arranging housing and developing a meal plan	☐	☐	☐	☒	☐
VII. Allowance Payments	☐	☒	☒	☒	☐
VIII. Pre-Departure Orientation, Including:					
o Administrative Orientation	☒	☒	☐	☒	☐
o Cultural Orientation	☒	☒	☐	☒	☐
IX. Training (Host Country and U.S.), Including:					
o English Language Training (ELT)	☒	☒	☐	☐	☐
o Remedial math/science training	☐	☐	☐	☐	☐
o Academic (long-term) training	☒	☒	☒	☒	☒
o Technical (short-term) training	☒	☒	☒	☒	☒

IN-PROGRAM

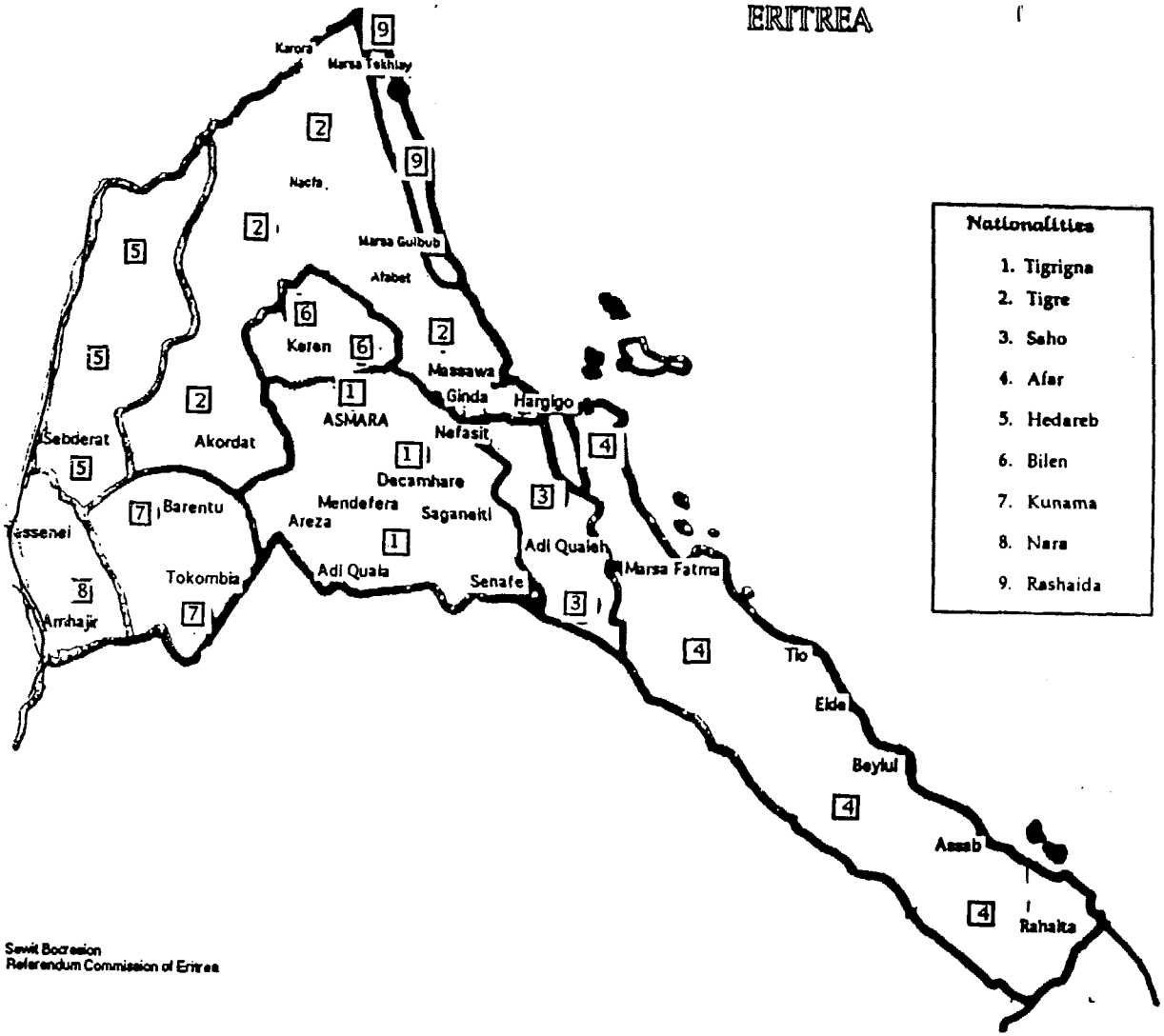
X. Reception Service, Including:					
o Meeting at international airport & transportation to hotel	☐	☐	☐	☒	☐
XI. Interpreter and Escort Services, Including:					
o Short-term training or observation tour	☐	☒	☒	☒	☒
XII. Orientation, Including:					
o Cultural orientation	☐	☐	☐	☒	☐
o Administrative orientation	☐	☐	☐	☒	☐
o Academic program orientation	☐	☐	☐	☒	☒

CHECKLIST OF ACTIVITIES IN THE PARTICIPANT TRAINING PROCESS

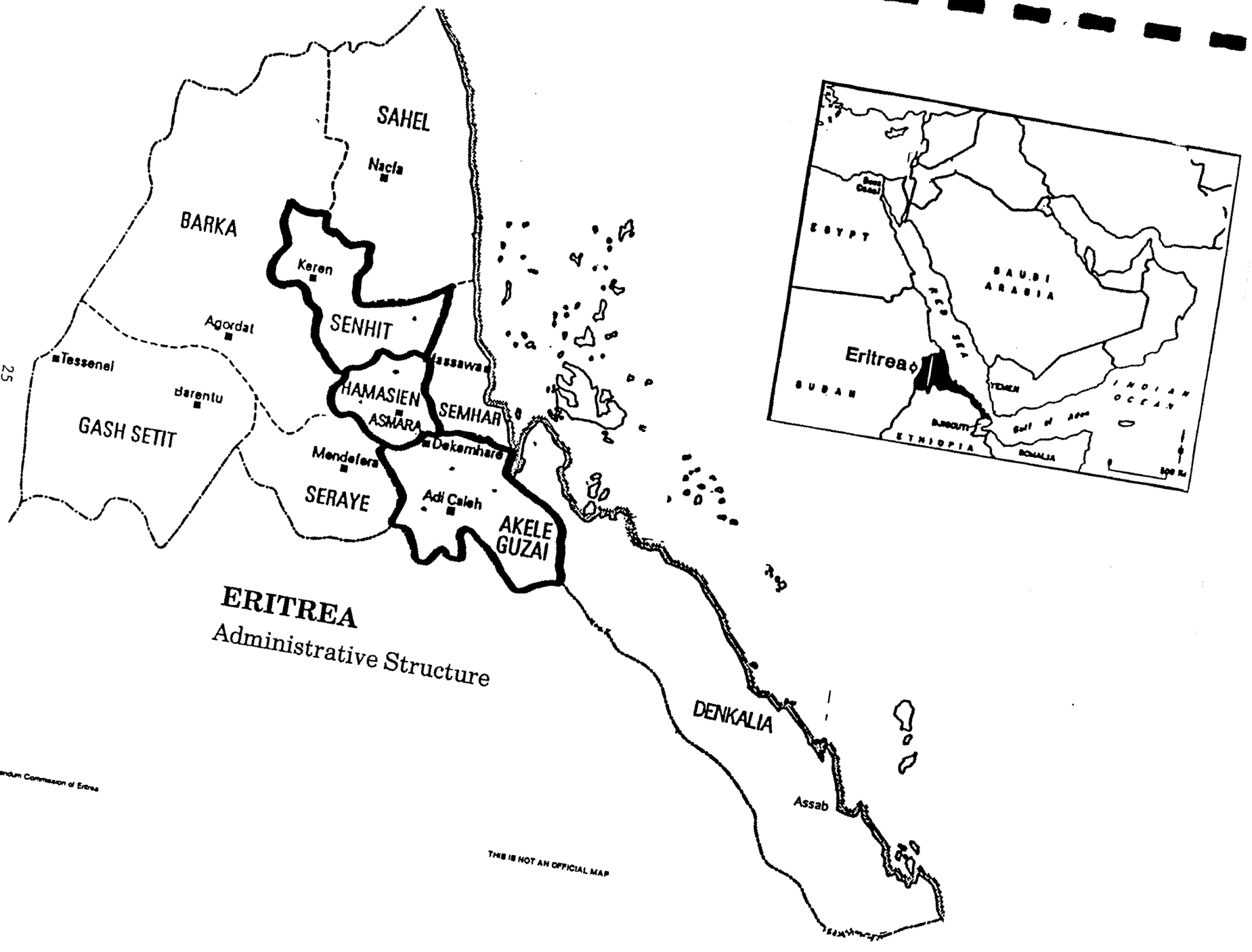
NOTE: This list is not intended to be comprehensive. It is instead a basic framework from which all appropriate training project activities can be identified.

IN-PROGRAM (cont.)	MOH	Mission	BASICS	Contractor	Other
XIII. Monitoring and Reporting, Including:					
o Regular participant contact	☐	☐	☐	☒	☐
o Reviewing Academic Enrollment and Term Reports (AETRs) and technical examinations	☐	☐	☐	☒	☐
o Consulting with faculty	☐	☐	☐	☒	☐
o Reporting to BASICS on Participant Data Form (PDF) and Visa Renewal Form (IAP 66A)	☐	☐	☐	☒	☐
o Reporting progress and financial status to A.I.D./BASICS	☐	☐	☐	☒	☐
XIV. Enrichment Programs, Including:					
o Supplemental experiences in U.S. related to technical field	☐	☐	☐	☒	☐
o Mid-Winter Community Seminars	☐	☐	☐	☐	☐
o Other special programs	☐	☐	☐	☐	☐
XV. Health and Accident Coverage (HAC)					
o Arranging for mandatory health insurance coverage	☐	☐	☐	☒	☐
XVI. Counseling, Including:					
o Resolving personal problems that jeopardize program completion	☐	☐	☐	☒	☐
o Handling accidents and deaths	☐	☐	☐	☒	☐
XVII. Follow-Up (Host Country and U.S.), Including:					
o Membership in professional organizations	☐	☐	☐	☒	☐
o Newsletters	☐	☐	☐	☐	☐
o Returned participant organizations	☐	☐	☐	☒	☐
o Follow-up training	☐	☐	☒	☒	☐
o Training utilization assistance	☐	☐	☐	☐	☐
XVIII. Evaluation, Including:					
o Exit interviews	☐	☐	☐	☒	☐
o Evaluation questionnaires	☐	☐	☐	☒	☐
o Course evaluations	☐	☐	☐	☒	☐
o Analysis of project effectiveness	☐	☐	☒	☒	☐
o Impact studies	☐	☐	☒	☒	☐

ERITREA



Source: Sawit Bocresion
Referendum Commission of Eritrea


SAHEL
Nacfa
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SEMHAR
Dekemhare
Mendefera
SERAYE
Adi Caieh
AKELE GUZAI
DENKALIA
Assab
ERITREA
Administrative Structure
Source: Referendum Commission of Eritrea
THIS IS NOT AN OFFICIAL MAP
EGYPT
SAUDI ARABIA
Eritrea
SUDAN
YEMEN
ETHIOPIA
INDIAN OCEAN

Appendix B: Training Needs Assessment - Methods and Results

TRAINING NEEDS ASSESSMENT (TNA) METHODS AND RESULTS

Introduction. Under ideal conditions deficiencies in the skills of an employee are matched with the training. The match usually involves organizational analysis in which the goals, human and material resources, and the environment are identified, followed by a task analysis which specifies knowledge and skills required for the employee to successfully carry out her/his job. In the two-week visit (7 - 21 December 1994) to Eritrea to assess training needs of tutors in its national training schools efforts were made by the BASICS training team to approach the ideal as closely as possible and within the time constraints of the visit.

