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Tulane

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PROPOSED REGIONAL PUBLIC HEALTH TRAINING PROGRAM FOR THE SADCC COUNTRIES IN THE SOUTHERN AFRICA REGION

DEVELOPMENT OBJECTIVE:

To develop a critical cadre of Public Health experts in the Southern African countries.

PURPOSE OF THE WORKSHOP:

To review Tulane's feasibility study and to draft recommendations and proposals for a final draft report.

WORKSHOP OBJECTIVES:

1. To examine input needed for development and implementation to a relevant PHC-oriented Mobile Public Health training program.

2. To determine if the feasibility study is relevant to other countries.

3. To draw on expertise, programs and experiences of other Southern African countries through exchange of information.

4. To explore methods of drawing national resources into technical cooperation for development of health manpower in Southern Africa.

5. To identify major themes essential to developing a relevant Mobile Public Health training program.

6. To provide an opportunity for development of sound progressive educational programs at all levels; and, academic programs to facilitate upward mobility of health workers without loss of time.

7. To reduce the number of years and resources put into training programs that do not ensure recognition.

8. To foster fruitful inter-institutional cooperation between ministries, university health training institutions, national, and overseas universities.

9. Foster research into health systems and HMD.

When he spoke to the congregation of Ebenezer Baptist Church in Atlanta, February 4, 1968, Martin Luther King Jr. wasn't thinking about apartheid medicine of the past and other African disasters but, in discussing his death and the eulogy he'd want at his funeral, the American civil rights leader provided an outline for planning a program to alleviate such suffering.

Dr. King, who was assassinated April 4, 1968, in Memphis, Tenn., said, "Every now and then I think about my own death, and I think about my own funeral... I don't want a long funeral.

"And if you get somebody to deliver the eulogy, tell them not to talk too long...Tell them not to mention that I have a Nobel Peace Prize...Tell them not to mention that I have three or four hundred other awards... I'd like somebody to mention that day, that Martin Luther King, Jr. tried to give his life serving others.

"I'd like for somebody to say that day that Martin Luther King Jr. tried to love somebody...Say that I was a drum major for justice. Say that I was a drum major for peace. That I was a drum major for righteousness. And all of the other shallow things will not matter. I won't have any money to leave behind. I won't have the fine and luxurious things of life to leave behind. But I just want to leave a committed life behind."

"Not to talk too long," not to dwell on awards or the pursuit of money or luxury, but to emphasize service to others, justice, peace, righteousness, and "a committed life" -- Dr. King's advice for writing his eulogy may also apply to those planning or working in a program in which physicians, dentists, nurses, public health workers, and educators work as a team to provide a continuously expanding and improving health care system to the people of Southern Africa. Developing nations are dissatisfied with the systems of health care, often inherited from their colonial past, and are seeking alternatives.

Traditional public health measures which helped control some diseases in the past have proven insufficient by themselves, says John R. David, chairman of the department of tropical public health, Harvard School of Medicine, and modernization efforts, thought to control diseases, have, in some cases exacerbated health problems. (i.e. Schistosomiasis, a disease in which parasitic worms invade blood vessels, has increased dramatically due to construction of hydroelectric dams creating large lakes, the breeding grounds for snails which transmit the disease.) He calls upon Americans to increase their support in developing the scientific knowledge needed for creation of vaccines, medicines and treatment methods to defeat Africa's killer diseases as quickly as possible.

In a Washington Times article, Sept. 27, 1984, David pointed out that starvation, as witnessed in media coverage of the Ethiopian catastrophy, is the "most visible killer stalking Africa," but people, who are moved to action by seeing babies dying in their parents' arms on television, also need to know that more Africans have been dying each year from parasitic diseases than from hunger.

More than a million African children die of malaria each year and approximately 300 million people in Africa and other developing areas also suffer from this disease. Many millions

have filariasis, a disease that can cause gross enlargement of limbs; thousands die from schistosomiasis; 40 million have onchocerciasis (river blindness), which may blind a third of the village people and make entire river valleys uninhabitable, David noted. Study of parasitic diseases increases our understanding of other ailments and helps control such diseases in developed countries which are also affected. For example, the giardia parasite is one of the most common causes of epidemic infectious diarrhea in the U.S.

Robert Coles, a child psychiatrist who has been researching in South Africa for the past 10 years, says that even if by some "political and moral miracle," apartheid in South Africa disappeared, that nation's 23 million black and colored (mixed race) people would still "face a grave struggle for survival."

In a recent newspaper article, Coles noted that blacks' infant-mortality rate is 190 per 1,000 live births -- six times that of whites; blacks' life expectancy is 15 years less that of whites; and 55 percent of black deaths occur between ages 1 to 4, while the figure is only 7 percent for whites. Tuberculosis, virtually eradicated among whites, occurs at the rate of 285 cases per 100,000 blacks.

To compound the situation, Coles noted that in South Africa there are only 300 black doctors per 90,000 people while the ratio for whites is 1 to 390. (World Health Organization considers a ratio of one for every 10,000 people too low.) The cost of tuition, books, room and board (approximately U.S. $2,300) is so prohibitive to black students that about a third of those accepted into health training can't afford to matriculate.

Coles called for Americans to offer experience and technology to aspiring physicians, dentists, nurses and veterinarians, and to help build programs in community health, family medicine and nutrition through exchanges of personnel, research grants, and training programs.

Recognizing Africa's need to ensure an adequate number of public health workers and to achieve self-sufficiency in health training by the year 2000, Tulane University School of Public Health and Tropical Medicine consulted with regional public health professionals, participated in numerous Maternal and Child Health and Primary Health Care workshops, evaluated other programs and reviewed literature. The result is a proposed Regional Public Health Training Program for SADCC countries in the Southern Africa region.

Practical aspects of the plan were investigated during site visits to Botswana, Lesotho and Swaziland in December, 1982, and February, 1983. Information gathered for a feasibility study included: committment of countries; availablity of educational resources and faculty; enumeration of existing courses; estimation of costs (assumed to be less within the region than overseas); and determination of the student pool.

The feasibility study also involved development of guidelines for the academic program, which includes maximum use of the expertise of African personnel -- members of regional institutions such as universities, hospitals and Ministries of Health -- to ensure development of a program uniquely African and responsive to specific area needs. Classes would be offered annually between mid-May and mid-August; and, in a three-year period, students could get one year of undergraduate training in

public health (credits to transfer to regional universities), or, students with baccalaureate or higher degrees could enter a master's degree program in which they could get M.P.H. degrees, with and without specialization.

Originally, the public health training program was to be developed in at least five countries, but lack of support from two USAID mission directors restricted the program to Botswana, Lesotho and Swaziland. Support from colleagues in those countries has enabled Tulane to develop a program that includes all nine independent countries in the region.

Support and fund-raising assistance was requested from Southern Africa Development Coordination Conference (SADCC) and contacts were made with foreign aid donors to public health training in Southern Africa, such as Swedish International Development Agency (SIDA), Norwegian Agency for International Development (NORAD), and the Dutch Technical Assistance Program to Developing Countries. Contacts at the U.N. and with Ford and Rockefeller foundations in the U.S. were made by Tulane development and foundation relations personnel. (See Review of Mobile MPH/Certificate Project Fund Raising Efforts). USAID and World Health Organization are also among those organizations invited to participate.

In addition to Tulane School of Public Health Dean James E. Banta, Tulane medical personnel directing the project include: Dr. James P. Carter, chairman of the Department of Nutrition and project director; Naomi Baumslag, M.D., M.P.H., associate director and consultant; Elaine Boston, R.D., M.P.H., program coordinator, and Dr. Claudio Schuftan, nutrition planner.

In reporting on the February, 1983, site visit to Southern Africa, Baumslag and Boston noted the need to explore in greater depth, the following:

1. Manpower data needed to determine training needs (SADCC commissioned a manpower needs study of BLS countries, Mozambique, Zimbabwe, Malawi, Zambia, Tanzania, and Angola, and affiliated non-independent countries, done by NORAD);
2. Committment of resources in the BLS countries and information about the people to be trained in those countries;
3. Hesitancy on Tulane's part to offer degrees remote from home campus;
4. Information on public health courses or infra-structues on which to build;
5. A design for career structure with upward mobility that meshes with existing health training programs.
6. Library facilities and the possibility of funding librarian services.
7. Funding for students' tuition, fees, living expenses.

Positive feedback from the site visits included:

1. Endorsement of the concept from all persons with whom it was discussed;
2. A regional institute could ultimately coordinate all health training in the area and eliminate the "piece-meal" approach to health training;
3. A regional institute could provide steps on the career ladder for health care personnel and make health careers more attractive to prospective students.

In setting up the Institute, the site visit report concluded, it is imperative that it be linked to or part of one of the universities in the area to ensure the upward mobility desired by health personnel and to upgrade the status and opportunities in public health so that it will attract new people. The institute could be based at one university, with guarantees from other universities that they would accept its credits toward degrees. The ultimate answer is to offer a four year program leading to a baccalaureate degree in public health.

Some recommendations of the Tulane site visiting team are similar to those suggested by the SADCC commissioned NORAD Consultancy Survey of health Training Facilities conducted from October 19 to December 21, 1982.

The NORAD survey team, headed by Dr. Egil Sniloberg, suggested cooperation among the SADCC countries in training and exchanging teachers, sharing medical equipment mantenance and administration/management personnel, establishment of a regional resource center and regional specialty training programs when separate national training programs are not economical.

Training institution recommendations included:

1. Expansion of existing institutions, and possible addition of new ones;
2. Relation of institution size to medical cadres offered;
3. Use of qualified teachers from outside the region until local tutors are trained;
4. Use of a "three party agreement/quota system" in which host countries take responsibilities for running their institutions and for training a quota of students from other SADCC countries, which in turn, need to guarantee a certain number of students annually; all to be accomplished with financial and manpower support from the cooperating agency/training institution;
5. Agreement to a staff development program of national teachers;
6. Courses with practical training could be given in students' home countries so that they practice in the context in which they will work.

The NORAD team emphasized that SADCC countries, not NORAD, should make decisions on priorities in the following categories:

1. Use of existing facilities with expansion capabilities where only an agreement between institutions is needed to provide scholarships, supplemental staff, libraries, etc.
2. Projects already planned in detail but which have been postponed due to lack of funding or manpower.
3. Projects needing further planning.

NORAD recommended cooperation on health manpower development between SADCC countries because:

1. There are similarities in demographic factors, educational systems, and health problems, policies, care systems, and manpower structures.
2. It is more economical to train students in the region than abroad.
3. Training within the region could be more relevant than elsewhere.

4. There has been small scale cooperation between the countries on health manpower development for many years.

5. Some countries have experienced "brain drain" when students are trained outside of Africa.

(See "SADCC NORAD Consultancy Survey of Health Training Facilities" summary for more information.)

Although not everyone invited to the February 19-21, 1985, meeting in Botswana could attend, input was received from several individuals and organizations concerned with public health programs in which their expertise gained from past and present programs was shared. Lists from various university officials suggesting prospective faculty for the Institute have also been received.

This input includes the following information:

Community-oriented Primary Health Care (COPC) now operating in the Hebrew University of Jerusalem and Hadassah Medical Organization School of Public Health and Community Medicine -- Professor Sidney L. Kark and Emily Kark.

COPC provides primary clinical care for individuals in a community-oriented practice. Programs may focus on main health problems affecting the community in general, or be specifically directed toward priority health needs of different community groups. Health service is promotive, preventive and curative. The Community Health Care Center in Jerusalem, which serves as a practicing base, is an integral part of the School of Public Health and Community Medicine and is administered by the Department of Social Medicine.

The graduate studies program leading to a Master of Public Health has been developed and modified since its inception in 1960. An obligatory field-workshop and seminar in community health care is a curriculum feature, and the curriculum's general objective is to provide the graduate training for multi-disciplinary professional groups required for practice, teaching and research in public health and social medicine. The groups include physicians, dentists, nurses, veterinarians, social workers, health educators, nutritionists, biostatisticians, environmental and occupational health workers, and scientists interested in community health.

A Course leading to the degree of Master of Science (University of London) In Mother and Child Health -- David Morley, Professor of Tropical Child Health, UOL.

The UOL Institute of Child Health offers an M.Sc. in Mother and Child Care to qualified graduate students and a Diploma in Mother and Child Health to students who don't qualify for the postgraduate degree. The course purpose is to train future teachers of Mother and Child programs for medical schools and auxiliary training institutions of Third World countries. Over 160 Fellows have trained in it and a previous UNICEF/WHO course, and they now hold responsible positions in their own countries.

Emphasis is on maternal care, family health and nutrition, as well as communication, management, and leadership skills. Focus of the M.Sc. course is providing management, training and support for local community health workers and middle level personnel. M.Sc. students have 8-10 weeks overseas study in the curriculum, and the course was set up in London in hope that it would lead to other universities undertaking similar training programs, a hope that has become reality in Nigeria, Durban, India, Indonesia and the Philippines.

Extendei MPH Degree Program of the University of Washington School of Public Health and Community Medicine -- Robert B. Wainwright, M.D., D.T.M.L.H., Malcom L. Peterson, M.D., Ph.D., and Janis M. Farrier.

The format of this curriculum radically differs from traditional two-year programs leading to MPH degree. Students fulfill all academic and institutional requirements for MPH over a three-year span of intensive, on-campus courses and seminars. In its four years of operation, many more applicants have enrolled for the Extended Degree Program than for the regular MPH program and the academic performance of these students is comparable to that of regular full-time MPH program students.

Administrative, fiscal and instructional problems have been overcome and the demand for the program and U.W. experiences suggest that extended MPH degree programs are both feasible and desirable. The 94 students who have matriculated in the program are employed mainly in government agencies in 8 western states and British Columbia; most have their prior professional training in nursing and medicine with median of nine years professional experience.

The Botswana/Meharry Project: A Nursing Achievement in Public Health, Maternal and Child Health, and Family Planning -- Jean Swinney R.N., M.A.

This five-year plan resulted from collaboration of USAID and the government of Botswana. Its goals were:

1. To provide training or retraining in public health, maternal and child health and family planning for personnel who staff rural health facilities;
2. To prepare an integrated curriculum in PH/MCH/FP for use in the basic nurses training schools; train a selected tutorial staff to continue using the curriculum;
3. To establish a health education unit with trained local staff to serve health needs in PH/MCH/FP and preventive health;
4. To develop field training and practice facilities and establish effective postnatal and family planning service in the three Botswana government training hospitals.

The plan was so successful that it was extended and now serves as a basis for other projects. By the project's end in August, 1979, 501 nurses completed the inservice course (only 98 completed unsuccessfully); 21 participants were in advanced training or had completed it to become tutorial staff (including a local replacement for the senior public health nurse of the original project health team); all family planning methods were delivered by nurse midwives and project participants (consulting with physicians for problems only). A dramatic increase in use of various family planning methods also resulted from the introduction of family planning services and education into the hospitals.

Botswana Institute of Health (Its first 10 years of operation and its present courses and instructors) -- Dr. D.B. Sebina.

NHI began with 117 students in four courses in 1973 and by 1983, the National Institute of Health had 720 students in 10 programs, which include basic nursing, health assistant, dental therapists, nurse anaesthetists, pharmacy technicians, health lab. assistants, medical records, midwifery, family nurse practitioner, community health nursing and community mental health.

Addition of courses continues and post-graduate opportunities include: Enrolled nurses proceeding to registered nursing programs; health assistants proceeding to health inspector or health inspector tutor; B.Sc. in Nursing or in Health Education; three-year Health Laboratory Technicians program. Former NHI students account for approximately 80 percent of the staff.

The Inter-American Division Program of Loma Linda University -- Winston J. Craig Ph.D, M.P.H., R.D.

The Office of International Health of LLU was in the process of writing new guidelines for its off-campus programs. Proposals include a six-year program with courses offered annually in concentrated fashion for 4-6 weeks at a time.

In 1979, an off-campus teaching sequence for an M.S.P.H. degree began at four different sites in Central America and the Caribbean. The majority of students were physicians, nurses and health administrators but non-health professionals were also accepted. The program's objectives were to coordinate teaching, research and service efforts of faculty with expertise and interest in solving public health problems of Third World countries. M.S.P.H. degrees are offered for those without professional health training and experience, and M.P.H for health professionals.

Service projects of this Seventh-day Adventists program have been located in Pakistan, Sarawak, Haiti, Tanzania, Marshall Islands, Philippines, Central America and the Caribbean. Goals are to help people help themselves to better health, to assist existing organizations to greater effectiveness, and to encourage development of local health training programs.

Curriculum for the Public Health Diploma Program of the Muhimbili Medical Center, Dar Es Salaam, United Republic of Tanzania -- Prof. W.J. Makene;

Goals include: providing doctors with skills needed to be the District Medical Officer; offering a curriculum flexible enough to admit people of different educational backgrounds.

Duties of district medical officers include promotive and preventive health services; management of district health programs, such as disease control;
maternal/child health and family planning; medical legal services; and administration of office and staff.

DPH candidates pursue approved study programs of full-time attendance for minimum of one calendar year or maximum of three years for part-time students. Courses include: epidemiology, biostatistics, development and management studies, behavioral science and health education, sanitation,
parasitology/entomology, and a field work project.

Role of the Public Health Worker in Famine Relief -- Cladio Schuftan M.D.

Their unique position places public health workers in a key role in initiating relief operations. Because they are on-site before and when disaster strikes, they can observe early warning signs of disasters, such as drought, and take steps to minimize their effects. Using whatever meager resources available, PHWs cope with disasters -- triaging victims, organizing community members into health brigades, becoming the right hand of whomever is in control in the community, and serving as liaison between external relief teams and the community.

To function effectively as members of the health team, PHW's need training that relates to their expected roles. They also need on-going education to sharpen logistics and managerial skills, as well as continuing education in health service.

(See Input Summaries for details; See "Questions, Suggestions, and Other Input" for responses from Swaziland, Holland, Lesotho, and UNICEF, USAID.)

INPUT SUMMARY

The consensus seems to be that on-site or field training should be added to the academic curriculum because it is an important part of the total public health care training program for physicians, dentists, nurses, public health workers and educators, and that it's imperative to train all personnel to be public health oriented and to be "trained to be trainers".

Emphasis in one report was placed on the importance of the village public health worker, who needs to be trained to anticipate disaster needs, request aid from the regional center, and then coordinate all health and disaster relief efforts, working with local civic leaders and the doctors and nurses sent from the regional center, to form a disaster relief and multidisciplinary public health "team."

Among the main curriculum needs, expressed by those who shared their expertise, are: nutrition; infant and maternal health (includes family planning); anticipation and identification of possible epidemic diseases or disasters, such as crop failures; development of research facilities; training in epidemiology for all health care workers, and training that focuses on use of epidemiology and clinical studies as complementary functions in the care of individual patients, their families, and in development of community health programs.

Also: management training to facilitate integration or coordination of curative, rehabilitative, preventive and promotive health services; focus on sociocultural as well as biomedical aspects of health care; infectious disease control; sanitation; and continuous or periodic evaluation of all programs to determine their effectiveness and/or need for change. Also noted was the need for courses in different languages to be met by an international faculty, which could also provide insights and perspectives from their countries' programs.

The importance of cooperation between universities, health ministries of the different countries, and among the individual health care providers was also emphasized, as was the need to fund prospective students needing scholarships, to use expertise of local health professionals, and to provide career advancement incentives to make health care occupations more attractive to those who would, like Dr. King, choose to live a "committed life" in the service of others.

Input Summations : Marcy Meffert, auxiliary staff TMC;
With the supervision of Dr. James P. Carter, chairman, TMC Department of Nutrition, and Mobile MPH Program project director.

REVIEW OF MOBILE MPH/CERTIFICATE PROJECT FUND RAISING EFFORTS

REVIEW OF MOBILE MPH/CERTIFICATE PROJECT FUND RAISING EFFORTS:

From: Dr. James P. Carter
Chairman and Professor
Department of Nutrition
Tulane Univ. Medical Center.
To: Rose Marie Wilkinson
Director, Development Office
February 11, 1983

Re: Request for assistance in developing a funding strategy to implement the Mobile MPH/Certificate Poject.

Possible donor countries include:
Sweden
Norway
The Netherlands
West Germany
Canada (including the International Development Research Center)
United Kingdom
Denmark

Assistance is requested in approaching Rockefeller and Ford foundations, which jointly co-sponsor a committee and group of consultants to develop a Southern Africa Development Strategy, and also, to identify European foundations which may be willing to donate funds.

Already begun is a proposal to obtain continuation of funding for USAID, and contacts are being developed with the following multinational agencies:
World Health Organization
UNICEF
World Bank

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Memos from: Rose Marie Wilkinson, Tulane MC Director of Development
Arlene Stanton, Director, Foundation Relations, TMC Development
April & May, 1983
Re: New York trip to meet with possible donors:

Ford Foundation:

Meetings with Richard A. Horovitz, program officer in Developing Country Programs, specializing in Africa, Mr. Oscar Harkavy and Miss Marsha Hunter of Ford Foundation's Fair Start Program -- Current emphasis is on fair start/child survival programs in the Urban Poverty area, and all public health concerns need fit this emphasis. Decision, if any, on the Tulane program would be made by Goran Hyden, Swedish field officer for Eastern and Southern Africa, who would review the proposal and make his recommendations to the foundation.

Ford Foundation prefers more modest programs with specific research areas which either improve parents capacity to better care for children and themselves, pre-natally, and/or help them amake better use of organizations available to them. Ford can't fund biomedical, university-based research.
Ford invests relatively small portions of its money to international projects ($4-5 million).

Other possible donors suggested are:
NORAD, SIDA and SARAC (Swedish), NOBID, ODA (British), OXFAM (Oxford Famine Committee), Trocine (Irish), Danida (Danish), African Medicine and Research Foundation, CIDA (Ottawa, Canada), International Development Research Council (funds for research only), American Express Company Foundation.

Also: Council for International Business, 1212 Avenue of the Americas, N.Y, (a source of information on businesses, such as pharmaceuticals, which operate in Africa), Committee of International Grantmakers, 1825 L Street, N.W., Washington, D.C. 20036, 202-466-6512 (Washington-based group headed by Bill Moody of Rockefeller Foundation).

United Nations:

UN Development Program -- Visit with Mr. John von Arnold, chief, Special Projects, Division of Information for the UNDP, One U.N. Plaza, N.Y., NY 10017, 212-906-5309. UNDP has a public health training program. A list of missions is available from the UN.

Contacts made with Rockefeller Foundation, various missions and smaller foundations.

From: Marit Berggrav
Acting Head of Division
Health, Family Planning and Education
Norwegian Agency for International Development (NORAD)
Boks 8142 Oslo Dep.
Oslo 1
Ph. 02-31 40 55
To: Dr. James Carter
May 4, 1983

Re: Proposed Mobile Public Health Training Program in Southern Africa.

NORAD, on request from Southern Africa Development Coordination Conference (SADCC), surveyed health training facilities in the SADCC region. The consultancy team report was submitted to SADCC early February, 1983, and discussed in a workshop held in Swaziland, April 17-19.

NORAD is further prepared to assist in preparatory work with project proposals as soon as they are approved by the council in May. According to our guidelines, we will relate directly to the SADCC representives concerning possible future cooperation within manpower development.

If your project, which seems interesting, is included among the project proposals given priority from SADCC, it will, from our side, be considered with the other proposals presented. Our assessment will relate to areas in which we assume to have special professional competance in Norway, as well as areas in which we have had previous cooperation within the health sector of the region.

From: Francis A Kornegay Jr.
Research Director
African Bibliographic Center
African Communications Liaison Service Inc.
1346 Connecticut Ave., N.W., Suite 901
Washington D.C. 20036
Ph. 202-223-1392
June 1, 1983

Re: The May meeting of the SADCC Council of Ministers in Dar es Salaam.

From discussions at the Tanzanian Embassy, it seems that the health project being vetted by Swaziland was not tabled at the meeting. The Embassy is still awaiting details about the meeting's outcome. It has been reported that items not tabled in Dar might be tabled at the upcoming SADCC Council of Ministers meeting preceeding the SADCC summit in Maputo in July.

News reports of the SADCC May meeting do not list public health among the subjects discussed by the ministers. Reports were given on transport, communications, agricultural concerns, manpower development, industry, energy conservation, fisheries, wildlife, forestry, mining and the Southern African Development Fund. A Trade agreement was reported to be tabled.

A summit was scheduled for July in Maputo, and the SADCC Annual Conference was scheduled for Lusaka in November.

Because of the region's drought, news reports noted that the nine SADCC member states would be forced to divert their resources from other sectors to relief and rehabilitation costs unless substantial additional foreign assistance was made available. During the November conference, it was announced, ministers would focus their attention on agriculture, including food security, animal disease control, agricultural research, soil and water conservation, and land utilization.

SADCC's member states include: Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia, and Zimbabwe.

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From: Bo Stenson
Head of Health Division
Swedish International Development Authority (SIDA)
S-105 25 Stockholm, Sweden
Ph. 08-15 01 00
To: Dr. James Carter
June 8, 1983

Re: Mobile Public Health Training Program for Southern Africa

SIDA has decided to support only a limited number of sectors of the total SADCC program. These sectors are transport and communications and soil conservation. It is not possible to include more sectors. Thus, SIDA will not be able to support the MPH program.