Apart from reviewing curricula and making observations of training facilities and clinical training sites, the team decided that it was both necessary and mandatory to survey the training needs of all tutors to obtain more systematic baseline data. The objectives of the survey were:

(1) to identify knowledge and skills tutors perceive they need in order to perform their jobs better;
(2) identify appropriate training for the tutors.

A questionnaire was constructed by the BASICS Short-term Training Consultant to meet these objectives. It was reviewed with the faculty in both group and individual sessions and consisted of 4 sections - demographics, teaching competencies, primary health care competencies and other job information. Thirteen major areas of concern were identified under the four sections. They are:

1. Demographics
   - age, sex, marital status
   - basic and post-basic professional nursing education
2. Teaching competencies
   - special training in pedagogy
   - weekly schedule of professional teaching activities and the number of courses taught
   - critical pedagogic skills
   - perceptions of deficiencies in knowledge and skills in teaching
   - problems in teaching in the classrooms and in the clinical areas
3. Primary health care competencies
   - experience in primary health care (PHC)
   - opinion about birth-spacing
   - perceptions of deficiencies in knowledge and skills in PHC
   - problems making it difficult for tutors to teach and
   - other job information.

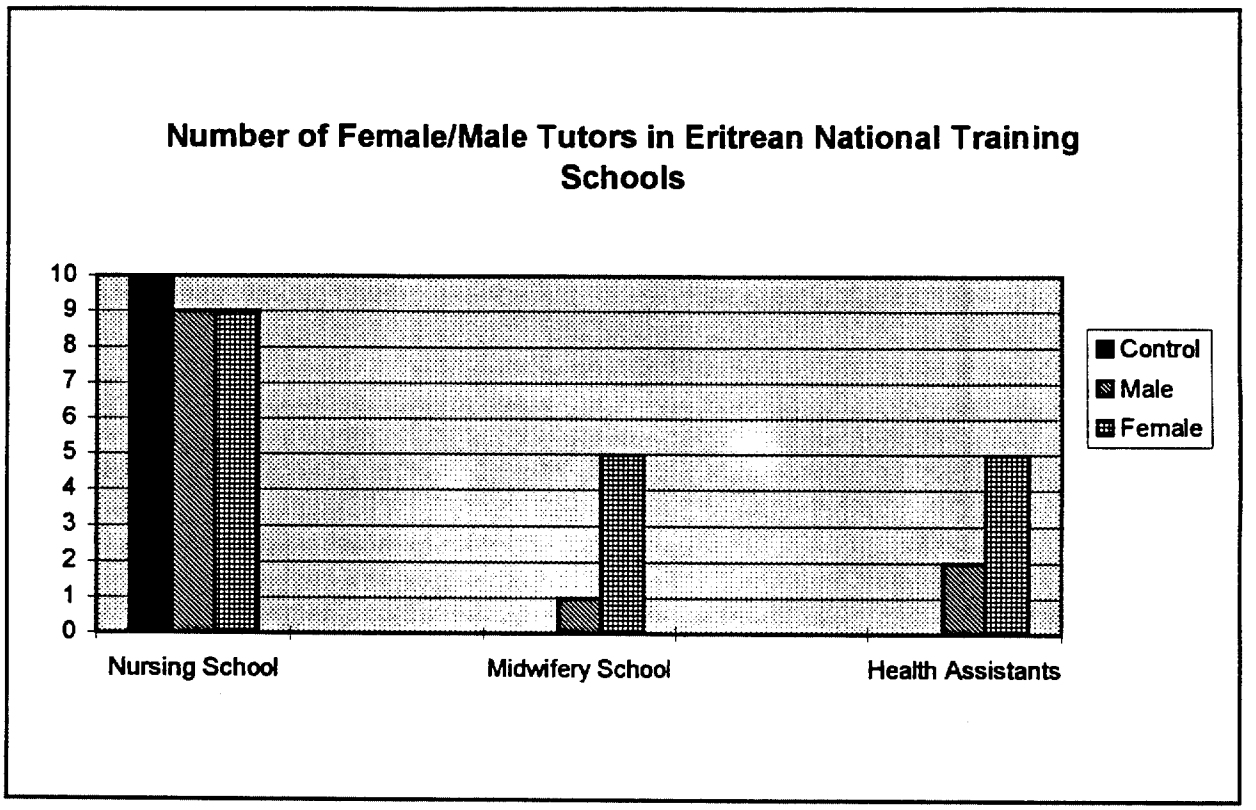
Data were collected using both fixed-response and open-ended questions. They were hand-delivered to the tutors and collected the following day by the STC. Validity and reliability estimates for this group were not calculated. Given the nature of the questionnaire and its limitations it was decided to consider this a pilot survey. This pilot could then become the basis of future TNA surveys of national training school tutors.

All data were analyzed using descriptive statistics. Results are presented in the subsequent pages of the report under the 13 major areas of concern. The report concludes with a summary of the findings and some recommendations for training.

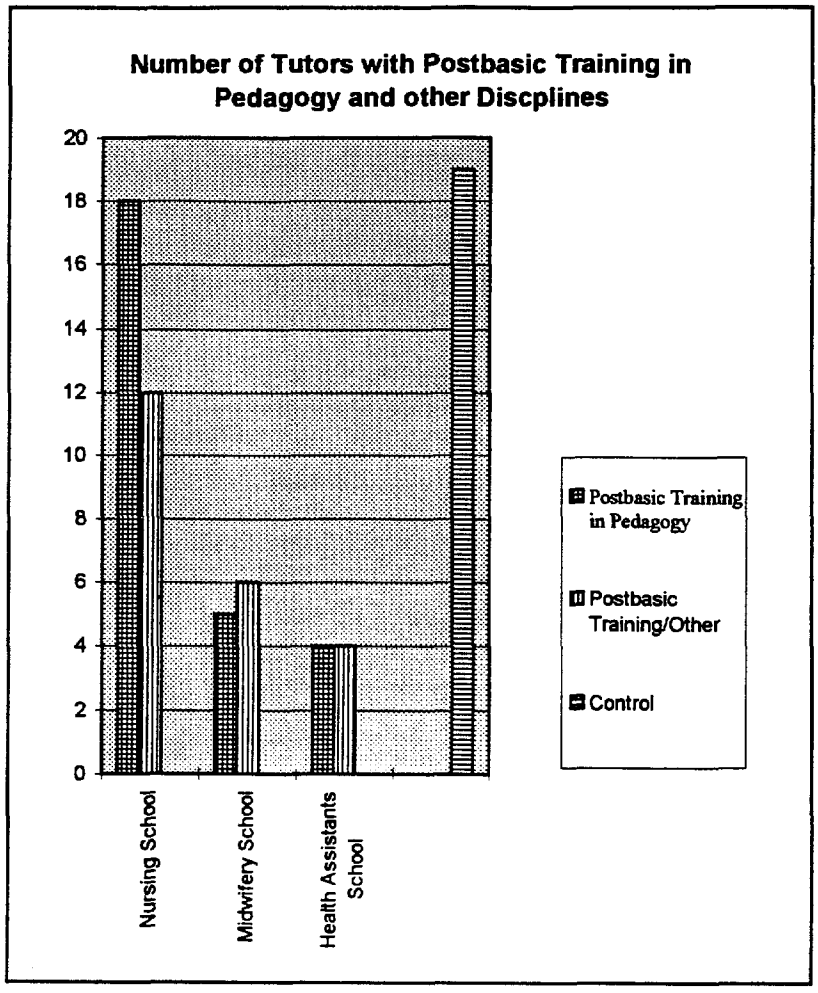
THE RESULTS

The population. Data were collected from 31 respondents representing 97% of the country's total number of national training school tutors. Tutors who did not participate in the survey (n=2) were either on leave or out of the country.

Of the 31 respondents, there were 18 females (58%) and 13 males (42%). **Figure 1** shows the breakdown by sex and type of training school. The mean (average) age was 40.8 years with a standard deviation of 5.7. Twenty-eight (90%) were married; the remaining 3 (10%), single.



Basic and post-basic nursing education. All of the tutors in the three schools had a basic nursing diploma; 14 (45%) held a diploma in midwifery while 17 (54%) had post-basic qualifications in other areas. Five School of Nursing tutors had baccalaureate degrees in accounting, economics, or management. Eighty-seven percent (n=27) of all tutors had post-basic training (certificates or diplomas) in pedagogy. Eighteen (95%) were nursing school tutors; 5 (83%) midwifery school tutors; and 4 (57%) health assistants school tutors. The number of tutors with training in pedagogy and other disciplines by training schools is depicted in **Figure 2.** The lengths of the programs in pedagogy varied from 2 - 18 months. The majority of the respondents (55%) had 8 or more years of teaching experience.



Number of courses taught and weekly schedule of professional teaching activities. Twenty-eight tutors responded to the question, "How many courses are you currently teaching?" Most tutors are teaching 2 - 3 courses. Forty-three percent of the tutors taught two courses; 36%, three courses; 18%, 1 course; and 1 respondent taught 4 courses.

Respondents were asked to evaluate the amount of time per week spent on various professional work activities. The type of activity, the means and standard deviations appear in Table 1.

It was expected that most of the time would be spent in teaching or teaching preparation. The data supports this expectation.