Undoubtedly, training opportunities in the public health field are an essential element in improving health conditions in Southern Africa.

SIDA will follow developments in the program through its close collaboration with the Nordic School of Public Health.

SADCC NORAD CONSULTANCY SURVEY OF HEALTH TRAINING FACILITIES

Survey conducted from:
Oct. 19 to Dec. 21, 1982,
by:

Egil Sniloberg, M.D., M.P.H.
Chief Medical Officer
Mission Director

Esther Gjertsen
Assistant Professor
in Nursing Education

Marit Karlsen
Pharmacy Technician
and Secretary

NORAD CONSULTANCY STUDY

GENERAL BACKGROUND

When SADCC met in Blantyre, in November, 1981, the working group on Regional Manpower Development examined six consultancy studies and two projects being presented to SADCC's international cooperation partners. When Consultancy 3, Regional Cooperation in Health Training was discussed, it was noted that certain SADCC members had health training institutions playing a regional role in this field, and there was a need to coordinate existing programs. Also noted was that many students are still being sent for training outside the region.

The importance of future cooperation in projects making full use of existing facilities was emphasized and a survey of such facilities in SADCC was requested.

Norway agreed to finance and implement the consultancy services and agreement on Terms of Reference was obtained through correspondence between Mr. V.E. Skihondze, Swaziland, chairman of the SADCC Regional Training Council, and Norwegian Agency for International Development (NORAD).

NORAD appointed Dr. Egil Sniloberg, Ms. Esther Gjertsen and Ms. Marit Karlsen to conduct the survey of existing health training facilities within the region, including promotive, preventive, environmental, curative and administrative health services from village level up to university level.

The survey would include information from each institution about:

The number of students admitted; admission requirements; drop-out rate; duration of training course; working language; diploma or certificate; curriculum and teachers' qualifications, and within the framework of available information, indicate future demands relating to national plans of the region.

IMPLEMENTATION OF THE STUDY

Consultants visited each SADCC country for approximately one week from Oct. 19 to Dec. 21, 1982. The study, facilitated by cooperation with Swaziland coordinators and regional Ministries of Health, and includes all training programs of governments, missions and mining companies. Quality was not judged.

TEAM SCHEDULE

During the opening visit to the Regional Training Council Secretariat, Swaziland, the team was asked to make recommendations for future projects, look for projects in preliminary planning stages that could become SADCC projects, focus on extension of existing facilities, and get health officials' priorities for health manpower training.

The tight time schedule made indepth study impossible so recommendations of the team must be regarded as tentative. Scheduled were meetings with officials from ministries of health, planning, finance and education; visits to health training institutions and interviews with personnel; document review, and a concluding meeting with the Regional Training Council Secretariat, Swaziland.

PRESENT MANPOWER SITUATION

Although health personnel training is a priority in SADCC countries, there is still a shortage of health manpower, and that shortage is expected to continue due to the ever increasing population. Most countries are drawing up health manpower plans to meet the increasing demands for health service and for quality and quantity in training facilities. The total population of the nine countries is estimated to be 63 million, with an annual increase of about 2 million.

SADCC countries have great numbers of expatriates in their health services in all cadres. For example, in some countries, 80 percent of the medical doctors are expatriates, and of the total 3,500 to 4,000 doctors in the entire region, more than 2,000 were expatriates. Some countries have no dentists at all who are nationals. There is a need to localize health posts and to replace health workers who leave the serice.

TRAINING LEVELS

Level 1. Community-based Health Workers: (e.g. traditionally birth attendants, family welfare educators, village health workers, etc.) Those with little formal education and a few weeks of training (except in Mozambique where 9 months of professional training is given).

Level 2. Assistants: (e.g. health assistants, enrolled nurses, laboratory assistants, etc.) These usually have 10 years of primary and secondary educaion in English-speaking countries, and 6-7 years in Portuguese-speaking countries,. and 1-3 years of professional training.

Level 3. Technicians: (e.g. registered nurses, pharmacy or laboratory technicians, health inspectors, clinical officers, etc.) These have 11-13 years of primary and secodary education in English-speaking countries; 8-9 years in Portuguese-speaking countries; professional training for 3-4 years.

Level 4. Professionals: (University trained. e.g. university degree courses for nursing tutors, pharmacists, medical doctors, public health engineers, etc.) These have 11-13 years primary and secondary education; professional training ranges from 3 years (pharmacists) to 11 years (medical specialists).

Health workers at levels 1 and 2 are trained in their home countries; those at level 3 are also trained in all countries but not all countries can train all cadres at this level so some students are sent abroad. Although there is training for level 4 in the SADCC region, the capacity is so limited that even those countries with training institutions have to send students abroad. It will be necessary for levels 3 and 4 to study abroad for a considerable time and therefore, SADCC cooperation is very important in the training of these cadres.

SADCC countries' policy is to train as many cadres as possible within the country, or to find study places in Africa for students who must go abroad (a policy supported by WHO). Due to

Africa's limited capacity, many students are sent to North America, Europe and other countries.

Disadvantages of study abroad are: Not enough scholarships for qualified students; difficulties in finding places for students in African and other countries; difficulties in finding students who meet entry requirements of universities abroad.

SACDD COOPERATIOM ON HEALTH MANPOWER DEVELOPMENT

Cooperation between SADCC countries on health manpower development is recommended because:

1. There are similarities in demographic factors, educational systems, and health problems, policies, care systems, and manpower structures.
2. It is more economical to train students in the region than abroad.
3. Training within the region could be more relevant than elsewhere.
4. There has been small scale cooperation between the countries on health manpower development for many years.
5. Some countries have experienced "brain drain" when students are trained outside of Africa.

GENERAL EDUCATION

Students in English-speaking countries have 7-8 years primary and 4-5 years secondary education while thoses in Mozambique and Angola have 4 years primary and 2-7 years secondary education. Because too few students complete 11 years of primary and secondary education, health training institutions in these countries have to lower intake requirements.

All nine countries are expanding educationally. For example:

New general educational programs were scheduled to be introduced in Mozambique in 1983 and in Angola, 3,000 students completed secondary school in 1980, but 50,000 were expected to complete the program in 1984.

In Botswana, 185 students passed the Cambridge examination in 1971 and 700 in 1981. All countries have similar examples of producing more and better qualified students for health training and while Junior Certificate is the minimum formal educational requirement, many students with GCE are admitted.

HEALTH PROBLEMS

Data collecting methods vary in the nine countries; it's difficult to compare, but infections of various kinds -- respiratory and skin infections, diarrheal diseases -- are the most prevalent diseases in all countries. Other health problems include tuberculosis, malaria, schistosomiasis, nutritional deficiences, injuries.

HEALTH POLICIES AND PLANS

The nine SADCC countries have adopted the primary health care approach -- promotive, preventive, curative and environmental services, to be aimed at the entire population. They also plan to strengthen secondary and tertiary levels to support primary care

services.

Facilities are similar in the nine countries and the levels are:

Level 1: Basic unit -- health post, clinic, dispensary -- in peripheral villages/communities.

Level 2: Health centers, responsible for larger geographical areas with staff responsible for professional supervision of Level 1 units.

Level 3: District hospitals, which care for referred patients from lower levels and provide supervisory staff for lower levels.

Level 4: Regional and/or central hospitals, which provide specialized services to referred patients.

Priority is given to establishing units in levels 1 and 2. Training of health manpower has priority in all countries and emphasis is on training health workers in levels 3 and 4.

TRAINING COSTS

With the exception of medical school in Zimbabwe, where the cost is U.S. $13-14,000, training is considerably less expensive in Africa than elsewhere. For example: Training costs per year in U.S. dollars is: $20,000 in the U.S.; $13-14,000 in Canada or the United Kingdom; $5-7,000 in Tanzania, Kenya and Nigeria. Cost estimation methods differ in the nine countries and many institutions train under difficult conditions, but as quality increases, the cost is also expected to increase but remain lower than training abroad.

RELEVANCE OF TRAINING

Health workers are trained to solve health problems with the resources they have at hand. The nine countries have similar problems and have decided to avoid advanced level technology in health services so that designing, adjusting, and running the most relevant training programs within the region is possible.

EXISTING COOPERATION

Altough the training institutions' capacities limit the numbers of students in cooperative training, SADCC countries have worked together. For example:

Students from Zambia are admitted to the University of Dar es Salaam pharmacy degree program;

Foreign students are accepted into the five medical schools of the SADCC countries;

Institute of Development Management in Botswana, Lesotho and Swaziland admits students from other countries;

Nurses from Lesotho have specialized in anaesthesia in Mozambique.

Students from all seven English-speaking SADCC countries enter the maintenance technicians training program in Swaziland through cooperation between the Commonwealth Health Region and Government of Swaziland.

Botswana, Lesotho and Swaziland have a common Nursing Education Board.

WHO and the Government of Angola run a higher training nursing

program for participants from several countries.

Some problems with cooperation are: different health worker registration requirements in the countries; foreign currency and language problems; the countries' economic situations; the destabilization policy in Southern Africa.

Some solutions to these problems could be: establishment of a "Training Council" comprised of each country's medical council, nursing council or MOH to work on health manpower development problems; manpower input from cooperating agencies to ease the shortage of training personnel until enough nationals are trained to staff programs; need for aid from cooperating agencies to enable foreign students to matriculate. Language and currency problems can be solved, but some officials are concerned about South Africa's destabilization policy and its effect on health training institutions.

GENERAL RECOMMENDATIONS

Each country should, when considering SADCC cooperation, bear in mind which cadres they will train for national use, which ones for other SADCC members, and which ones they would like trained in another SADCC country.

Recommendations for Training Institutions:

1. Expand existing institutions; possibly establish new ones.

2. Decide upon institutions' sizes according to cadres offered; consider that for most cadres, three or four medium-sized institutions may be preferable to one large one. Also, training centers should continue to be national institutions, leaving responsibilities for them to the host country.

3. To establish new institutions or expand existing ones, long-term financial support from cooperating agencies on a bilateral or multilateral basis is necessary. Until there are enough local tutors, qualified teachers from outside the region will be needed,, and it might be an advantage to be assisted by one cooperating agency responsible for each institution, with assistance given either directly by that agency or through an associated university or college.

4. The three party agreement/quota system is recommended. Agreements need be made for the host country to take responsibility for running the institution and training a quota of students from other SADCC countries, which in turn, need to guarantee a certain number of students annually. The cooperating agency/training institution must guarantee specific financial and manpower support.

5. Agree to a staff development program of national teachers.

6. Courses with blocks of practical training could be given in the students' home countries so that they can practice skills in the context in which they'll work.

Preferential Areas of Cooperation:

Training of teachers, shared medical equipment maintenance and administration/management personnel, establishment of a regional resource center and regional specialty training programs when separate national training programs would not be economical.

Establishment of Regional Resource Centers:

The team recommends that priority be given to establishing regional resource centers in the most fundamental health disciplines, and if possible, in connection with existing professional health training institutions which already have the manpower needed for a resource center. Additional staff will be needed to meet expansion of existing libraries.

Resource centers should emphasize production of regionally relevant textbooks and teaching aids, offer advice on curricula development and educational programs. Facilities for hiring professionals from other institutions for short-term projects should exist.

Library services, in addition to current reference materials, need translation facilities from English to Portuguese and vice versa.

Expatriate services need to be calculated in running the centers.

Exchange of Teachers:

A system for exchange of teachers within the same profession would benefit the schools and the expenses of such an exchange system should be paid by a cooperating agency, and could be administered by the Regional Training Council.

Coordinating Commonwealth, SADCC and WHO Efforts:

Ongoing communication between the three international bodies , Commonwealth Region for East, Central and Southern Africa, SADCC countries and WHO Subregion III, ensures coordination of their efforts and this should be systemized for maximum benefit.

Re-inforcement of the Secretariat of the SADCC Regional Training Council:

The Secretariat needs re-inforcement to perform such duties as coordinating projects. It will likely be responsible for administration of agreements between training program partners, and administration of the SADCC cooperation on Commonwealth and WHO programs.

SUMMARY DATA OF EXISTING TRAINING FACILITIES
SPECIFIC RECOMMENDATIONS

We recommend a great number of projects, fully aware that it is unrealistic to expect all to be implemented. Although the projects have been discussed in the countries visited, no official committments have been made. Not having sufficient data, we have not set priorities, and believe the SADCC countries should make such decisions.

Priorities need to be set in the following categories:

1. Use of existing facilities with expansion capabilities, where only an agreement is needed to provide scholarships, supplement staff, libraries, etc.
2. Projects already planned in detail but which have been postponed due to lack of funds and manpower.
3. Projects needing further planning.

STATICAL INFORMATION
CHARTS, TABLES, GRAPHS
Prepared by NORAD

CADRE: LEVEL I HEALTH WORKERS

Country	No. of schools	Annual intake	Course duration (years)	Language of instruction English = E Portuguese = P	ENTRY REQUIREMENTS: Years of basic education	ENTRY REQUIREMENTS: Specifications	Designation/Remarks
ANGOLA			6 months	P		18 years, able to Read and Write and Count	Health Promoters
	1		45 days	P	4		Social activists
BOTSWANA	1	90	11 weeks	E/Setswana	7		Family Welfare Educators
LESOTHO			7 weeks	Sesotho		Read and Write Sesotho	Village Health Workers
MALAWI	1	30	6 weeks 2 weeks		8	Have Working Experience as TBA's	Primary Health Workers (experimental) Traditional Birth Attendants
MOZAMBIQUE			9 months	P	4		APE - Village Health Workers
SWAZILAND			3 months	Siswati		Read and Write Siswati	Rural Health Motivators
TANZANIA			3 months	Swahili			Village Health Workers (not yet started)
ZAMBIA			6 weeks 7 weeks		3	25 years of age Have Working Experience as TBA's	Community Health Workers Traditional Birth Attendants
ZIMBABWE			12 weeks			Read and Write	Village Health Workers

TABLE : ENROLLED NURSES

Country	No. of schools	Annual intake	Course duration (years)	Language of instruction English = E Portuguese = P	ENTRY REQUIREMENTS		Designation/Remarks
					Years of basic education	Specifications	
ANGOLA	21	Luanda 80	2	P	6		General Nurse
BOTSWANA	4	140	2	E	10	Junior Certificate + aptitute tests	Enrolled Nurse
LESOTHO	4	80	1	E	10	Junior Certificate	Assistant Nurse
MALAWI	1	60	2	E	10	Junior Certificate with pass in English + 2 science subjects	Enrolled Nurse
MOZAMBIQUE	4	150	2	P	6		General Nurse A
SWAZILAND	1	20	2	E	10	Junior Certificate	Nursing Assistant
TANZANIA	21	520	3 + 1	E	7	Primary School Education. Entrance Exam. 2 years secondary preferred	Registered B-Nurse/Midwife
ZAMBIA	16	600	2	E	10	Form 1: Junior Certificate with passes in Biology, English + 3 others, one science subject	Enrolled Nurse

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CADRE: Enrolled Nurse

	HEALTH PERSONNEL EMPLOYED			TRAINING PROGRAMMES ANNUAL INTAKE		TOTAL ENROLLMENT BASED ON PRESUPPOSED 1982-LEVEL OF INTAKE
	Health workers		Population per health worker	Number of students admitted	Population per student	
	Year	No.				
ANGOLA				21 schools		21 schools
BOTSWANA	1980	600	1,600	140	6,900	280
LESOTHO	1979			80	17,300	80
MALAWI	1980	1293	4,600	60	105,700	120
MOZAMBIQUE	1981	2134+	5,800	150	85,000	300
SWAZILAND	1980	100	5,900	20	29,300	40
TANZANIA	1980	7275+	2,700	520	37,600	2,080
ZAMBIA	1979	6200+	1,000	800	7,700	1,600
ZIMBABWE	1982					
TOTAL TRAINING CAPACITY:						4,500

+The numbers include both Registered Nurses and Enrolled Nurses (or equivalents).

CADRE:

Country	No. of Schools	Annual Intake	Course duration (Years)	Language of Instruction English = E Portuguese = P	ENTRY REQUIREMENTS: Years of basic education	Specifications	Designation/Remarks
ANGOLA	several	Luanda 40	2	P	6 + 2	6 years + Nursing Certificate	Mother and Child Nurse
BOTSWANA	1	40	1½	E	10 + 2	2 years Enrolled Nurse	Enrolled Nurse/Midwife
MALAWI	6	95	1	E	10 + 2	Enrolled Nurse	Enrolled Nurse/Midwife
MOZAMBIQUE	2	49	2½	P	6		Midwife A
	2	221	2½	P	6	Females only	Mother and Child Nurse
TANZANIA	19	620	2	E	7	Entrance Examination Females only	Maternal and Child Health Aids (MCH Aids)
ZAMBIA	6	250	1	E	10 + 2	Enrolled Nurse	Enrolled Nurse/Midwife
ZIMBABWE		30	1	E	10 + 3	Medical Assistant	Maternity-Assistant

CADRE: Enrolled Midwives/Mother and Child Nurses - Aids

	HEALTH PERSONNEL EMPLOYED			TRAINING PROGRAMMES ANNUAL INTAKE		TOTAL ENROLLMENT BASED ON PRESUPPOSED 1982-LEVEL OF INTAKE
	Health workers		Population per health worker	Number of students admitted	Population per student	
	Year	No.				
ANGOLA				40+	179,000	80+
BOTSWANA	1980			40	24,200	60
LESOTHO	1979		-	-	-	-
MALAWI	1980			95	66,700	95
MOZAMBIQUE	1981	490	25,300	270	47,000	270
SWAZILAND	1980	-	-	-	-	-
TANZANIA	1980	2070	9,500	620	31,000	620
ZAMBIA	1979			250	25,000	250
ZIMBABWE	1982			30	265,000	30
TOTAL TRAINING CAPACITY:						1,405

+Luanda figures only.

CADRE: REGISTERED NURSES

Country	No. of schools	Annual intake	Course duration (years)	Language of instruction English = E Portuguese = P	ENTRY REQUIREMENTS		Designation/Remarks
					Years of basic education	Specifications	
BOTSWANA	2	80	3	E	12	GCE O'level	Registered Nurse
SWAZILAND	2	71	3	E	12	O'level with 5 passes of which 3 science subjects + English	Diploma in General Nursing
ZAMBIA	4	240	3	E	12	GCE O'level pass English Maths Gen. Science Biology	Nurse
ZIMBABWE	4	225	3	E	12	GCE O'level with 4 credits	Nurse

CADRE: Registered Nurses

	HEALTH PERSONNEL EMPLOYED			TRAINING PROGRAMMES ANNUAL INTAKE		TOTAL ENROLLMENT BASED ON PRESUPPOSED 1982-LEVEL OF INTAKE
	Health workers		Population per health worker	Number of students admitted	Population per student	
	Year	No.				
ANGOLA						
BOTSWANA	1980			80	12,000	240
LESOTHO	1979					
MALAWI	1980					
MOZAMBIQUE	1981					
SWAZILAND	1980			71	8,200	213
TANZANIA	1980					
ZAMBIA	1979			240	26,000	720
ZIMBABWE	1982			225	35,000	675
TOTAL TRAINING CAPACITY:						1,848

CADRE REGISTERED NURSES/REGISTERED MIDWIVES

Country	no. of schools	Annual intake	Course duration (years)	Language of instruction English = E Portuguese = P	ENTRY REQUIREMENTS		Designation/Remarks
					Years of basic education	Specifications	
BOTSWANA	2	69	1	E	12 + 3	Registered Nurse	Registered Nurse/Midwife
LESOTHO	3	70	3 + 1	E	12	GCE O'level	" " "
MALAWI	2	60	4	E	12	GCE O'level Credits in English Biology and Physics	" " "
SWAZILAND	1	25	1	E	12 + 3	Diploma in General Nursing	" " "
TANZANIA	3	150	4	E	11	GCE pass in Biology, Chemistry, Physics, English and Swahili	" " "
ZAMBIA	3	60	1	E	12 + 3	Registered Nurse	" " "
ZIMBABWE	2	45	1	E	12 + 3	Registered Nurse	" " "

CADRE: Registered Nurses/Midwives

	HEALTH PERSONNEL EMPLOYED			TRAINING PROGRAMMES ANNUAL INTAKE		TOTAL ENROLLMENT
	Health workers		Population per health worker	Number of students admitted	Population per student	BASED ON PRESUPPOSED 1982-LEVEL OF INTAKE
	Year	No.				
ANGOLA				-		-
BOTSWANA	1980	471	2,050	69	14,000	69
LESOTHO	1979	407	2,800	70	19,700	280
MALAWI	1980	402	15,000	60	106,000	240
MOZAMBIQUE	1981	2134+	5,800	-	-	-
SWAZILAND	1980	281	2,100	25	23,000	25
TANZANIA	1980	7275+	2,700	150	130,000	600
ZAMBIA	1979	6200+	1,000	60	103,000	60
ZIMBABWE	1982	2230	3,600	45	176,000	45
TOTAL TRAINING CAPACITY:						1,319

+The numbers include both Registered Nurses and Enrolled Nurses.

CADRE NURSE ANAESTHETIST

Country	No. of Schools	Annual Intake	Course duration (years)	Language of Instruction English = E Portuguese = P	ENTRY REQUIREMENTS: Years of basic education	ENTRY REQUIREMENTS: Specifications	Designation/Remarks
ANGOLA	1	10.	2	P	6 + 2	Nursing Certificate	Nurse Anaesthetist
BOTSWANA	1	10	1	E	12 + 4	Registered Nurse/ Midwife Certificate	Nurse Anaesthetist
MOZAMBIQUE	1	15	1½	P	9 + 2	Nurse A Certificate (2 years)	Nurse Anaesthetist

CADRE: INTENSIVE CARE NURSE

Country	No. of schools	Annual intake	Course duration (years)	Language of instruction English = E Portuguese = P	ENTRY REQUIREMENTS: Years of basic education	ENTRY REQUIREMENTS: Specifications	Designation/Remarks
ZIMBABWE	4	24	1	E		Registered Nurse + 1 year experience	I.C.U. Nurse

CADRE: OPHTALMIC NURSING

Country	No. of schools	Annual intake	Course duration (years)	Language of instruction English = E Portuguese = P	ENTRY REQUIREMENTS: Years of basic education	ENTRY REQUIREMENTS: Specifications	Designation/Remarks
TANZANIA		26	1½	E	7 + 4	B-Nurse Certificate + 4 years working experience + Entrance Test	Opthalmic Nurse Register A

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CADRE: PAEDIATRIC NURSING

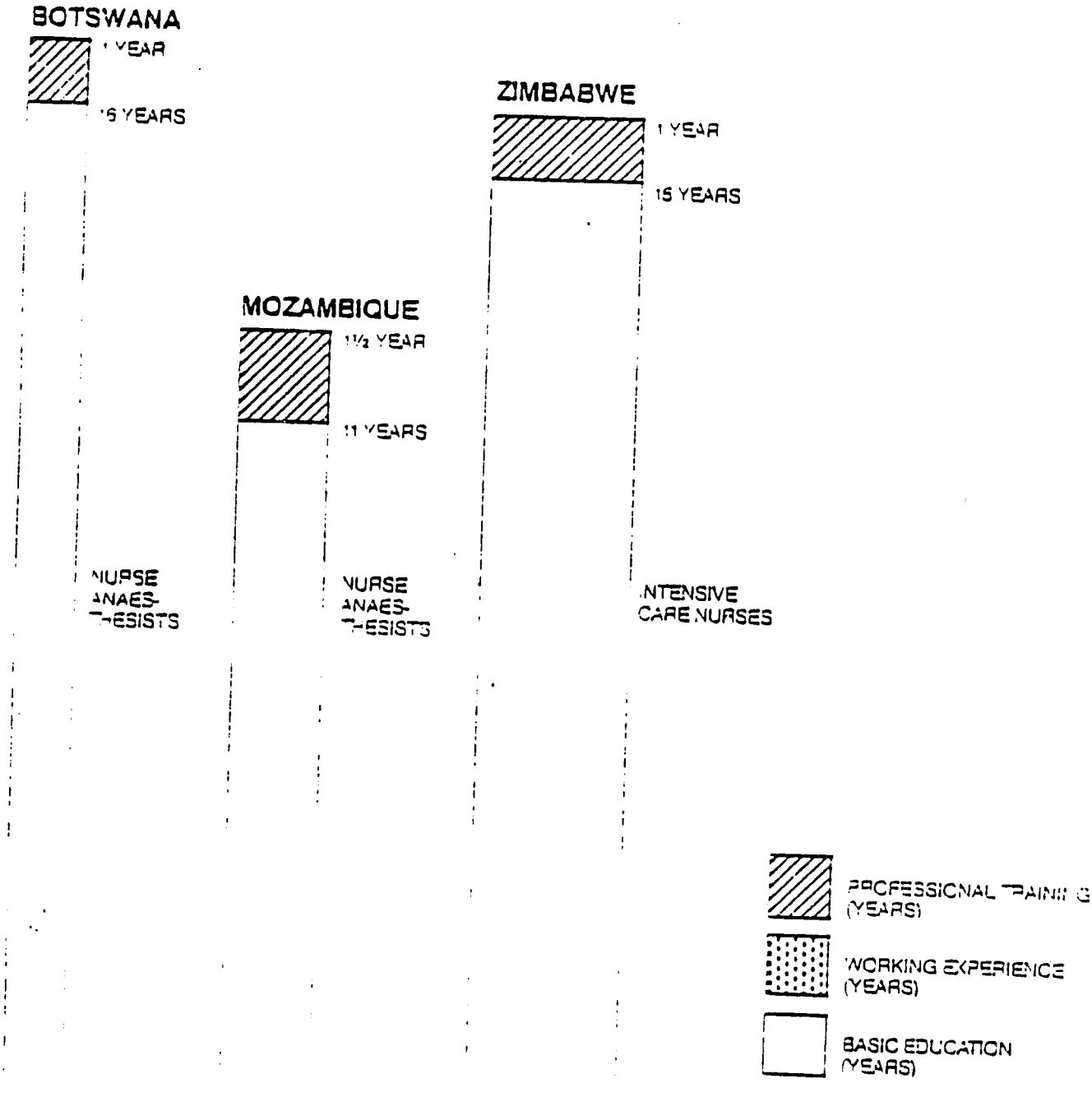
Country	No. of schools	Annual intake	Course duration (years)	Language of instruction English = E Portuguese = P	ENTRY REQUIREMENTS		Designation/Remarks
					Years of basic education	Specifications	
MOZAMBIQUE	1	15	8 Months	P	8	Nurse A Certificate (2 years)	Paediatric Nurse Course starts 1983
TANZANIA	1	25	1½	E	7 + 4	B Nurse Certificate + 4 years experience + Entrance Test	Paediatric Nurse Register A