Critical pedagogic skills. Competencies required of teaching faculty are varied. This section of the questionnaire inquired about some of critical pedagogic skills required of tutors. They include (1) writing learning programs, i.e., designing curricula; (2) making learning modules; (3) developing a written list of general and specific objectives; (4) writing course outlines and daily lesson plans; (5) revising and up-dating courses; and (6) preparing course reading lists. Almost all of the tutors reported they were competent in most of the skills. Tutors were least likely to have skills in drawing and painting. Table 2 shows the distribution of "yes" responses by type of training school.

Table 1. Hours Spent on Professional Work Activities Per Week

Type of Activity	Mean	Standard Deviation
▸ attend meetings	1.5	.88
▸ read professional magazines	8.1	11.65
▸ teach classes	10.08	12.39
▸ teaching preparation	15.29	6.56
▸ discussions with other collegues	4.83	5.07
▸ other activities.	13.09	8.70
- correcting assignments and case studies		
- clinical instruction and supervision		
- administration, preparing schedules		
- translation of nursing articles from English to Tigringna		

Table 2. Percent of Tutors Reporting Competence in Pedagogic Skills by Type of Training School

Pedagogic Skills	Nursing n (%)	Midwifery n (%)	Health Assistant n (%)
1. Write learning programs	18 (94)	6 (100)	7 (100)

Table 2. Percent of Tutors Reporting Competence in Pedagogic Skills by Type of Training School

Pedagogic Skills	Nursing n (%)	Midwifery n (%)	Health Assistant n (%)
2. Make learning modules	17 (82)	6 (100)	7 (86)
3. Draw, paint	17 (71)	6 (100)	7 (43)
4. Write case studies	17 (94)	6 (83)	7 (71)
5. Construct learning activities	17 (94)	6 (83)	7 (100)
7. Written specific course objectives	18 (100)	6 (100)	7 (100)
8. Written course outline	18 (100)	6 (100)	7 (100)
9. Revised/up-dated course	17 (100)	6 (100)	7 (100)
10.Written general course objectives	17 (100)	6 (100)	7 (100)
11.Course reading list	17 (100)	6 (83)	7 (100)

Learning needs in pedagogy. Respondents were asked what they needed to learn (to know and to do) to be a better teacher. They generated a list of 77 learning needs that were classified under five headings: pedagogy, clinical skills, other skills, planning and management, and research and problem-solving. In Table 3 is the rank order and number of responses under each category.

Table 3. Rank Order and Number of Learning Needs in Pedagogy for All Tutors in Eritrean National Training Schools.

Learning Need	Rank Order	Number of Responses
Teaching Competencies		
* Pedagogy	1	23
* Clinical Skills (community health, PHC, other)	2	22
* Other Skills	3	21
* Planning and Management	4	8
* Research and Problemsolving	5	3

While pedagogic skills were ranked number 1, they were most often reported within the context of wanting refresher courses, continuing education training, "practice teaching", and improved skills in developing and using teaching materials. In terms of rank number 2, clinical skills, learning deficiences in community health and primary health care nursing were most frequent, followed by the courses individual tutors were currently teaching. Planning and management, and research/problemsolving ranked a distant 4th and 5th, respectively.

Problems making it difficult for tutors to teach their courses. To address some of the organizational and environmental conditions that affect how teachers perform their jobs, tutors were asked about problems they were having that made it difficult for them to teach their courses in the classroom and in the clinical areas. Large class sizes, lack of teaching materials and equipment, and poor maintenance of the teaching facility were identified as most problematic in all three schools. Many tutors expressed concerns about inefficient, poorly motivated supervisory staff in clinical facilities, and problems of integrating theory and practice under the existing poor conditions in hospitals and clinics used by students. Several tutors indicated that when there were good facilities transportation to them was inadequate or lacking.

Primary Health Care. The national policy of the Ministry of Health (MOH) is to make primary health care (PHC) available to all of its citizens. In order to examine the tutors' knowledge of and participation in PHC respondents were asked if they had worked in a PHC clinic as a graduate nurse and had carried out PHC activities.
Twent-one (68%) had worked in primary health care since graduation from the basic nursing program. Eighteen respondents had conducted home visits; 16, school health activities; 12, had been responsible for clinic management; 21, had conducted health education activities; and 20, immunization programs. All who responded to the question (n=27) stated there was a role for the staff nurse in PHC clinics; 30(97%), that the nurse could manage a PHC clinic. Ninety-seven percent also indicated that nurses should do physical assessments of mothers, children and adults as part of their role.

Morbidity and mortality rates among mothers and children in Eritrea are some of the highest in the world. Family planning and birth spacing has been suggested as one strategy for attacking the problem. Along a 5 - point agree-disagree scale respondents were asked to describe how they feel about the statement, " Birth spacing of 2 - 3 years is recommended as a method of improving the health of the mother and child." Twenty-nine (94%) strongly agreed with the statement; 2 (6%) agreed.

Learning needs in PHC. As pointed out in the teaching section of the report, respondents were asked what they wanted to learn and do in PHC. The responses were classified in terms of the World Health Organization's eight essential elements of primary health care and defined as clinical competencies. Competencies describing processes in PHC services delivery were labeled functional tasks. The number and rank order of responses are in Table 4.

Table 4. Rank Order and Number of Training Needs in PHC for All Tutors in Eritrean National Training Schools

Learning Need	Rank Order	Number of Responses
PHC Clinical Competencies		
* MCH/Family Planning	1	40***
* Health Education	2	24
* Immunization/EPI	3	21
* Sanitation and Water	4	13
* Food and Nutrition	5	12
* Prevention & Control of Endemic Diseases	6	4
* Treatment of Common Diseases and Injuries	7	1
* Drug Supply	8	1
PHC Functional Competencies		
* Management and Leadership	1	27
* Community Development and Participation	2	10
* Data Collection and Records	3	7
* Student Clinical Education	3	7
* Nursing Skills	4	5
* Staff/Faculty Development	4	5

** 12 of the 40 responses listed MCH without including family planning.

A final set of seven questions asked for additional information about job standards; time, tools, and information needed to do the job; and employer feedback on employee performance and competencies. Of the twenty-four tutors who responded to the questions 87% stated they had job standards they must meet *. All indicated they could do the job without interference from other tasks, had time and information to do their job and the necessary skills and knowledge to do the job. Seventy-five percent said they had tools to do the job while 67% said they received information about their job performance.

Observational data and review of training school curricula. To augment information from questionnaires the STC made observational visits to training school facilities, the national hospital and one primary health care center in Asmara to identify problems which might pose difficulties for the tutors in performance of their jobs. Observational data supported findings from data analysis of questionnaires. The physical structures of teaching and clinical facilities were in poor repair; runnning water was scarce, even in the hospital; supplies and equipment were scarce and outdated except in the School of Midwifery and the Semanawi Health Center, Asmara.

On two observational visits nurses and midwives in the national hospital indicated they were short-staffed, had no organized in-service program, and had low morale because of working conditions. These variables may contribute to the poor supervision of students suggested by training school tutors as well as their concern about positive role models.

Training School curricula. Training school curricula were reviewed. While the curricula had well developed objectives course outlines, content, and student evaluation systems, conceptually they reflected a traditional medical model of education with minimal integration of PHC content as a curriculum strand. The finding supports the argument for up-dating pedagogic competencies and suggests a need for curriculum reformulation and development of a philosophy which reflects primary health care as a major theme.

SUMMARY

This summary presents the highlights of the TNA conducted 7 - 21, December 1994. Three methods of data collection were used: a questionnaire to survey tutors' perceptions of their learning needs; observations of the environments in which tutors teach, and a review of school curricula.

Ninety-seven percent of the tutors completed the questionnaire. The majority of the tutors were female (58 %). Most (55 %)had more than 8 years of teaching experience. All of the respondents had basic nursing diplomas and most had received some post-basic nursing training. The majority of the tutors (87%) had training in pedagogy and experience in primary health care services delivery (68%).

In terms of specific learning needs respondents stated their first priorities were up-dating pedagogic and clinical skills in communiity health, PHC, and to a lessor degree, skills in the individual specialty courses they teach. MCH and family planning clinical skills were reported and the most deficient PHC skill. Functional competencies in PHC management and leadership were also seen as defiicent. However, tutors did perceive their skills as adequate for the performance of their jobs.
**** It should be noted that all three schools have detailed job descriptions and periodic performance appraisals of their tutors.***

RECOMMENDATIONS

- The training plan needs to be revised to take into account the need for up-dating clinical and pedagogic skills. Short three-day skill oriented workshops should satisfy most learning needs and should begin as soon as possible. Most faculty stated they

had adequate competencies to do their jobs but lacked learning resources to keep their skills current. They expressed a readiness for learning.
- A comprehensive task analysis of primary health care on the job requirements of all health workers should be undertaken to ensure that training of future nurses, midwives, and health assistants is relevant to the needs of the country. One of the documents reviewed during the trip was a sample MOH job description for a staff nurse. Task analyses would be helpful to the tutors and the MOH as it structures its health care system and its training programs.
- A system of inservice education and staff development should be established for all training schools. The system should provide mechanisms through which learning needs can monitored and relevant programs planned, implemented and evaluated. Training of trainers (TOT) programs in pedagogy and management would present an excellent opportunity to begin to build an inservice education infrastructure.
- Long-term overseas training should be re-scheduled to begin in 1996. The postponement would allow for more careful planning of participant learning experiences; time for the participant to meet overseas training program requirements, especially English language competencies and nursing practice laws; and time to explore the possibility of expatriate volunteer faculty to replace tutors during their study leaves. The length of time for long-term overseas training programs should be examined in realistic terms. If the objective is to assist the participant in obtaining a Masters degree, 12 months is too short in most cases.
- Masters degree long-term overseas training should focus on those tutors who a) have obtained baccalaureate degrees or post-basic diplomas which are 12 - 18 months in length, and b) have excellent English language skills. With many School of Nursing tutors prepared at one or both of these levels finding suitable candidates should not be a problem. It will be a problem for the Midwifery and the Health Assistants Schools. Shorter non-degree programs may be more feasible for them.
- The content of masters degree in education programs should be specialization in instructional media; in nursing education, pedagogy; in nursing, specialization in administration and management, community health, and pediatrics.
- Short-term overseas participant training should stress third countries which have clinical situations that more closely resemble those in Eritrea.
- Given the number of project fellowships allocated to midwifery and health assistant tutors, programs in MCH and family planning are appropriate for midwifery tutors; programs in teaching methods and curriculum development, for health assistants tutors.
- Study tours are recommended for the three directors of the national training schools to give them the opportunity to examine organizational frameworks of USA-based health training programs and compare them to the directors. own training institution. The program of study for the tour should have very specific objectives and result in products which can be used in the "back home situation".