CADRE: THEATRE TECHNIQUE NURSES

Country	No. of schools	Annual intake	Course duration (years)	Language of instruction English = E Portuguese = P	ENTRY REQUIREMENTS		Designation/Remarks
					Years of basic education	Specifications	
ANGOLA	1	10	2	P	6 + 2	Nursing Certificate	Theatre Nurse
MOZAMBIQUE	1	15	1	P	6 + 2	Nurse A Certificate	Surgical Instrument Nurse
	1	6	1½	P	9 + 2	Nurse A Certificate	Theatre Nurse
ZAMBIA	1	30	1	E	12 + 4	Registered Nurse + 1 year experience	Theatre Nurse
			1½		10 + 2	Enrolled Nurse	Theatre Nurse
ZIMBABWE	1	24	1	E		Registered Nurse + 1 year experience	Theatre Nurse

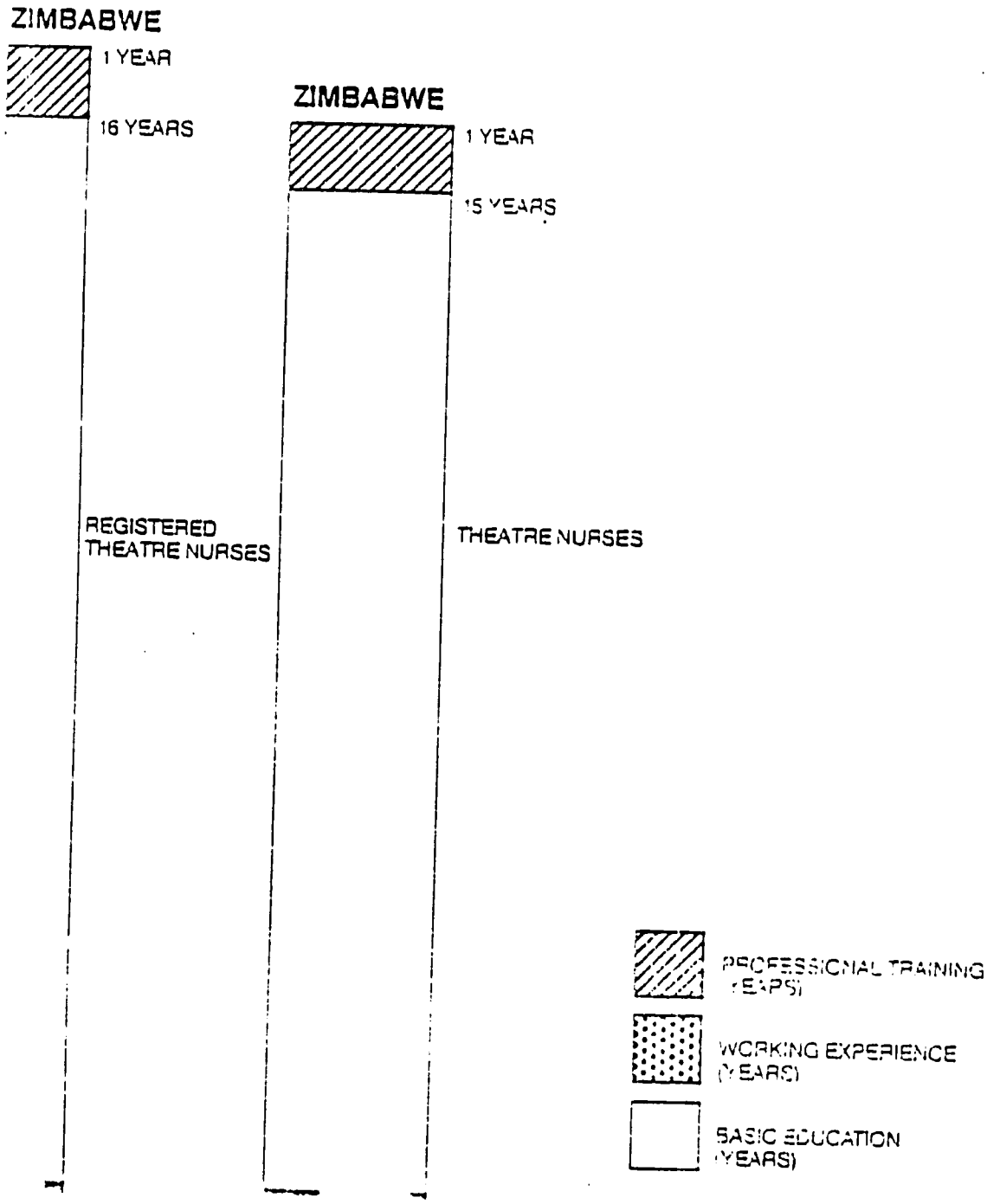
NURSING SPECIALISTS:

Admission requirement Nurse or more



NURSING SPECIALISTS:

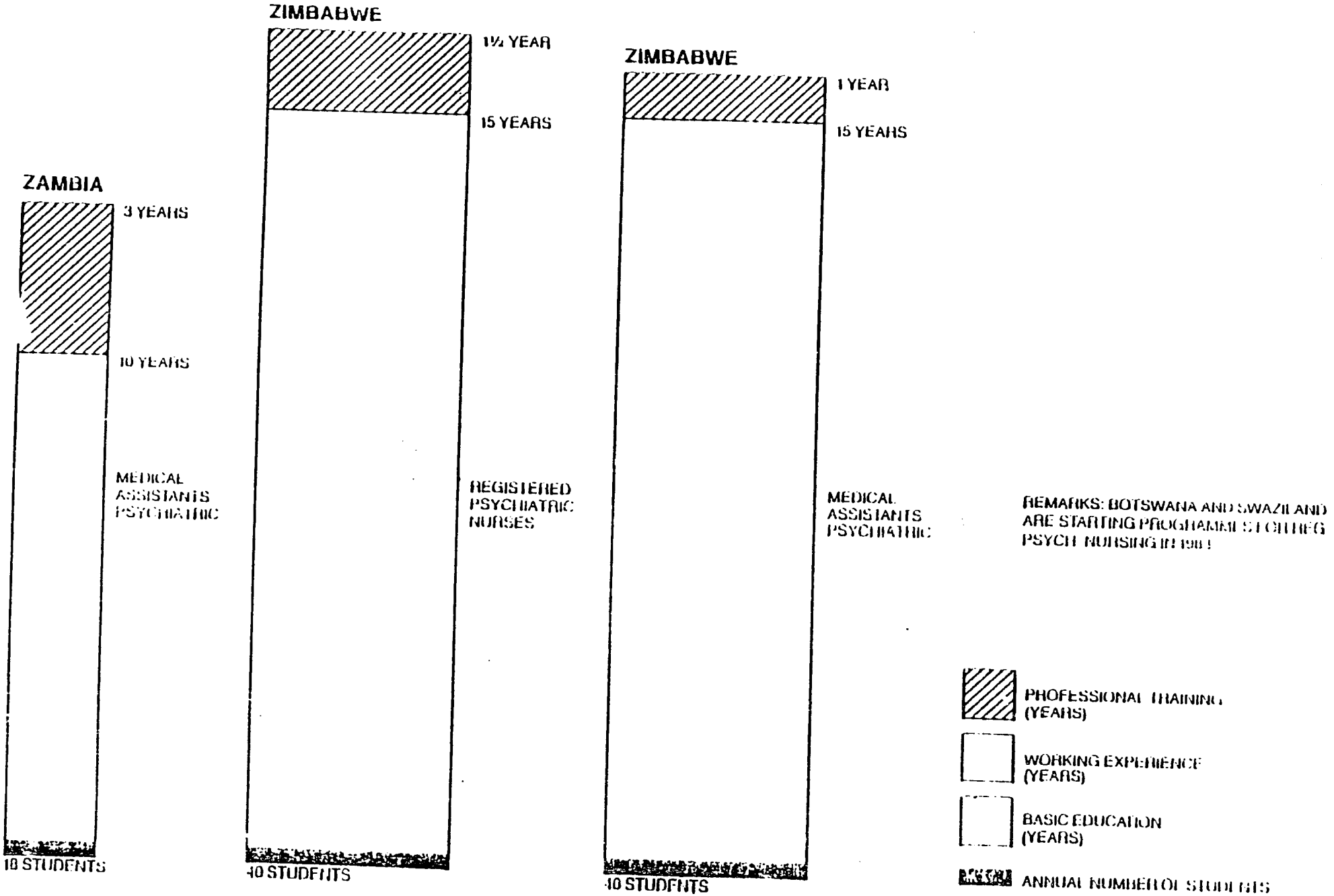
Admission requirement Nurse or more



CADRE: PSYCHIATRIC NURSING

Country	No. of schools	Annual intake	Course duration (years)	Language of instruction English = E Portuguese = P	ENTRY REQUIREMENTS		Designation/Remarks
					Years of basic education	Specifications	
BOTSWANA	1	10	1	E	12 + 3 (4)	Registered Nurse or Registered Nurse/ Midwife	Registered Psychiatric Nurse Starts 1983
MALAWI	1	50	1	E	9 + 4	EN/EM Certificate	Enrolled Psychiatric Nurse
SWAZILAND	1		1	E	12 + 4	RN/RM Certificate + 1 year experience	Psychiatric Community Mental Health Nurse. To start 1983
TANZANIA	1	45	1½	E	7 + 4	B Registered Nurse + 4 years experience + pass entrance ex.	Registered A Psychiatric Nurse
ZAMBIA	1	18	3	E	10	Junior Certificate	Med. Ass. Psychiatric
	1	60	2	E	10 + 2	Enrolled Nurse	Enrolled Psychiatric Nurse
ZIMBABWE	1	40	1½	E	12 + 3	Registered Nurse + 2 years experience	Psychiatric Nurse
	1	40	1	E	10 + 3	Med. Ass. Certificate	Med. Ass. Psychiatric

Psychiatric Nursing programmes for Registered Nurses/Medical Assistants



CADRE: Nurse Specialists, various

	HEALTH PERSONNEL EMPLOYED			TRAINING PROGRAMMES ANNUAL INTAKE		TOTAL ENROLLMENT BASED ON PRESUPPOSED 1982-LEVEL OF INTAKE
	Health workers		Population per health worker	Number of students admitted	Population per student	
	Year	No.				
ANGOLA				40+	179,000	80
BOTSWANA	1980			20	48,500	20
LESOTHO	1979					
MALAWI	1980			10	634,000	10
MOZAMBIQUE	1981			50	255,000	50
SWAZILAND	1980					
TANZANIA	1980			96	204,000	110
ZAMBIA	1979			90	69,000	150
ZIMBABWE	1982			128	62,000	130
TOTAL TRAINING CAPACITY:						550