Appendix C: Training Needs Assessment - Workplan and Tools

TNA Workplan

ACTIVITY	DATE
1. Obtain permission from the MOH to conduct the TNA	Dec. 8, 1994
2. Arrange appointments with the Directors of Nursing, Midwifery, and Health Assistants Schools to discuss training issues and and the TNA	Dec. 9, 1994
3. Discuss and review TNA with the Nursing School Director and faculty and distribute the TNA questionnaire	Dec. 12, 1994
4. Inventory Nursing School facility and other human and material resources	Dec. 12, 1994
5. Discuss and review TNA with the Midwifery School Director and faculty and distribute the TNA questionnaire	Dec. 12, 1994
6. Tour National Hospital facilities and arrange an appointment to talk with nurses and midwives working in health services delivery	Dec. 12, 1994
7. Inventory Midwifery facility and other human and material resources	Dec. 13, 1994
8. Collect questionnaires from Nursing School faculty	Dec. 13, 1994
9. Collect questionnaires from the Midwifery School faculty	Dec. 13, 1994
10. Discuss and review TNA with the Health Assistants School Director and faculty and distribute the TNA questionnaire	Dec. 15, 1994
11. Conduct brainstorming sessions on learning needs with National Hospital nurses and midwives and record results	Dec. 16, 1994
12. Collect questionnaires from Health Assistants School faculty	Dec. 16, 1994
13. Distribute questionnaires to 3 nurse ex-fighters (by request)	Dec. 16, 1994
14. Collect any remaining questionnaires	Dec. 16, 1994
15. Tour the Semanawi Health Center, Asmara; discuss learning needs of staff	Dec. 16, 1994
16. Begin data analysis	Dec. 16, 1994

Section A

Training Needs Assessment - Teacher Training

Institution Number and Respondent Number ____ _____

01 Age _____

02 Sex: _____

1. male _____
2. female _____

03 Marital Status:

1. married _____
2. single _____
3. widowed _____
4. other (specify) _____

04 Education

Type degree /Diploma	Name of Institution	Location of Institution	Year of Graduation
1. RN Diploma	_____	_____	_____
2. Midwife Diploma	_____	_____	_____
3. BSCN	_____	_____	_____
4. Masters Degree	_____	_____	_____
(specify)	_____	_____	_____
5. Doctoral Degree	_____	_____	_____
(specify -------)	_____	_____	_____
6. Other (specify ----------	_____	_____	_____

05 Check (/) below the years of teaching experience:

1. Less than 1 year _____
2. 1 year _____
3. 2-4 years _____
4. 5-7 years _____
5. 8-10 years _____
6. 11 years or more _____

Section A

Training Needs Assessment - Teacher Training

Institution Number and Respondent Number ____ _____

01 Age _____

02 Sex: _____

1. male _____
2. female _____

03 Marital Status:

1. married _____
2. single _____
3. widowed _____
4. other (specify) _____

04 Education

Type degree /Diploma	Name of Institution	Location of Institution	Year of Graduation
1. RN Diploma	_____	_____	_____
2. Midwife Diploma	_____	_____	_____
3. BSCN	_____	_____	_____
4. Masters Degree (specify)	_____ _____	_____ _____	_____ _____
5. Doctoral Degree (specify -------)	_____ _____	_____ _____	_____ _____
6. Other (specify -- ----------	_____	_____	_____

05 Check (/) below the years of teaching experience:

1. Less than 1 year _____
2. 1 year _____
3. 2-4 years _____
4. 5-7 years _____
5. 8-10 years _____
6. 11 years or more _____

06 Have you completed a teacher training programme?

1. Yes _____, year completed _____
0. No _____

07 If yes, do you hold a teaching certificate?

1. Yes _____
0. No _____

08 Have you attended a teacher - training continuing education workshop/course?

1. Yes _____
0. No _____

8.1 If yes, state the title, content areas, year and location of the workshop/course you attended.

Title of Workshop/	Major Focus Content Areas	Year Attended	Location
1. _____	1. _____	1. _____	1. _____
2. _____	2. _____	2. _____	2. _____
3. _____	3. _____	3. _____	3. _____
4. _____	4. _____	4. _____	4. _____
5. _____	5. _____	5. _____	5. _____

09. In evaluating your weekly schedule of professional activities, approximately how many hours do you spend in each of the following activities? Check (√) where applicable.

9.1	Attend meetings	_____ hrs /week
9.2	Read professional magazines/materials	_____ hrs/week
9.3	Teach classes	_____ hrs/week
9.4	Teaching preparation	_____ hrs/week
9.5	Discussion with other collegues	_____ hrs/week
9.6	Other (specify) _____	_____ hrs/week
9.7	other(specify) _____	

10. How many courses are you presently teaching? _____

11. List the title(s) of each course.

11.1 Title: _____
11.2 Title: _____
11.3 Title: _____
11.4 Title: _____

12. Can you do any of the following activities?

12.1	Write learning programs?	1. Yes ___	0. No ___
12.2	Make learning modules?	1. Yes ___	0. No ___
12.3	Think up games?	1. Yes ___	0. No ___
12.4	Draw or paint?	1. Yes ___	0. No ___
12.5	Write case study material?	1. Yes ___	0. No ___
12.6	Construct learning activities?	1. Yes ___	0. No ___

13. Have you developed a written list of what your students should know (knowledge) and be able to do (skills) at the end of your course(s)?

1. Yes _____
0. No _____

14. Do you have a written outline for your course(s)?

1. Yes _____
0. No _____

14.1 If yes, when was the last time you revised/ updated your course(s)?

1. Less than 1 year ago _____
2. 1 to 2 years ago _____
3. 3 to 5 years ago _____
4. more than 5 years ago _____

15. Do you have a written list of overall objectives for your course?

1. Yes _____
0. No _____

16. Do you have written daily lesson plans for your course(s)?

1. Yes _____
0. No _____

17. Do you have a reading list for your courses?

1. Yes _____
0. No. _____

23. What are the things you feel you need to know or do to be a better teacher?

23.1 To Know (Knowledge)

23.2 To Do (Skills)

24. What problems are you having that make it difficult for you to teach your course(s) in:

24.1 The Classroom (list)

24.2 Clinical areas (list)

TRAINING NEEDS ASSESSMENT
PRIMARY HEALTH CARE
Section B

General Primary Health Care related questions:

1. Have you ever worked in a Community Health, MCH, or Primary Health Care Clinic as a graduate nurse?
   1.1 YES ___, how long ___ (months) If you answered yes, not go to question #2.
   1.0 NO ___ If you answered no, now go to question #3a.

2. Have you ever carried out any of the following activities as a graduate nurse in a community setting?

   a) Conducted a home visit?
      2a.1 YES ___, How often? _____
      For what purpose(s)?_____
      _____
      2a.0 NO ___

   b) Carried out school health activities?
      2b.1 YES ___, How often?_____
      What activities?_____
      _____
      2b.0 NO ___

   c) Have you ever been responsible for the management of a community based clinic?
      2c.1 YES ____ What type? A___ B____ C____ other ____

      What type and number of staff did you supervise?
      none _____ assistant nurses _____(#)
      practical nurses _____(#) sanitarians _____(#)
      midwives _____(#) other _____ (explain)

      2c.0 NO ___

   d) Have you conducted health education?
      2d.1 YES _____, How often? _____
      Topics _____
      Groups of people taught _____
      _____
      Where did you do this? home_____ clinic _____
      hospital _____ other _____

   e) Have you conducted an immunization program?
      2e.1 YES_____, How often _____
      Where? clinic _____, hospital _____ school _____
      other _____
      2e.0 NO ____

3a. Do you think there is a role for the staff nurse in Primary Health Care Clinics?
3a.1 YES ___, List duties you think he/she could or should do_____

3a.0 NO ___, Why not? _____

3b. Do you think a staff nurse trained in Primary Health Care could manage a PHC clinic?
3b.1 YES _____
3b.0 NO ___, Why not?_____

4. Birth spacing of 2-3 years is recommended as a method of improving the health of the mother and child. (Circle the number which best describes how you feel about this state ment.)

strongly agree	agree	don't know	disagree	strongly disagree
5	4	3	2	1

5. Do you think it is appropriate for the nurse to do physical assessments of infants, children and adults?
5.1 YES _____
5.0 NO ___, why not? _____

6. What are the subjects/tasks you want to learn about and do in the area of Primary Health Care? (List them below.)

want to learn _____

want to do _____

7b. What special areas in nursing or midwifery have you worked in?

Appendix D: Training Needs Assessment - Teacher Training

PARTICIPANTS SECTION A-1	01 AGE	02 SEX	03MAR. STAT.	04 EDUC. RN DIP	04 EDUC. MID-WIFE DIP	04 EDUC. OTH	05YRS EXP	06TTRNG PROG	07CERT HELD	08CON'T EDUC.	09PROFACT/HRS/WK9.1ATND MTG
SN001	44	001	002	006	007	008	014	015	015	016	4.0
SN002	33	000	003	006		008	014	015	015	015	0.5
SN003	40	000	002	006		008	014	016	016	016	
SN004	46	000	002	006	007	008	014	015	015	015	
SN005	46	000	002	006	007	008	014	015	015	015	2.0
SN006	43	000	002	006	007	008	014	015	015	015	3.0
SN007	38	001	002	006	007	008	013	015	015	016	2.0
SN008	41	000	003	006		008	012	015	015	016	
SN009	41	001	002	006		008	012	015	015	016	2.0
SN010	41	001	002	006			012	015	015	015	1.0
SN011	41	000	002	006	007	008	014	015	015	015	1.0
SN012	39	001	002	006	007		012	015	015	016	
SN013	48	001	002	006			014	015	015	016	
SN014	53	001	002	006			014	016	016	016	1.0
SN015	37	001	002	006			012	015	015	016	
SN016	47	001	002	006			014	015	015	016	1.0
SN017	32	000	002	006		008	012	015	015	016	
SN018	40	000	002	006			012	016	015	015	1.0
M001	30	000	003	006	007		009	016	016	016	1.0
M002	45	001	002	006	007	008	014	015	015	015	1.0
M003	36	001	002	006		008	013	015	015	015	1.0
M004	48	001	002	006	007		013	015	015	015	2.0
M005	47	001	002	006	007		014	015	015	015	1.0
M006	38	001	002	006		008	014	015	015	015	1.0
HA001	40	000	002	006		008	013	015	015	015	
HA002	44	000	002	006			014	015	015	015	2.0
HA003	32	001	002	006			012	015	015	016	
HA004	45	001	002	006			011	016	016	016	
HA005	29	000	002	006	007		012	016	016	016	
HA006	43	001	002	006	007	008	011	016	016	016	
HA007	38	001	002	006	007	008	011	015	015	016	

9.2 READ PROF MAT	PARTICIPANTS SECTION A-1	9.3 TEACH CLASS	9.4 TEACH PREP	9.5DIS-CUSSION WITH OTHERS	9.6 OTHER	9.7 OTHER	10 #COURSES TAUGHT	12 ACTIVI-TIES 12.1WRITE PROGS	12.2LEARN MODS
	SN001			4.0	12.0			016	016
8.0	SN002	5.5	13.0	2.0	2.0	2.0	3	015	015
	SN003	6.0					2	015	015
10.0	SN004	72.0	24.0	4.0			2	015	016
3.0	SN005			2.0				015	
3.0	SN006	18.0	20.0	10.0	10.0		3	015	015
4.0	SN007	6.0	14.0	6.0			1	015	015
45.0	SN008	10.0	24.0	11.0			2	015	015
37.0	SN009	10.0	19.0	5.0			3	015	015
4.0	SN010	8.0	14.0	2.0			3	015	015
3.0	SN011	8.0	10.0	2.0			1	015	015
3.5	SN012	10.0	20.0	8.0			3	015	015
	SN013	6.0	20.0				1	015	016
4.0	SN014	11.0	16.0	2.0			3	015	015
35.0	SN015	10.0	35.0	20.0			1	015	015
4.0	SN016	11.0	16.0		2.0		2	015	015
5.0	SN017	10.0	20.0	5.0	5.0		2	015	015
3.0	SN018	10.0	10.0	20.0			2	015	015
1.0	M001	5.0	10.0	3.0	20.0		2	015	015
2.0	M002	5.0	11.0	1.0		20.0	1	015	015
2.0	M003	4.0	12.0	1.0	20.0		4	015	015
2.0	M004	1.0	2.0	4.0	27.0	2.0	3	015	015
2.0	M005	5.0	11.0	1.0	20.0		3	015	015
2.0	M006	4.0	12.0	1.0	20.0		2	015	015
	HA001	3.0						015	016
	HA002	6.0	6.0	2.0			3	015	015
8.0	HA003	12.0	20.0	4.0	6.0		2	015	015
5.0	HA004	12.0	10.0	3.0			2	015	015
6.0	HA005	8.0	12.0	3.0			3	015	015
6.0	HA006	8.0	16.0	2.5			2	015	015
4.0	HA007	8.0	16.0	2.0			2	015	015

12.3MAKE GAMES	PARTICIPANTS SECTION A-1	12.4DRAW /PAINT	12.5WRITE CASE STUD	12.6CONST LRN ACT	13KSA'S WRITTEN	14COURSE OUTLINE	14.1OUT/L REVISED	15WRITE OBJECT-IVE?
016	SN001	016	016	015		015	019	015
051	SN002	016	015	015	015	015	017	015
016	SN003	016	015	015	015	016		
016	SN004	016	015	015	015	015	017	015
	SN005		015	015	015	015	017	015
015	SN006	015	015	015	015	015	017	015
016	SN007	015	015	015	015	015	017	015
015	SN008	015	015		015	015	017	015
015	SN009	015	015	015	015	015	017	015
015	SN010	015	015	015	015	015	017	015
016	SN011	015	015	016	015	015	018	015
015	SN012	015	015	015	015	015	017	015
016	SN013	016	015	015	015	015	017	015
015	SN014	015	015	015	015	015	017	015
015	SN015	015	015	015	015	015	017	015
015	SN016	015	015	015	015	015	017	015
016	SN017	015		015	015	015	017	015
016	SN018	015	015	015	015	015	017	015
016	M001	015	016	016	015	015	017	015
016	M002	015	015	015	015	015	017	015
016	M003	015	015	015	015	015	017	015
015	M004	015	015	015	015	015	017	015
016	M005	015	015	015	015	015	017	015
016	M006	015	015	015	015	015	017	015
016	HA001	016	016	015	015	015	017	015
016	HA002	016	015	015	015	015	017	015
015	HA003	015	015	015	015	015	017	015
015	HA004	016	015	015	015	015	017	015
015	HA005	016	016	015	015	015	017	015
016	HA006	015	015	015	015	015	017	015
016	HA007	015	015	015	015	015	017	015

16DAILY LESS/PLNS?	PARTICIPANTS SECTION A-1	17COURSE READING LIST	PARTICIPANTS SECTION B-2	1.Ever worked in CH, MCH, or PHCC/nurse?	2.Carried out fol/act as gradnurse/ setting? "2a.Home visit?	2b.Carried out sch/hhealth activities?	2c.Resp for mgt of community clinic?
015	SN001	015	SN001	015	015	015	015
015	SN002	015	SN002	015	015	015	015
015	SN003	015	SN003	016	016	016	016
015	SN004	015	SN004	015			
016	SN005		SN005	015	015	015	016
015	SN006	015	SN006	015	015	016	016
015	SN007	015	SN007	016			
015	SN008	015	SN008	015	015	015	015
015	SN009	015	SN009	015	015	051	015
015	SN010	015	SN010	016			
015	SN011	015	SN011	016			
016	SN012	015	SN012	015	016	016	016
015	SN013	015	SN013	016			
015	SN014	015	SN014	016			
015	SN015	015	SN015	015	015	015	015
015	SN016	015	SN016	016			
015	SN017	015	SN017	015	015	015	015
015	SN018	015	SN018	015	016	016	016
016	M001	016	M001	016			
015	M002	015	M002	015	015	015	
015	M003	015	M003	015	015	015	015
015	M004	015	M004	015	015	015	016
015	M005	015	M005	015	015	015	
015	M006	015	M006	015	015	015	015
015	HA001	015	HA001	015	015	016	015
015	HA002	015	HA002	015	015	015	015
015	HA003	015	HA003	015	015	015	016
015	HA004	015	HA004	016			
015	HA005	015	HA005	015	015	015	015
015	HA006	015	HA006	015	015	015	015
015	HA007	015	HA007				

2d.Have you conducted health education?	2e.Have you conducted immuniza-tion prog?	PARTICIPANTS SECTION B-2	3a.Role for staff nurse in Primary Hlth CC?	3b.Can staff nurse manage PHCC?	4.Birth spacing 2-3yrs recommeded.	5.Appro- priate for nurse to physical assess inf/child /adult?	
015	015	SN001	015	015	021	015	
015	015	SN002	015	015	021	015	
015	016	SN003	015	015	021	015	
		SN004	015		021		
015	015	SN005	015	015	021	015	
015	015	SN006	015	015	021	015	
		SN007	015	015	021	015	
015	015	SN008		015	022	015	
015	015	SN009	015	015	022	015	
		SN010	015	015	021	015	
		SN011	015	015	021	015	
015	015	SN012	015	015	021	015	
		SN013	015	015	021	015	
		SN014	015	015	021	015	
015	015	SN015		015	021	015	
		SN016	015	015	021	015	
015	015	SN017		015	021	015	
015	015	SN018	015	015	021	015	
		M001	015	015	021	016	
015	015	M002	015	015	022	015	
015	015	M003	015	015	021	015	
015	015	M004	015	015	022	015	
015	015	M005	015	015	021	015	
015	015	M006	015	015	021	015	
015	015	HA001	015	015	021	015	
015	015	HA002	015	015	021	015	
015	015	HA003	015	015	021	015	
		HA004	015	015	021		
015	015	HA005	015	016	021	015	
015	015	HA006	015	015	021	015	
		HA007					

TRAINING NEEDS ASSESSMENT - TEACHER TRAINING

PARTICIPANTS SECTION 3	1.Have job standards must meet?	2.Can do job without interference other tasks?	3.Have time to do your job?	4.Have tools to do your job?	5.Have information to do yur job?	6.Do you receive information about your performance?	7.Think you have necessary skills/knowledge to do job?
SN001	015	015	015	015	015	015	015
SN002	015	015	015	016	015	016	015
SN003	015	015	015	015	015	015	015
SN004	016	015	015	016	015	015	016
SN005	015	015	015	015	015	015	015
SN006	015	015	015	015	015	015	015
SN007	015	015	015	015	015	015	015
SN008	015	015	015	015	015	015	015
SN009	015	015	015	016	016	016	016
SN010	015	015	015	015	015	015	015
SN011	016	015	015	016	015	015	016
SN012	015	015	015	015	015	015	015
SN013	016	015	015	015	015	016	016
SN014	015	015	015	015	015	015	015
SN015	015	015	015	015	015	015	015
SN016	015	015	015	015	015	015	015
SN017	015	015	015	015	015	015	015
SN018	015	015	015	015	015	015	015
M001	015	015	015	016	015	015	016
M002	015	015	015	015	015	016	016
M003	015	015	015	016	015	016	015
M004	015	015	015	015	015	016	015
M005	015	015	015	015	015	016	015
M006	015	015	015	015	015	016	015
HA001							
HA002							
HA003							
HA004							
HA005							
HA006							
HA007							

TRAINING NEEDS ASSESSMENT - TEACHER TRAINING

01-AGE		*02-SEX*	
Mean	40.80645161	Mean	0.580645161
Standard Error	1.030105282	Standard Error	0.090091871
Median	41	Median	1
Mode	41	Mode	1
Standard Deviation	5.735383479	Standard Deviation	0.50161031
Sample Variance	32.89462366	Sample Variance	0.251612903
Kurtosis	-0.220846731	Kurtosis	-2.016546672
Skewness	-0.272491398	Skewness	-0.343720593
Range	24	Range	1
Minimum	29	Minimum	0
Maximum	53	Maximum	1
Sum	1265	Sum	18
Count	31	Count	31
Largest(1)	53	Confidence Level(95.000%)	0.176576561
Smallest(1)	29		
Confidence Level(95.000%)	2.018966264		

03-MARITAL STATUS		*04-EDUC. RN DIPLOMA*	
Mean	2.096774194	Mean	6
Standard Error	0.053978066	Standard Error	0
Median	2	Median	6
Mode	2	Mode	6
Standard Deviation	0.300537154	Standard Deviation	0
Sample Variance	0.090322581	Sample Variance	0
Kurtosis	6.653764954	Kurtosis	#DIV/0!
Skewness	2.868427266	Skewness	#DIV/0!
Range	1	Range	0
Minimum	2	Minimum	6
Maximum	3	Maximum	6
Sum	65	Sum	186
Count	31	Count	31
Confidence Level(95.000%)	0.105794909	Confidence Level(95.000%)	#NUM!

04-EDUC. MIDWIFE		04-EDUC. OTHER	
Mean	7	Mean	8
Standard Error	0	Standard Error	0
Median	7	Median	8
Mode	7	Mode	8
Standard Deviation	0	Standard Deviation	0
Sample Variance	0	Sample Variance	0
Kurtosis	#DIV/0!	Kurtosis	#DIV/0!
Skewness	#DIV/0!	Skewness	#DIV/0!
Range	0	Range	0
Minimum	7	Minimum	8
Maximum	7	Maximum	8
Sum	98	Sum	136
Count	14	Count	17
Confidence Level(95.000%)	#NUM!	Confidence Level(95.000%)	#NUM!