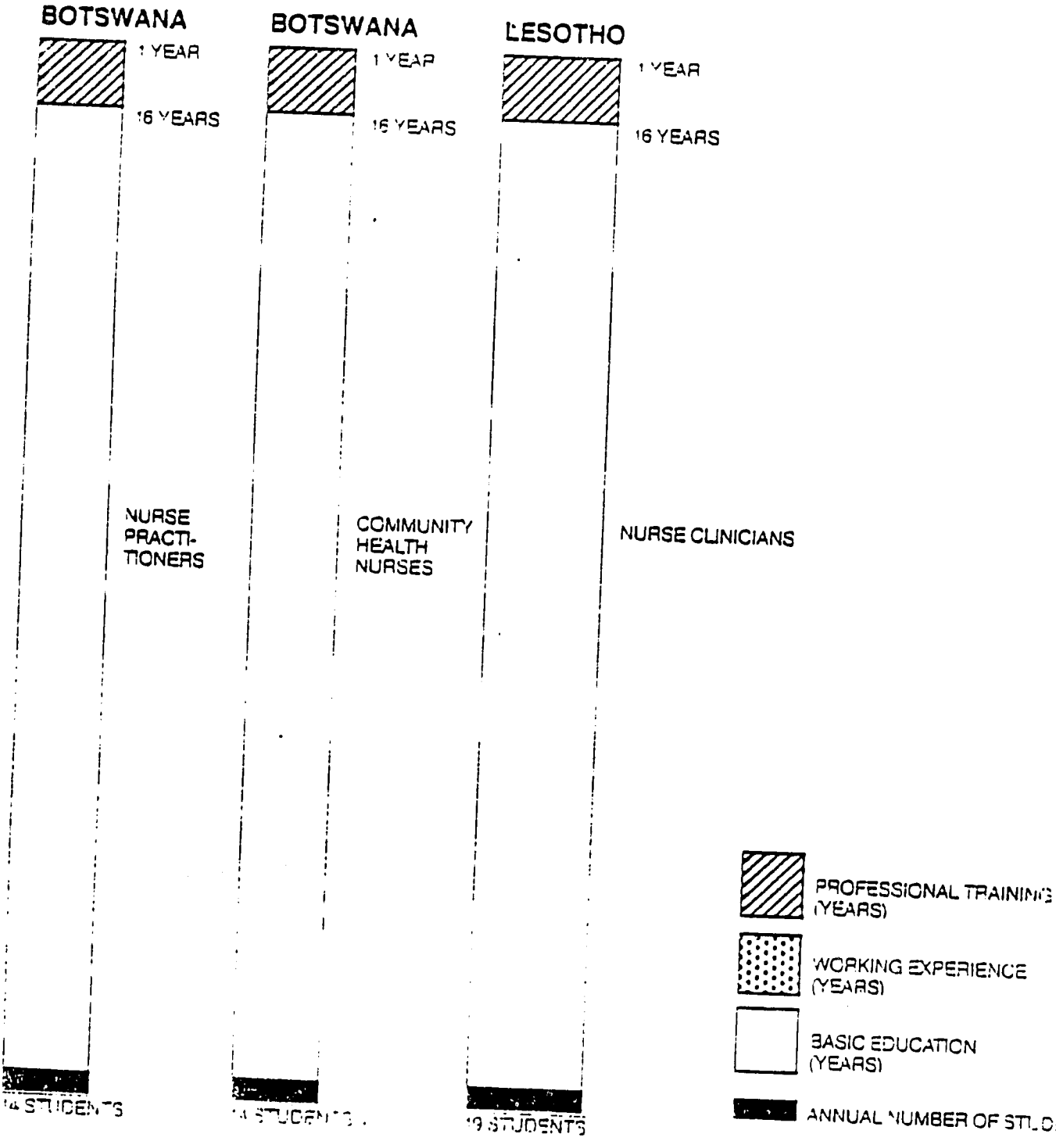
+Luanda figures only.

CADRE: POST BASIC NURSING PROGRAMME

Country	No. of schools	Annual intake	Course duration (years)	Language of instruction English = E Portuguese = P	ENTRY REQUIREMENTS: Years of basic education	ENTRY REQUIREMENTS: Specifications	Designation/Remarks
BOTSWANA	1	14	1	E	12 + 4	RN/RM + relevant experience	Nurse Practitioner
	1	14	1	E	12 + 4	RN/RM	Community Health Nurse
LESOTHO	1	19	15 Months	E	12 + 4	RN/RM + 2 years experience in Health centre	Nurse Clinican
SWAZILAND	1	20	1	E	12 + 4	RN/RM + 2 years experience	Nurse Practitionar (Public Health Nurse or Family Nurse Practitioner)
TANZANIA	1	37	1½	E	11 + 4	Section A Nurse Certificate + 4 years experience	Public Health Section A Nurse
ZAMBIA	1	10	1	E	12 + 4	RN/RM + 2 years experience	Public Health Nurse
ZIMBABWE	1	10	1	E	12 + 4	RN/RM	Community Nurse
	1	6	2		12 + 4	RN/RM + Family Planning Certificate + 2 years Work Experience	Advanced Clinical Nurse

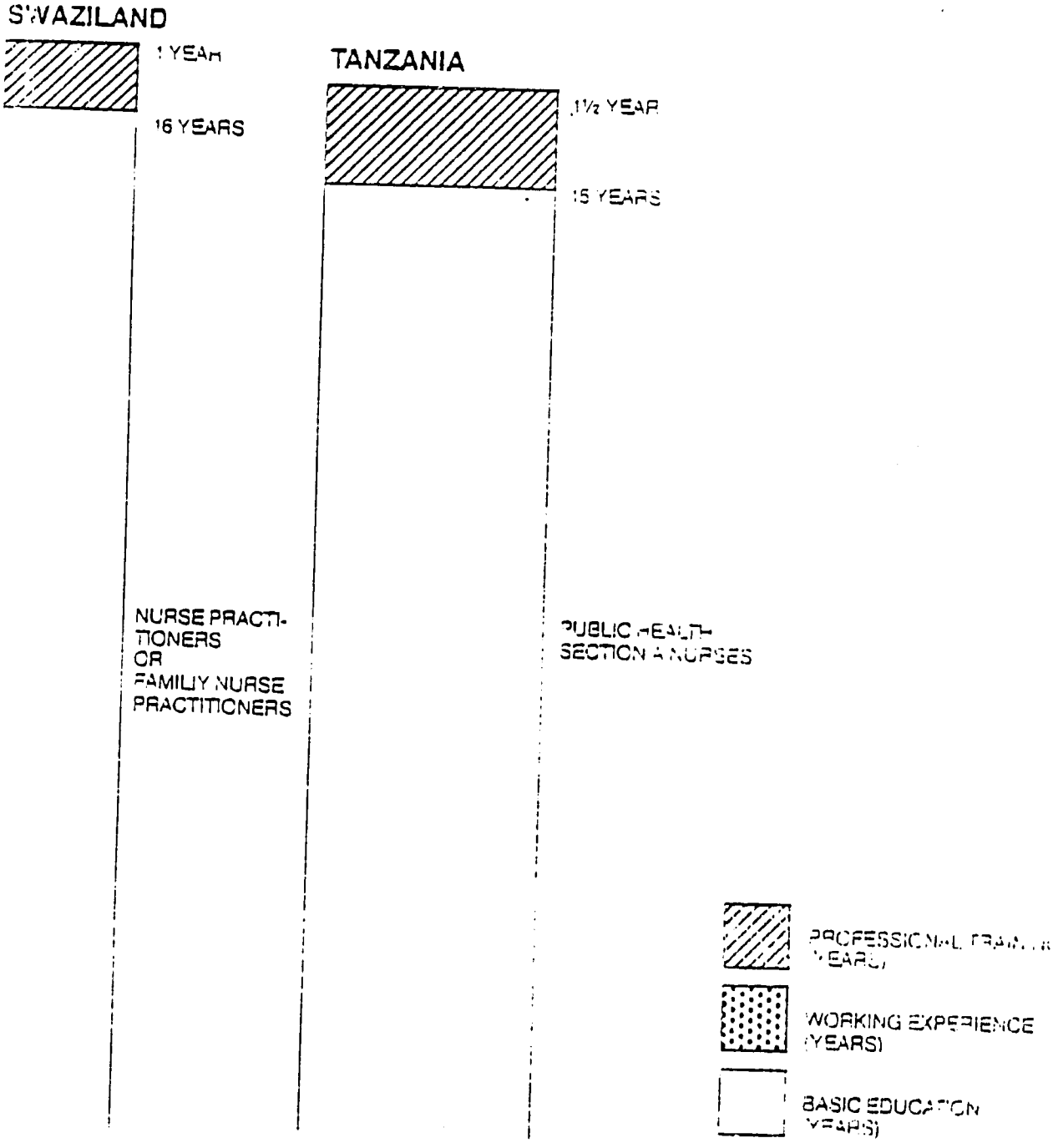
POSTBASIC NURSING PROGRAMMES

(Double qualified nurses) with relevant practical experience)

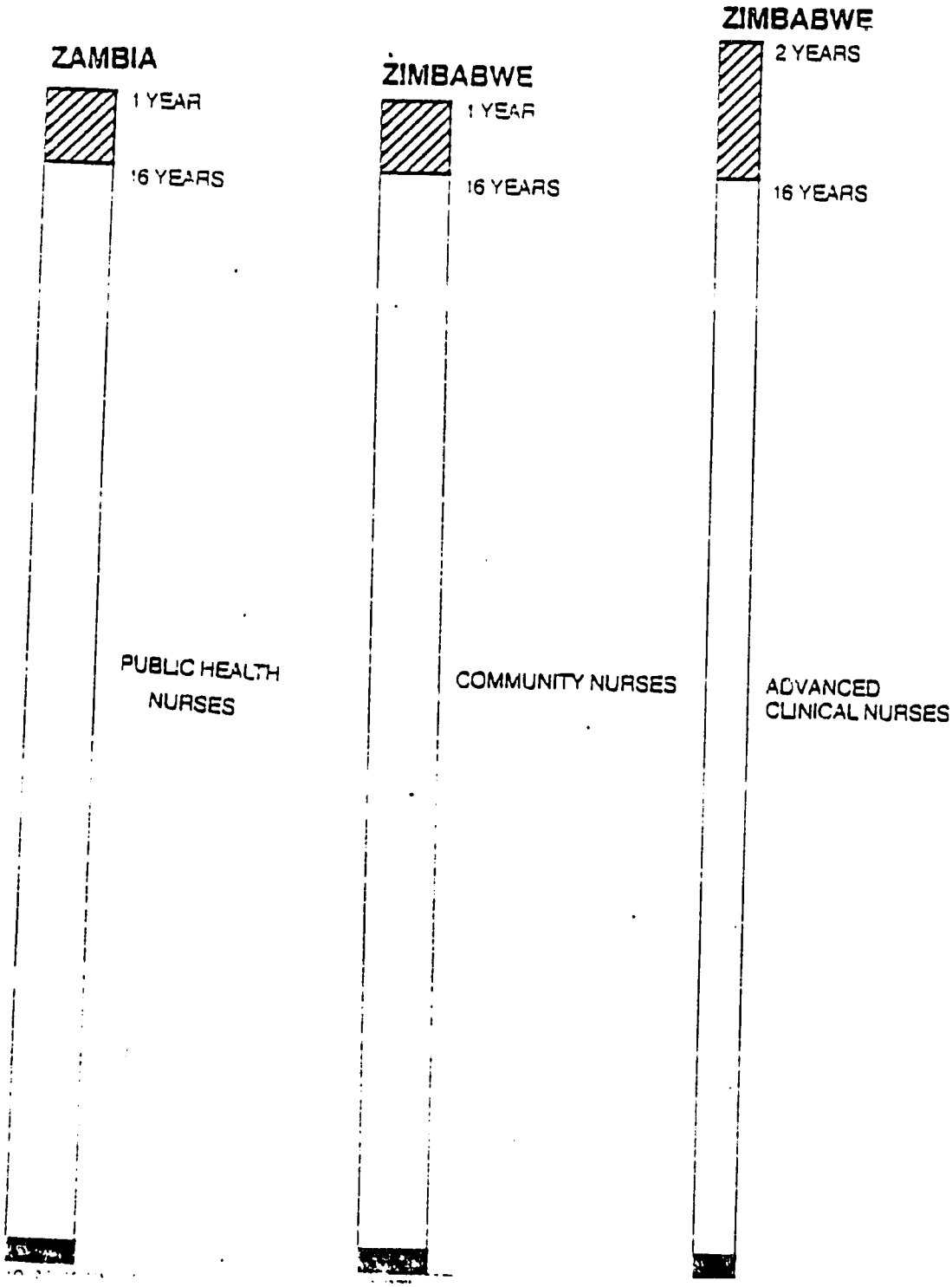


POSTBASIC NURSING PROGRAMMES

(Double qualified nurses) with relevant practical experience)



POSTBASIC NURSING PROGRAMMES (cont.)