05-YRS EXP		***06-TEACHER TRNG EXP***	
Mean	12.83870968	Mean	15.22580645
Standard Error	0.232317794	Standard Error	0.076336513
Median	13	Median	15
Mode	14	Mode	15
Standard Deviation	1.293490734	Standard Deviation	0.425023719
Sample Variance	1.67311828	Sample Variance	0.180645161
Kurtosis	0.767734874	Kurtosis	-0.109078114
Skewness	-0.964544023	Skewness	1.379233372
Range	5	Range	1
Minimum	9	Minimum	15
Maximum	14	Maximum	16
Sum	398	Sum	472
Count	31	Count	31
Confidence Level(95.000%)	0.455333835	Confidence Level(95.000%)	0.149616595

07-CERT. HELD		*08-HAVE CON'T EDUC.?*	
Mean	15.19354839	Mean	15.5483871
Standard Error	0.072131225	Standard Error	0.090858624
Median	15	Median	16
Mode	15	Mode	16
Standard Deviation	0.401609664	Standard Deviation	0.505879411
Sample Variance	0.161290323	Sample Variance	0.255913978
Kurtosis	0.702463054	Kurtosis	-2.098149605
Skewness	1.631366154	Skewness	-0.204491967
Range	1	Range	1
Minimum	15	Minimum	15
Maximum	16	Maximum	16
Sum	471	Sum	482
Count	31	Count	31
Confidence Level(95.000%)	0.141374394	Confidence Level(95.000%)	0.178079368

09-9.1 ATTEND MTG-HRS/WK		***9.2-READ PROF MATERIAL***	
Mean	1.527777778	Mean	8.134615385
Standard Error	0.207979002	Standard Error	2.286340323
Median	1	Median	4
Mode	1	Mode	4
Standard Deviation	0.882380174	Standard Deviation	11.65809392
Sample Variance	0.778594771	Sample Variance	135.9111538
Kurtosis	2.498312613	Kurtosis	5.076503265
Skewness	1.567352815	Skewness	2.487561447
Range	3.5	Range	44
Minimum	0.5	Minimum	1
Maximum	4	Maximum	45
Sum	27.5	Sum	211.5
Count	18	Count	26
Largest(1)	4	Largest(1)	45
Smallest(1)	0.5	Smallest(1)	1
Confidence Level(95.000%)	0.407630749	Confidence Level(95.000%)	4.481138053

9.3-TEACH CLASS		***9.4 TEACHER PREP***	
Mean	10.0862069	Mean	15.2962963
Standard Error	2.300951421	Standard Error	1.262899047
Median	8	Median	14
Mode	10	Mode	20
Standard Deviation	12.39100262	Standard Deviation	6.562215941
Sample Variance	153.5369458	Sample Variance	43.06267806
Kurtosis	24.27630871	Kurtosis	2.050029103
Skewness	4.748002644	Skewness	0.809946021
Range	71	Range	33
Minimum	1	Minimum	2
Maximum	72	Maximum	35
Sum	292.5	Sum	413
Count	29	Count	27
Largest(1)	72	Largest(1)	35
Smallest(1)	1	Smallest(1)	2
Confidence Level(95.000%)	4.509775237	Confidence Level(95.000%)	2.475232983

9.5-DISCUSSION W/OTHERS		***9.6-OTHER***	
Mean	4.833333333	Mean	13.09090909
Standard Error	0.976577546	Standard Error	2.623164451
Median	3	Median	12
Mode	2	Mode	20
Standard Deviation	5.074445783	Standard Deviation	8.700052246
Sample Variance	25.75	Sample Variance	75.69090909
Kurtosis	4.620659382	Kurtosis	-1.487893156
Skewness	2.214222535	Skewness	0.067663736
Range	19	Range	25
Minimum	1	Minimum	2
Maximum	20	Maximum	27
Sum	130.5	Sum	144
Count	27	Count	11
Largest(1)	20	Largest(1)	27
Smallest(1)	1	Smallest(1)	2
Confidence Level(95.000%)	1.914053984	Confidence Level(95.000%)	5.141300236

9.7-OTHER		*10-COURSES TEACHING*	
Mean	8	Mean	2.25
Standard Error	6	Standard Error	0.151054495
Median	2	Median	2
Mode	2	Mode	2
Standard Deviation	10.39230485	Standard Deviation	0.799305254
Sample Variance	108	Sample Variance	0.638888889
Kurtosis	#DIV/0!	Kurtosis	-0.553846154
Skewness	1.732050808	Skewness	-0.02928965
Range	18	Range	3
Minimum	2	Minimum	1
Maximum	20	Maximum	4
Sum	24	Sum	63
Count	3	Count	28
Largest(1)	20	Largest(1)	4
Smallest(1)	2	Smallest(1)	1
Confidence Level(95.000%)	11.75976649	Confidence Level(95.000%)	0.296060931

12-12.1 WRITE PROGRAMS		***12.2 WRITE LEARN MODS***	
Mean	15.03225806	Mean	15.13333333
Standard Error	0.032258065	Standard Error	0.063124277
Median	15	Median	15
Mode	15	Mode	15
Standard Deviation	0.179605302	Standard Deviation	0.345745904
Sample Variance	0.032258065	Sample Variance	0.11954023
Kurtosis	31	Kurtosis	3.385989011
Skewness	5.567764363	Skewness	2.272519435
Range	1	Range	1
Minimum	15	Minimum	15
Maximum	16	Maximum	16
Sum	466	Sum	454
Count	31	Count	30
Largest(1)	16	Largest(1)	16
Smallest(1)	15	Smallest(1)	15
Confidence Level(95.000%)	0.063224551	Confidence Level(95.000%)	0.123721126

12.3-MAKE GAMES		*12.4-DRAW/PAINT*	
Mean	16.76666667	Mean	15.3
Standard Error	1.183879589	Standard Error	0.085096294
Median	16	Median	15
Mode	16	Mode	15
Standard Deviation	6.484375563	Standard Deviation	0.4660916
Sample Variance	42.04712644	Sample Variance	0.217241379
Kurtosis	29.61806062	Kurtosis	-1.24212648
Skewness	5.426357061	Skewness	0.919500435
Range	36	Range	1
Minimum	15	Minimum	15
Maximum	51	Maximum	16
Sum	503	Sum	459
Count	30	Count	30
Largest(1)	51	Confidence Level(95.000%)	0.166785425
Smallest(1)	15		
Confidence Level(95.000%)	2.320357921		

12.5-WRITE CASE STUDY		***12.6-CONTRUCT LEARN ACT.***	
Mean	15.13333333	Mean	15.06666667
Standard Error	0.063124277	Standard Error	0.046320556
Median	15	Median	15
Mode	15	Mode	15
Standard Deviation	0.345745904	Standard Deviation	0.253708132
Sample Variance	0.11954023	Sample Variance	0.064367816
Kurtosis	3.385989011	Kurtosis	12.20663265
Skewness	2.272519435	Skewness	3.659998686
Range	1	Range	1
Minimum	15	Minimum	15
Maximum	16	Maximum	16
Sum	454	Sum	452
Count	30	Count	30
Confidence Level(95.000%)	0.123721126	Confidence Level(95.000%)	0.090786486

13-WRITTEN KSA'S		*14-COURSE OUTLINE*	
Mean	15	Mean	15.03225806
Standard Error	0	Standard Error	0.032258065
Median	15	Median	15
Mode	15	Mode	15
Standard Deviation	0	Standard Deviation	0.179605302
Sample Variance	0	Sample Variance	0.032258065
Kurtosis	#DIV/0!	Kurtosis	31
Skewness	#DIV/0!	Skewness	5.567764363
Range	0	Range	1
Minimum	15	Minimum	15
Maximum	15	Maximum	16
Sum	450	Sum	466
Count	30	Count	31
Confidence Level(95.000%)	#NUM!	Confidence Level(95.000%)	0.063224551

14.1-OUTLINE REVISED		***15-WRITE OBJECTIVES***	
Mean	17.1	Mean	15
Standard Error	0.073500332	Standard Error	0
Median	17	Median	15
Mode	17	Mode	15
Standard Deviation	0.4025779	Standard Deviation	0
Sample Variance	0.162068966	Sample Variance	0
Kurtosis	18.77320054	Kurtosis	#DIV/0!
Skewness	4.280921172	Skewness	#DIV/0!
Range	2	Range	0
Minimum	17	Minimum	15
Maximum	19	Maximum	15
Sum	513	Sum	450
Count	30	Count	30
Confidence Level(95.000%)	0.144057791	Confidence Level(95.000%)	#NUM!

16-DAILY LESSON PLNS		***17-COURSE READ LIST***	
Mean	15.09677419	Mean	15.03333333
Standard Error	0.053978066	Standard Error	0.033333333
Median	15	Median	15
Mode	15	Mode	15
Standard Deviation	0.300537154	Standard Deviation	0.182574186
Sample Variance	0.090322581	Sample Variance	0.033333333
Kurtosis	6.653764954	Kurtosis	30
Skewness	2.868427266	Skewness	5.477225575
Range	1	Range	1
Minimum	15	Minimum	15
Maximum	16	Maximum	16
Sum	468	Sum	451
Count	31	Count	30
Confidence Level(95.000%)	0.105794909	Confidence Level(95.000%)	0.065332036

Section B2-1 WORKED IN CH/MCH/PHCC?		***2-FOL/ACT AS GRAD NURSE-2a HOME VISIT***	
Mean	15.3	Mean	15.14285714
Standard Error	0.085096294	Standard Error	0.07824608
Median	15	Median	15
Mode	15	Mode	15
Standard Deviation	0.4660916	Standard Deviation	0.358568583
Sample Variance	0.217241379	Sample Variance	0.128571429
Kurtosis	-1.24212648	Kurtosis	3.138401559
Skewness	0.919500435	Skewness	2.201736912
Range	1	Range	1
Minimum	15	Minimum	15
Maximum	16	Maximum	16
Sum	459	Sum	318
Count	30	Count	21
Confidence Level(95.000%)	0.166785425	Confidence Level(95.000%)	0.153359271