CADRE: Community Health Nurse/Family Nurse Practitioner/ Public Health Nurse

	HEALTH PERSONNEL EMPLOYED			TRAINING PROGRAMMES ANNUAL INTAKE		TOTAL ENROLMENT
	Health workers		Population per health worker	Number of students admitted	Population per student	BASED ON PRESUPPOSED 1982-LEVEL OF INTAKE
	Year	No.				
ANGOLA						
BOTSWANA	1980			24	40,000	24
LESOTHO	1979			19	32,000	19
MALAWI	1980					
MOZAMBIQUE	1981					
SWAZILAND	1980			20	29,000	20
TANZANIA	1980			37	529,000	37
ZAMBIA	1979			10	621,000	10
ZIMBABWE	1982			16	496,000	16
TOTAL TRAINING CAPACITY:						120

COMMUNITY HEALTH IN THE CURRICULUM
(Response to Report by Feasibility Study Team of Tulane University School of Public Health and Tropical Medicine.)

Sidney L Kark and Emily Kark
57 Hechalutz St.
Beth Hakerem
96269 Jerusalem ISRAEL

January, 20, 1985

Suggestions for the Place of Community-oriented Primary Health Care in the Proposed Public Health Program in Southern Africa:

I. Community-Oriented Primary Health Care

II Community Health through Primary Health Care in Higher Education for Public Health

III A Graduate Curriculum of Studies in Social Medicine and Public Health. A Summary Outline of Program in Jerusalem, Israel.

Prof. Sidney L. Kark M.D. DSc med. and Hon.
Professor Emeritus in Social Medicine

Emily Kark MB, ChB.
Formerly Lecturer in Social Medicine

Prof. Kark has retired from his position in the Hebrew University of Jerusalem and Hadassah Medical Organization School of Public Health and Community Medicine. He continues to volunteer his services to the school as Professor Emeritus.

Prof. Kark's life has been devoted to what is now called Community-Oriented Primary Health Care (COPC) and he believes COPC is a major field of interest and practice that adds to the experience of students and staff. He and his colleagues have written extensively on COPC and are now involved in defining universal validity of COPC principles and applications of these principles in different settings.

Expressing his interest in the program, Prof. Kark wrote:

I would like to congratulate you and your colleagues in Africa and at Tulane on this initiative. It offers a tremendous opportunity for promoting suitable health care where most needed, an opportunity which I hope will be fully grasped.

We are happy to comment on the excellent report of the Tulane Feasibility Study on the proposed mobile training program in public health for Southern Africa. The possiblity of establishing a Regional Institute of Public Health
of the kind outline is most exciting.

Our suggestions focus on ways to achieve your objective of emphasizing primary health care in the curricula of studies for the Bachelor and Master degrees proposed in the report. We pay special attention to the community health (public health) component of primary health care to ensure development of primary care practice oriented to care of the community as a whole and its sub-groups as well as to individuals seeking care. We refer to this integrated practice as Community Oriented Primary Health Care (COPC). Summary outlines (Memoranda I and II) of COPC are attached. Memoranda III is a summary of our M.P.H. program in which COPC studies are integrated.

Prof. Kark's successor in the Department of Social Medicine of Hebrew University and Hadassah Medical Organization is Prof. J. H. Abramson.

THE BACHELOR PROGRAM

After graduation, graduates work at the clinic level. Behavioral aspects of the curriculum should include planning village level interventions for their area and, implementation of plans and government projects. Therefore, graduates' skills should include community diagnosis and prioritization, the basics of planning, and techincal skills necessary for implementation of programs.

We believe the curriculum should stress certain experiences more than provided for in the model outline (p.62). We suggest that COPC should be a major subject in each of the three summer courses, continually integrating relevant aspects of the introductory foundation courses into COPC experience.

Among the introductory courses mentioned for academic undergraduate course in tne report are: Epidemiology; Public Health Statistics; Fundamentals of Nutrition; Health Education. We suggest adding: Infection and Diseases; Behavior, Culture and Society; Environment and Health.

Our suggestion is that such basic courses should be accompanied by applied practical clerkships or field workshops in COPC, which makes COPC a unifying course ensuring development of student orientations, behavior and skills in COPC practice. (See Illustration 1.)

THE MASTER'S DEGREE PROGRAM

Much depends upon requirements for admission to this more advanced degree course. We believe there will be a difference in the course's sophistication level during the first three or four years of your experience and afterwards because candidates for admission, who have your proposed Batchelor's degree, will only be available some three years after the program's initiation.

Perhaps, during the early period, some Bachelor program courses could be suitable "fill-in" courses for Master's students. Exemptions from such courses might be made on the basis of individual experience and previous course credits.

Again, we urge more time be devoted to COPC in the curriculum to ensure that graduates concerned with directing community health and primary care services become familiar with COPC practice. Our goal for the future is to have teachers and directors of primary health care who possess an intimate knowledge of COPC as a discipline and practice -- no less knowledge than we expect from those who direct more traditional clinical medicine units such as internal medicine and pediatrics, or in nursing units of various kinds.

Thus, we suggest a major course entitled, "Community Health Care." It should focus on COPC, thereby integrating community and family health programs with care of the individual. This course should be developed through the three-year curriculum, and, in between the summer courses, students should gather data and conduct suitable programs with specific reference to their own communities as well as in a wider "public health" or political region.

The course should include:

1. Study of a particular community (population) served by a clinic, health center or other community facility. The objective of this study is gaining experience in defining and gathering

data, then using it to prepare a program in which students participate.

2. Study of regionalization of primary health care services would involve existing services in a region and possibilities of regional coordination of these services. This study would require considering development of a network of COPC units, horizontal coordination between various regional services, and vertical coordination with regional and central government institutions.

Which of the above programs is emphasized depends upon student interest and his or her previous experience or training in COPC practice. The integrative functions of such a course are similar to those in the Bachelor's program, with minor modifications in the program shown in Illustration 1.

As indicated in the attached Memorandum II, we have had much experience in developing similar COPC programs in M.P.H. students' curricula. It should be emphasized that our students are international -- from countries in Asia, Africa, and Latin America, as well as from more developed countries.

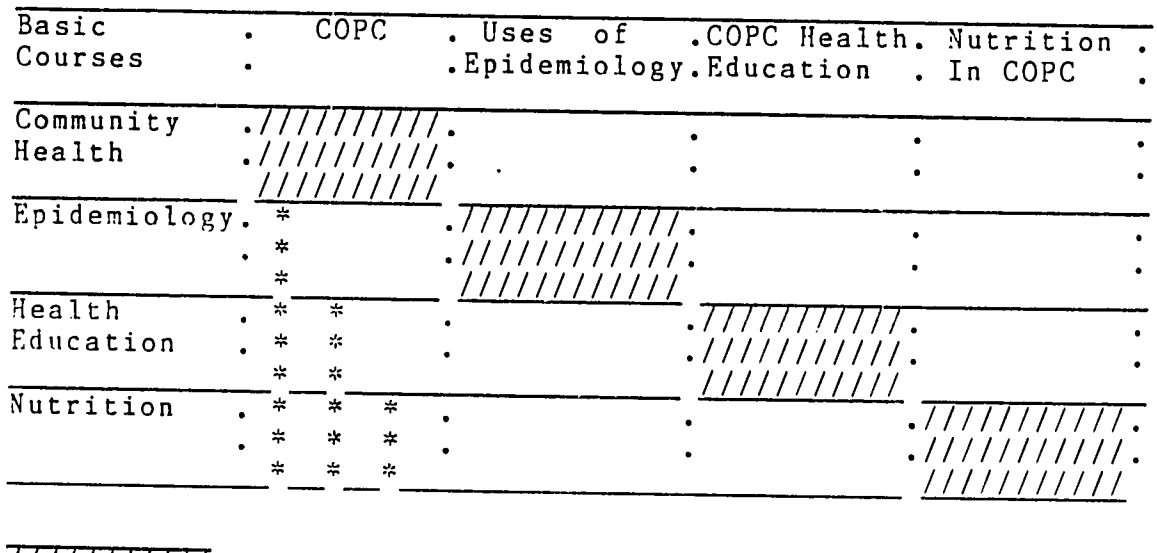
Much of the programs' successes are due to the students being able to observe and study COPC practicing centers with responsibility for care of individuals, families and other defined groups, as well as the community as a whole.

While students gain much from studies of various ongoing health services, we believe study in a teaching and investigative unit in active practice is as important in COPC as it is in any clinical field in medicine. In fact, experience in a teaching unit enables students to study other services more effectively.

The Feasibility Study report indicates that each of the three countries -- Botswana, Lesotho and Swaziland -- has various community health practices, some of which might be developed into useful teaching centers. While the report's recommendation (p.55) is that the institute be housed at one of the three national universities, the teaching function of the other countries is not clear. Perhaps you have in mind that field training and research centers in community health care should be based in each country. The initial center should be focused on COPC, each linked with its national university and affiliated to the proposed Institute of Public Health in a comprehensive division of community health care. Some practitioners of these units should hold joint academic appointments, namely in their national universities, and in the proposed Institute of Public Health.

5

APPLICATION IN COPC PRACTICE (Illustration 1)



////////// Shaded areas indicate basic courses and their integration as applied practical clerkships or field workshops in COPC.

* * * indicate another function of COPC field work namely, bringing together and interaction in practice of epidemiology, health education, and nutrition.

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MEMORANDUM I

Community-Oriented Primary Health Care (COPC)

COPC community health care combines primary care of sick or well individuals focusing on health of the community as a whole or its sub-groups. Provision of primary clinical care for individuals in a community-oriented practice requires change in the nature of primary care, involving methods and skills used in daily practice, as well as in its organization.

COPC's more important features are summarized under the broad headings of:
"The System of COPC Practice," and "The Organizational Framework Required to Facilitate Practice."

A. The System of COPC Practice:

1. Defining and describing the community as the denominator population of the practice, and as a target population of community health programs.
2. The development of community health programs in the framework of COPC.
3. Use of epidemiology and clinical studies as complementary functions in care of individual patients, their families, and in development of community health programs.
4. Emergence of a practice focusing on social and behavioral aspects of care, as well as the biomedical.
5. Development of a concept of community syndromes; its inclusion in epidemiologic investigations, and in community health programs in the COPC practice.

B. The Organizational Framework Required to Facilitate Practice:

1. Social policy for promotion of COPC includes:
   a. Establishment of a network of COPC centers (regionalization).
   b. Community participation in decision-making on policy and involvement in policies.
   c. Accessibility (financial, geographic, communication, cultural.)
   d. Integration or coordination of curative, rehabilitative, preventive and promotive health services.
2. Staff -- formation of the mulitdisciplinary health team requires:
   a. Training of various categories of health teams ("grass-roots" community members, leaders, teachers, researchers) in COPC and its special needs.
   b. Mobility of health team, outreach activities in the community, its families, other groups and institutions.
3. Coordination with other agencies, including horizontial and vertical coordination.
4. Administration and finance of each COPC unit itself, and of the network of services in a region.

COMMUNITY HEALTH PROGRAMS

Defined primary health care community programs may focus on main health problems affecting the community in general or be more specifically directed toward priority health needs of different community groups. Among the health problems are major developmental phases of the life span and social groups. Thus, in

moving towards a COPC practice providing promotive, preventive and curative services, we need to study the extent to which existing services are focused on such problems as:

1. Promotion of community health as a whole.
2. Health aspects of reproduction and family formation.
3. Growth, development and health through infancy and pre-school childhood (the under-fives), childhood through puberty, and adolescence (school-age and adolescents).
4. Adulthood, including young, middle-aged, older and aged persons, with special regard to the differing health status and needs of men and women in their various roles (eg. family and work roles).

Since COPC is concerned with health of ALL people in the community or in its sub-groups, and not only those who use its clinical services, it requires a system of gathering relevant information, recording, storing, and retrieving data, summarizing and analyzing it.

Developing community health programs in a primary care practice requires:

1. Getting to know the community.
2. Determination of health priorities on which the community health programs should focus.
3. Epidemiologic investigation of those conditions having high priority ratings.
4. Planning and implementation of intervention.
5. On-going surveillance of community health programs' operation and the changing state of the community's health.

1.Getting To Know The Community

As long ago as the mid-19th century, medicine was considered a social science by Virchow and his colleague, Neuman. Yet, the social and behavioral aspects of health care still receive relatively scant attention, although there has been considerable advance in this direction. Social policy affecting health services and public health is now almost universal, and the social component of health care itself is being increasingly recognized, especially in respect of patient-practitioner relationships, patients' behaviors and perception of health and illness, and roles of doctors and nurses. It is not surprising that present revitalization of primary care emphasizes the key role of the consultation when a patient turns to a doctor for care and advice.

Even more importatnt in COPC, is the knowledge gathered by the health team about the community. Getting to know the community is an indispensable foundation for community health programs as well as for understanding and relating with individual patients and their families. It is an ongoing process beginning with preliminary steps of defining the population that will be the community of the practice, and introducing the practice team to different formal and informal community groups. Methods vary according to the community's nature, location, social structure and culture.