2b-CARRIED OUT SCH/HLTH ACTIVITIES?		***2c-RESP FOR MGT OF COMMUNITY CLINIC?***	
Mean	16.95238095	Mean	15.36842105
Standard Error	1.705001313	Standard Error	0.113697205
Median	15	Median	15
Mode	15	Mode	15
Standard Deviation	7.813297578	Standard Deviation	0.495594628
Sample Variance	61.04761905	Sample Variance	0.245614035
Kurtosis	20.85066018	Kurtosis	-1.856092437
Skewness	4.559478032	Skewness	0.593464155
Range	36	Range	1
Minimum	15	Minimum	15
Maximum	51	Maximum	16
Sum	356	Sum	292
Count	21	Count	19
Confidence Level(95.000%)	3.341736219	Confidence Level(95.000%)	0.222842097

2d-CONDUCTED HEALTH EDUCATION		*2e-CONDUCTED IMMUNIZATION PROG*	
Mean	15	Mean	15.04761905
Standard Error	0	Standard Error	0.047619048
Median	15	Median	15
Mode	15	Mode	15
Standard Deviation	0	Standard Deviation	0.21821789
Sample Variance	0	Sample Variance	0.047619048
Kurtosis	#DIV/0!	Kurtosis	21
Skewness	#DIV/0!	Skewness	4.582575695
Range	0	Range	1
Minimum	15	Minimum	15
Maximum	15	Maximum	16
Sum	315	Sum	316
Count	21	Count	21
Confidence Level(95.000%)	#NUM!	Confidence Level(95.000%)	0.09333148

3a-ROLE FOR STAFF NURSE IN PHCC?		***3b-CAN STAFF NURSE MANAGE PHCC?***	
Mean	15	Mean	15.03448276
Standard Error	0	Standard Error	0.034482759
Median	15	Median	15
Mode	15	Mode	15
Standard Deviation	0	Standard Deviation	0.185695338
Sample Variance	0	Sample Variance	0.034482759
Kurtosis	#DIV/0!	Kurtosis	29
Skewness	#DIV/0!	Skewness	5.385164807
Range	0	Range	1
Minimum	15	Minimum	15
Maximum	15	Maximum	16
Sum	405	Sum	436
Count	27	Count	29
Confidence Level(95.000%)	#NUM!	Confidence Level(95.000%)	0.067584865

4-BIRTH SPACING 2-3YRS RECOMMEND?		***5-APPROP FOR NURSE TO PHYSICAL ASSESS INF/CHILD/ADULT?***	
Mean	21.13333333	Mean	15.03571429
Standard Error	0.063124277	Standard Error	0.035714286
Median	21	Median	15
Mode	21	Mode	15
Standard Deviation	0.345745904	Standard Deviation	0.188982237
Sample Variance	0.11954023	Sample Variance	0.035714286
Kurtosis	3.385989011	Kurtosis	28
Skewness	2.272519435	Skewness	5.291502622
Range	1	Range	1
Minimum	21	Minimum	15
Maximum	22	Maximum	16
Sum	634	Sum	421
Count	30	Count	28
Confidence Level(95.000%)	0.123721126	Confidence Level(95.000%)	0.06999861

SECTION-3 1.HAVE JOB STAND'S MUST MEET?		***2-DO JOB W/O INTERFERENCE FROM OTHER TASKS?***	
Mean	15.125	Mean	15
Standard Error	0.068959661	Standard Error	0
Median	15	Median	15
Mode	15	Mode	15
Standard Deviation	0.337831962	Standard Deviation	0
Sample Variance	0.114130435	Sample Variance	0
Kurtosis	4.210265925	Kurtosis	#DIV/0!
Skewness	2.421860301	Skewness	#DIV/0!
Range	1	Range	0
Minimum	15	Minimum	15
Maximum	16	Maximum	15
Sum	363	Sum	360
Count	24	Count	24
Confidence Level(95.000%)	0.135158251	Confidence Level(95.000%)	#NUM!

3-HAVE TIME TO DO JOB?		***4-TOOLS TO DO JOB?***	
Mean	15	Mean	15.25
Standard Error	0	Standard Error	0.09028939
Median	15	Median	15
Mode	15	Mode	15
Standard Deviation	0	Standard Deviation	0.442325868
Sample Variance	0	Sample Variance	0.195652174
Kurtosis	#DIV/0!	Kurtosis	-0.531024531
Skewness	#DIV/0!	Skewness	1.233150906
Range	0	Range	1
Minimum	15	Minimum	15
Maximum	15	Maximum	16
Sum	360	Sum	366
Count	24	Count	24
Confidence Level(95.000%)	#NUM!	Confidence Level(95.000%)	0.17696369

5-HAVE INFO TO DO JOB?		*6-RECEIVE INFO ABOUT PERFORMANCE?*	
Mean	15.0417	Mean	15.33333333
Standard Error	0.04167	Standard Error	0.098294637
Median	15	Median	15
Mode	15	Mode	15
Standard Deviation	0.20412	Standard Deviation	0.481543412
Sample Variance	0.04167	Sample Variance	0.231884058
Kurtosis	24	Kurtosis	-1.568181818
Skewness	4.89898	Skewness	0.755147624
Range	1	Range	1
Minimum	15	Minimum	15
Maximum	16	Maximum	16
Sum	361	Sum	368
Count	24	Count	24
Confidence Level(95.000%)	0.08167	Confidence Level(95.000%)	0.192653664

7-HAVE NECESSARY SKILLS TO DO JOB?	
Mean	15.25
Standard Error	0.09028939
Median	15
Mode	15
Standard Deviation	0.442325868
Sample Variance	0.195652174
Kurtosis	-0.531024531
Skewness	1.233150906
Range	1
Minimum	15
Maximum	16
Sum	366
Count	24
Confidence Level(95.000%)	0.17696369

Appendix E: Learning Needs of Hospital Nurses and Midwives

1. Rank Order of Training Needs for All Tutors in Eritrean National Training Schools

Learning/Training Need	**Rank Order**	**Number of Responses**
A. Teaching Competencies		
*Pedagogy	1	23
*Clinical skills (community health, PHC, other)	2	22
*Other skills	3	21
*Planning and Management	4	8
*Research/Problemsolving	5	3
B. PHC Clinical Competencies		
*MCH/Family Planning	1	40**
*Health Education	2	24
*Immunization/EPI	3	21
*Sanitation/water	4	13
*Food/Nutrition	5	12
*Prevention & control of endemic diseases	6	4
*Treatment of common diseases and injuries	7	1
*Drug supply	8	1
C. PHC "Job Function" Competencies		
*Management and leadership	1	27
*Community development and participation	2	10
*Data collection/records	3	7
*Student education	3	7
*Nursing skills	4	5
*Staff/faculty development	4	5

** 12 of the 40 responses listed MCH without including family planning.

Learning Needs Identified in BrainstormingSessions:

1. Hospital Nurses

- Need up-dating of nursing knowledge and clinical skills in all hospital specialties
- Need lessons in professional ethics
- Need modern skills in ward management
- Need modern skills in using the nursing and the management process
- Need inservice training, continuing education, and post-basic training

2. Hospital Midwives

- Need to know more about modern anesthesia; need a trained anesthetist;
- Need to know more about HIV/AIDS and how to protect themselves; (Note: they stated recruitment in the hospital and the school of midwifery was difficult because of AIDS "fears".);
- Need to know appropriate drug therapy in pregnant and lactating mothers;
- Need neonatology training , especially in the resuscitation of newborns;
- Need up-dating on breastfeeding, postpartum exercises, prenatal care and premature infant care;
- need increased skills in maternal and child care;
- Need to know more about health education; they suggested a training of trainers program for midwifery staff.

3. Semanawi Health Center

- Need surgical nursing training for the head nurse;
- Need post-basic training of staff nurses in the expanded program for immunization (EPI);
- Need in-service training of all staff to update skills required on-the-job;
- Need a written job description for MOH staff so that training needs can be more accurately defined.

Appendix F: In-Country Visit Schedule and List of Contacts

Date	Name(s) of Contact(s)	Reason for Contact
Dec. 7	USAID: Dr. G. Jones, USAID Coordinator Ms. P. Delargy, TAP	USAID Briefing
Dec. 8	MOH: Mr. Sanai, Director, Planning & Evaluation (P&E) Mr. Eyob Tekle, MOH P & E,	MOH Briefing ; arrange meetings with other MOH personnel
Dec.9	Ambassador Ariel Kerem, Israeli Embassy	To discuss short-and long-term training opportunities in Israel for Eritrean health personnel
	Dr. Ephrem Zewoldi, Regional Medical Director, Asmara	To discuss health services in in Asmara
	Mr. Eyob Zere, Director of Training, MOH	Briefing for the training needs assessment (TNA); make appointments for TNA implementation
	Sr. Regbe Samuel, Director of Asmara School of Nursing	Courtesy visit; to set appointment to discuss training issues
	Sr. Medhin Sbhatu, Director of the Asmara School of Midwifery	(Same as above)
Dec. 10	Field visit to Soraye PHC facilities, accompanied by Mr. Estifanos, Head of MOH Community Health Services	Observe "ideal" PHC facility (UNICEF supported)
Dec. 12	Sr. Regbe Samuel, Director, Asmara School of Nursing and faculty (see attached list of faculty)	To discuss/review SON curriculum, TNA
	Eritrean Nurses Association President and Chairperson of Research Committee	To discuss training needs of Eritrean nurses, mid-wives, health assistants

Dec. 12	Tour of SON training facility and student dormitories	To assess needs and resources
	Tour of National Hospital Facilities	To identify needs and resources from a training perspective
Dec. 13	Sr. Mehdin Sbhatu, Director, School of Midwifery and faculty (see attached list)	To discuss curriculum, needs and resources, TNA
	Tour of SOM training facility, dormitories	
	Mr. Yosief G. Mehdin, Director, Health Assistants School	(Same as above)
	Revisit to OB/GYN unit, National Hospital	Arrange meeting with hospital midwives; identify problems, resources
	Reception by USAID Director/Coordinator	Informal reception to meet other USAID and Embassy personnel
Dec. 15	Sr. Kidisty, Director, Eritrean Planned Parenthood Association	Informal luncheon by USAID TAP
	Mr. Yosief G. Mehdin and Health Assistants faculty (see list of faculty)	To discuss needs, resources: TNA
Dec. 16	National Hospital midwives	Brainstorming session on training needs, issues
	National Hospital nurses	(same as above)
	Three ex-fighters - nurses	Requested from STC the TNA which they completed
	Tour of the Semanawi Health Center, Director of Nursing and staff	To observe and discuss PHC delivery services; staff learning needs

	Training School Directors	To collect remaining TNA questionnaires
Dec. 17	Sr. Samuel, Director, SON	To discuss criteria for selection of EHP training candidates and training plan issues
Dec. 18	Mr. Sennay, MOH; Ms. Delarge, USAID	MOH/USAID debriefing

Schedule visits and List of Contacts

Kenya

	Reason for Contact
Dr. Sem Singh Bhachu Principal of the AMREF Training Centre	To Review AMREF training programs for Nurses
Dr. J. K. Mbugua AMREF Training Centre	
Dr. Basil King Head, Nomadic Health Unit	
Mr. John N. Atiento Head, CBH Support Unit	
Mrs. Njeri W. Muriithia Head, Women and Development Unit	
Mr. Afewerki Zerazion Berhe Registred Nurse (Student)	To talk about his experience with the AMREF Training

Eritrea

Dr. Georges Jones Coordinator, USAID Mission	USAID Briefing
Mrs. Pamela Delarge TAP Manger USAID Mission	
Ambassador Ariel Kerem Embassy of Israel Asmara, Eritrea	To discuss short- and long terms training opportunities in Israel
Dr. Elmi A. Duale WHO Representative a.i. Asmara, Eritrea	To discuss training programs in priority areas planned by WHO/AFRO
Dr. Tekeste Fikadu Vice-Minister of Health Ministry of Health, Asmara, Eritrea	Courtasy call
Mr. Sennay Kifleyesus Head, Planning and Evaluation Unit Ministry of Health, Asmara, Eritrea	To discuss training plan and arrange other meeting with other MOH officials

Dr. Aferwork Abraham Head, Health Care Services Ministry of Health, Asmara, Eritrea	To discuss training needs for urban and rural health workers
Mr. Eyob Tekle Planning and Evaluation Unit Ministry of Health, Asmara, Eritrea	
Mr. Eyob Azaria Head, Training Unit Minstry of Health, Asmara, Eritrea	To discuss training needs assessment and arrange meetings with training institutions
Mr. Kidane Woldeyesus Head, Pharmaceutical Services Unit	
Sister Kidiste Habete Coordinator, IPPF, Eritrea	To discuss Family Planning Programs in Eritrea
Dr. Ephrem Zewoldi Provincial Medical Director Asmara Province	To discuss training needs in one of the focus province
Dr. Tesfai Solomon Provincial Medical Director Seraye Province	To discuss about UNICEF supported program
Dr. Abraham Yehdego G.P/Surgeon ADI UGRI Hospital Mendefera, Seraye	

LIST OF CONTACTS

United States Agency for International Development, Asmara
1. Dr. George Jones, Coordinator
2. Mrs. Pamela Delarge, TAP Manager

World Health Organization
1. Dr. E. A. Duale

Ministry of Health (MOH)
1. Mr. Sennay, Director, Planning and Evaluation
2. Mr. Eyob Tekle, Planning Unit
3. Dr. Afewoke, Head of the Health Care Unit
4. Mr. Eyob Azaria, Assistant Head of the Planning Unit
5. Mr. Estifanos, Head of Community Services
6. Dr. Ephrem Zewoldi, Regional Medical Director, Asmara

Israeli Embassy
1. Ambassador Ariel Kerem

Asmara School of Midwifery Tutors
1. Mehdin Sbhatu, Director
2. Lemlem Y/Amlak
3. Isayas Solomon
4. Asmara /Ezgi
5. Mulu Berhane
6. Letezghi Afewerki

Asmara School of Nursing Tutors
1. Rigbe Samuel, Director
2. Tseghehanna Meri
3. Ato Berhane Negussie
4. Letemichael Afeworki
5. Senait W/Micheal
6. Ato Ghirmay T/Haimanot
7. Ato Eyob Zere
8. Shashu G/Sellasie
9. Menghesteab Beraki
10. Mebrat G/Sellasie
11. Ato Tseggai Beraki
12. Ato Tekeste Tombosa
13. Adeba T/Haimanot
14. Ato Taddesse W/Micheal
15. Letebrhan W/Micheal
16. Ato Tesfy Wahid

17. Hiwet W/Tensae
18. Ato Tesfayohannes Sebahto, Ex-combatant
19. Terhas Mehreteab, Ex-combatant

Health Assistants School
1. Yosief Zemicael G/Medhen, Director
2. Itmet Negassi Amanuel
3. Ghidey Araya Gebre
4. Hiwet Yohanes
5. Dehab Yohannes Menghestu
6. Ato Isaac-Zecarias Habte
7. Letebthan W/Silassie

National Hospital Midwives
1. Mebcat Zere
2. Berhane Yohannes
3. Ghebre Micheal Ande Micheal
4. Mullu Wolde Semait
5. Ghebremedhin Memghesha
6. Andeberhan Tecle Berhan
7. Ascalu Tsegai
8. Zufan Zeraberuk
9. Berekty Habte

National Hospital Staff Nurses
1. Woldegiorgis Haile
2. Tesfay G/Micael
3. Mokonnen G/Kidou
4. Freweii Zerazui
5. Berhane Hadera
6. Miriam Haile
7. Aberat Fessehaie
8. Emuna Fessehaie
9. Mehret Adhanom
10. Shewainesh G/Yohonnes
11. Medhin Araya
12. Mamarite Embaye
13. Kibrom Mesfin
14. Lucia Keyom
15. Zeius Ahmed
16. Demet Kidane
17. Berekfy Mehretals
18. Rigbe Ghirmay
19. Andebraham Teweldebrhan

Semanawi Health Center, Asmara

1. Dr. Letemedlin Eyachem
2. Hialot Yohannes
3 Tsigh Eastifant
4. Ethiopia Fekalu

Adi Ugri Hospital: Nurses and Midwives

1. Albrehet Yoseph
2. Eyerusalem Beyenne
3. Rezenesh Kidice
4. Tsega Tombosa
5. Becaki Abraham

Appendix G: Short-Term/Long-Term Trainings

		SHORT TERM TRAININGS								
Eritrean Health and Population Project										
FY 95										
MOH Department/Program	Training Areas/Degree	Institution	Duration	Country	# of Participants	Tuition	Airfare	Living Exp.	Total Fees	Total Cost
Health Planner	Mgmt. Health Program	Harvard	June95-Aug.95	U.S.A	1	$5,400	$3,334	$4,780	$13,514	$13,514
Vice Minister	Sr. Mgmt. Govt.	JFK School of Government	July95-Aug.95	U.S.A.	1	$4,595	$3,334	$3,655	$11,584	$11,584
Health Planner	Fin. Health Care	Boston University	Sep.95-Dec.95	U.S.A.	1	$6,350	$3,334	$6,303	$15,987	$15,987
Public Health Officer	Hlth. Care in Dev. Countries	Boston University	May95-Aug.95	U.S.A	1	$6,350	$3,334	$7,034	$16,718	$16,718
Training Advisor	Training Design in Mgmt.	Univ. of Conn. IPS	May95-June95	U.S.A.	1	$5,900	$2,575	$5,831	$14,306	$14,306
Midwifery Tutors	Training Program	Aaron Offer Int. Ctr.	Nov.95-Dec.95		1				$0	$0
Nurses	Pediatric Nurs. in Comm.	Tel Aviv University	June95-July95	ISRAEL	6		$1,289		$1,289	$7,734
Physicians	Int. Postgrad. Training Med.	Tel Aviv University	May95-Aug.95	ISRAEL	8	$336	$1,289	$2,400	$4,025	$32,200
Hospital Administrators	Hlth. Care Adm. & Hosp. Mgmt.	Carmel Med. Center	July95-Sept.95	ISRAEL	2		$1,289		$1,289	$2,578
Epidemiologist	Epid. Method & Practice	TUFTS University	June95	U.S.A.	2	$1,200	$3,334	$1,181	$5,715	$11,430
GRAND TOTAL										$126,051
* Any blanks will be filled by the	time the final version is submitted.									

		LONG TERM TRAININGS								
Eritrean Health and Population Project										
FY' 96										
MOH Department/Program	**Training Areas/Degree**	**Institution**	**Duration**	**Country**	**# of Participants**	**Tuition**	**Airfare**	**Living Exp.**	**Total Fees**	**Total Cost**
Vice Minister's Office	Master of Pubic Admin.	JFK SG Harvard	2 years	USA	1	$35,420	$3,334	$23,450	$62,204	$62,204
Health Statistician	Masters Biostatistics	Johns Hopkins	1 year	USA	1	$19,700	$2,859	$16,500	$39,059	$39,059
Public Health Officer	Masters Public Health	Boston U. SPH	1.5 years	USA	1	$30,000	$3,334	$12,960	$46,294	$46,294
Health Economist	M.A. Economics	Boston Univ.	1 year	USA	1	$32,300	$3,334	$11,200	$46,834	$46,834
HIS Specialist	M.Sc. Computer Information	Clark Atlanta/OIT	2 years	USA	1	$11,808	$4,221	$9,456	$25,485	$25,485
Computer Technician	Diploma Computer Sci.	Mass. Bay. Coll.	2 years	USA	1	$17,280	$3,334	$11,200	$31,814	$31,814
Public Health Nurse	Diploma Community Hlth	AMREF	1 year	Kenya	1	$8,400	$1,900	$3,300	$13,600	$13,600
Nurse Tutor	M. Sc. Pediatric Nursing	Virginia Sch. Nurs.	1 year	USA	1	$13,062	$4,126	$11,200	$28,388	$28,388
Health Assistant Tutor	M. Ed. Teaching Method.								$0	$0
Health Center Nurse	MCH/FP	Johns Hopkins	1 year	USA	1	$22,000	$2,859	$11,800	$36,659	$36,659
Pharmacist	M. Sc. Clinical Pharmacology	Howard University	1 year	USA	1	$18,131	$2,859	$11,200	$32,190	$32,190
Provincial Director	MPH Health Services Admin.	Boston U. SPH	1.5 years	USA	1	$30,000	$3,334	$12,960	$46,294	$46,294
GRAND TOTAL										$406,821
FY' 97										
Epidemiologist	MPH Epidemiology	Univ. of Mass.	1.5 years	USA	1	$17,085	$3,334	$11,000	$31,419	$31,419
Nurse Tutor	M.Sc. Nursing Administration	Comm. Virginia N.S	1.5 years	USA	1	$22,000	$3,958	$10,400	$36,358	$36,358
Provincial Director	Master of Public Health	Boston U. SPH	1.5 years	USA	1	$30,000	$3,334	$12,960	$46,294	$46,294
Public Health Nurse	Public Health Nurse	AMREF	1 year	Kenya	9	$8,400	$1,900	$3,300	$13,600	$122,400
Computer Technician	Diploma Computer Sci.	Mass. Bay. Coll.	1 year	USA	1	$17,280	$3,334	$11,200	$31,814	$31,814
Public Health Officer	Master of Public Health	Tulane U. SPH	1 year	USA	2	$13,200	$4,221	$10,800	$26,221	$56,442
GRAND TOTAL										$324,727
* ANY BLANKS WILL BE FILLED BY THE TIME THE FINAL VERSION IS SUBMITTED.										