Describing the community includes: Its demographic characteristics, and over a period of time, its health relevant economic activities and status; its social system, involving

kinship and social networks; its customary behavior, practices, lifestyles, value attitudes, and beliefs. It is especially the micro-social and more personal aspects of these social attributes that have considerable relevance to both the clinical and epidemiologic aspects of the practice. This knowledge is also relevant to the action involved in community, family and individual health education, and community organization.

Linking epidemiologic studies with those of social and cultural anthropology and other behavioral sciences could lead to fruitful, innovative investigations in the relatively small populations in which COPC units practice. Thus, epidemiologic studies of infant growth and illness are more relevant when associated with anthropologic studies of child rearing.

2.Determination of Health Priorities on which Community Health Programs Should Focus.

We need to be selective in deciding which community health programs should be carried out in the primary care framework. Critical questions are:

a. What is the community's state of health?

This involves knowledge of survival and death rates, prevalence and incidence of various diseases and disabilities, and indices of health and wellbeing, such as growth, behavior development, and functioning.

b. What factors are responsible for this state of health?

Like an individual, a community's health reflects interaction of its inheritance, environment, behavior, and life experience. Selective study of these factors is necessary, emphasizing those which will be influenced by COPC personal health programs.

c. What is being done about community health conditions by its present health service system or by other social action.

d. What more can be done?

"More" meaning what contribution could COPC make.

e. How can information outlined above be obtained, and what community resources are available for programs selected?

Interest, motivation, knowledge, training and experience of primary care givers is especially important. Are they prepared or do they need more training to develop COPC?

Information sources may be official reports or any other relevant publications, and impressions of physicians, nurses and other health care workers, and members of the community itself. As COPC practice develops, data from clinical practice should be gathered and recorded for epidemiologic study providing more detailed community health diagnosis and planning of appropriate intervention.

Planning the introduction of primary health care community health programs requires introduction of routines in COPC practice -- clinics, home visits, organization of formal and informal groups. Again, these routines should include standardized methods of accumulating and recording data for epidemiologic investigation of specific health variables. Deciding objectives and intervention program methods would be based on this data. Data includes the type of program, action taken, and special records such as maintained for home and family visits, school health programs, and community group activities.

3. Epidemiologic Investigation of Community Health Conditions Having High Priority:

Epidemiologic investigations in primary care practice require data analysis to determine health priorities in the primary care practice and are also important for use in community-oriented primary care. Data includes:

a. More intensive epidemiologic investigation of the particular health conditions in primary care practice which lead to development of community health programs.

b. Study of how services are used by various community groups, which includes their compliance with advice from the health team, and extends to such behaviors as family planning practices, infant feeding and rearing practices, cigarette smoking.

c. Subsequent epidemiologic surveillance of community health programs established in primary care includes recording changes in health behaviors as well as health state.

d. Evaluation of programs by epidemiologic methods to measure effectiveness of changing the community's state of health and habits.

Information for epidemiologic purposes can come from individual patient's clinic records, special records added to clinical procedures, special surveys data. Using epidemiology in primary care enables much of the data to have a double function, meeting responsibility of clinical care of individuals and care of the community. If information is used in this way, methods of collection need be defined as rigorously as in any epidemiologic survey. It is necessary to have standardized diagnostic criteria for common or important diseases, uniform methods of examination and recording of physical, behavioral and social findings. This includes assessments of nutritional status and body measurements such as weight, height, blood pressure, immunizations records, and other actions.

Thus, the two disciplines required for asseessing individual and community health states -- clinical practice and epidemiology -- are complementary to each other in development of COPC. These complementary diagnostic, surveillance and evaluative processes have been the foundations of many intervention programs which are an integral part of the COPC practice of our community health center.

The programs involve various health conditions relating to:

a. Reproduction and family formation -- health education in family spacing; care thorough pregnancy, and of mother and child; reducing prevalence of anemia in pregnancy and infancy; promoting growth and development through childhood.

b. In adulthood -- focusing on the main public health problems of this community, namely, behavior and risk factors in arterial disease, such as heart and cerebrovascular diseases, hypertension, diabetes mellitus, diet, cigarette smoking and stress.

Detailed planning of epidemiologic investigation for each component of these various programs is as important as the clinical. Such an investment has yieled dividends in effective community health programs of intervention based on these epdemiologic foundations.

4. Planning and Implementation of Intervention.

Planning:

Planning community health programs focused on health priorities evolves as the health team and community get to know each other and knowledge accumulates about community health and determinants. Emphasis is on the prevously listed questions:

a. What are the primary care priorities and what is already being done about them by existing health services, other programs, the community itself?

b. What more can be done in primary health care in the light of current knowledge and practical constraints?

c. What are the health team's resources -- training and skills of its members for initiating and carrying out programs?

A case for intervention exists when a problem is considered sufficiently important to warrant action and there is reason to believe intervention is both feasible and likely to be effective. The planning process includes decisions on general and specific goals and their relative practicality and priorities. Also involved is consideration of alternative strategies, their feasibility, allocation of resources, records' design, and specific tasks of health team members.

Also, the program needs monitoring to see if it is meeting its goals. Planning must include specific methods for ongoing surveillance of changes in the community's health and factors determining it, as well as methods of formulating criteria and program evaluation.

Implementaion of Intervention Program:

Implementation involves treatment and advice for individuals, family and community health education, and community organization emphasizing community involvement in its own health care. Activities may include:

a. Individual health care in clinics; home calls for patient care; midwifery.

b. Laboratory and other special investigations.

c. Home visits for household surveys; family health education; conferences about family health.

d. Group sessions at schools, churches, health and community centers, or elsewhere such as a water-point which is being considered for protection purposes.

e. Inter-agency meetings.

f. Use of recording systems suitable for analysis of community health, as well as records for presentations to groups in the community, schools or individual homes.

g. Contined program monitoring -- ongoing surveillance of community and family health -- requires procedures decided upon in the program's planning and should be regarded as essential as other actions.

5. Ongoing Surveillance of the Conduct of the Community Health Programs' Operation and Changing State of Community Health:

Evaluation:

Evaluation of COPC community health programs may be measured by community response, satisfaction and costs.

Each program must be designed to include detailed statements of its purposes and specific objectives, such as:

The primary prevention or recognition and treatment of diarrhea in infancy; immunization against various diseases; improvement of nutition and health through pregnancy by diet changes; screening procedures for malnutrition signs such as anemia, and preventive or therapeutic action; protection of local water supplies and home water storage; a program to reduce cigarette smoking or hypertension.

Evaluation studies of community health programs may include program reviews and trials. Program review aims to help COPC practitioners decide on particular programs as clinical reviews assess particular patients. Review reveals improvements, if any, in specific community health conditions. Program trial yields generalized conclusions about a program of the type studied. Trial is concerned with testing a specific community health program's effectiveness in changing the state of community health, such as reduction of hypertension or changing growth trends in infancy and childhood. It may requre rigorous methods, such as those used in clinical trials involving use of control groups an other procedures which go beyond normal practice. We note program trials here because they are essential for a relatively new form of practice such as COPC.

Decision-Making for Future Action:

The knowledge accumulated in the course of continuing surveillance, together with periodic evaluation provides the opportunity to review the program. This allows for its modification or discontinuance, if necessary. Modifications can extend a program or radically alter it, based upon relevant public health and medical knowledge and new information.

MEMORANDUM II

Community Health Through Primary Care in Higher Education for Public Health

Our experience in the different settings in which we have established community health teaching programs may be of some help in your planning of a "Mobile Public Health Training Program for Southern Africa." From the data summary in your Feasibility of Setting Up an Institute of Public Health report, major health problems of the region are:

1. Malnutrition.
2. Communicable diseases, especially tuberculosis, venereal diseases, malaria, bilharzia, other parasitic disorders, and in one country, sleeping sickness and measles.
3. Malignancy, carcinoma of the cervix, liver.
4. Other problems mentioned, goiter.
5. Maternal and infant mortality, morbidity.
6. High fertility rates, problems of pregnancy outcome involving mothers (obstetrical problems) and infants.
7. High infant mortality rates, with special mention of causes such as gastro enteritis, acute respiratory illness.

Much more than this is surely known in each of the three countries about the people's state of health and main determinants of their health and disease. However, the picture presented is sufficient to indicate the major contribution which community-oriented primary health care (COPC) could make to the people's health. It is therefore very encouraging to note the emphasis on primary health care.

The initiative of WHO and UNICEF in promoting world wide development of Primary Health Care demands recognition by all educational institutions concerned with training health practicioners. Higher education in Public Health is one of the most important avenues which should include emphasis on primary health care, and in so doing, to ensure its focus on community health. The proposal to establish a mobile public health training program as a coordinated venture of several Southern African countries offers such an opportunity.

Educational programs, leading to first and second degrees (Bachelor's and Master's) in Public Health, may be organized through a number of units. In whatever way these are organized, one of the central functions should be Community Health Care. Considering the increasing recognition by educational health institutions for reality experience by students and their teachers, a feature of the proposed Institute should be development of practicing units -- teaching practices have the same role in the proposed Institute of Public Health as teaching hospitals in undergraduate and postgraduate medical education.

A Community Health Care Center:

We have developed an example of a practicing base in Jerusalem. It is an integral part of the School of Public Health and Community Medicine, and is administered by the School's Department of Social Medicine.

Its practices inlude primary health care and community medicine (community health), integrated in a practice we refer to as "community-oriented primary health care (COPC)." This

combination of primary health care of the individual, family and community requires clinical and epidemiologic foundations for both individual and community health care.

Our center includes the following:

1. Primary health care of individuals and families living in defined neighborhoods. Primary care includes:
   a. Family medicine practice in a defined population of some 2,500 people.
   b. Maternal and child health unit for mothers and children in a population of some 10,000 people.
   c. School health program in four neighborhood schools.
   d. Home care of longterm housebound patients in a total population of some 25,000 people.
2. Community medicine programs (community focused health programs) for all persons in these communities or defined sub-groups. These programs focus on:
   a. Reproduction and family formation.
      e.g. Family spacing, prenatal and postnatal health education and care.
   b. Infants, children and adolescents.
      e.g. Progam for promotion of growth and development (PROD program) with special attention to needs of children from poorer homes and with less-educated mothers.
   c. Adults.
      e.g. Intervention program for all community adults designed to reduce risks of heart disease, cerebrovascular and peripheral vascular disease. Main focus is on family history, hypertension, hyperglycemia, hypercholesterolemia and obesity.

      We also aim to continually improve use of primary care services, modification of diet, reduction of cigarette smoking, encouragement of physical exercise; while studying other social and behavioral factors, such as behavior types and stressful life events.

      Also, a program of surveillance of disabled persons' needs and increasing attention to the elderly.
   d. General -- community as a whole.
      e.g. Program for surveillance, control and treatment of communicable diseases, including an active immunization program and recording of all acute infections in the community.

There are many publications on COPC activities of our health center, including analysis and periodic feasibility evaluation of incorporating community health programs within primary health care, and reports of encouraging changes in the community's state of health.

Community Health Care in the Curriculum for the Master's Degree in Public Health of the Hebrew University in Jerusalem:

An obligatory field-workshop and seminar in community health care has been a Hebrew University M.P.H. curriculum feature. It has varied over time, and differs for different student groups, for example, a special workshop suited to international students' needs.

Part 1. Study of Basic Methods of Developing Community Medicine (Community Health Programs) in, and through, primary

health care.

This includes study of clinical and epidemiologic skills in development of COPC to provide students opportunities to study and discuss ways in which individual patients' primary care has been extended to include health care of families, other sub-groups, and the community as a whole. In many countries, including Israel, public health services are separated from clinical medical services, even when provided as community-based services. Also, general clinic services in the community seldom focus their skills and energies on changing the health state of the community as a whole.

In this part of the workshop, students observe development of a unified COPC practice, in which clinical skills on the one hand, and epidemiologic and community health care skills on the other, are seen as complementary functions in a single practice. Study of basic methods used to change established health care practices provides students with observations and exercises of this innovative approach to family and community health care.

Students elect to study in some detail, at least one community health program of the center, such as a child health or an adult community health program. With staff guidance, students work through epidemiologic investigations, for example, growth, anemia in infancy, diet regime in infancy, or adulthood, cigarette smoking, blood pressure distribution, use of health services. Thus, they develop some familiarity with use of epidemiology in COPC as a diagnostic instrument, in surveillance, and in evaluating effectiveness of the COPC program.

Part 1. Study by Students of Possible Application of COPC in Communities with which They Are Familiar.

Accompanying observations studies of the COPC practice in the Teaching Health Center, students are expected to outline proposals for initiation, development, and evaluation of at least one community health program in a community with which they are familiar; or a primary care practice in which they are involved.

Material for this exercise is brought by students themselves. Data about the community and its health state, and available health services, with special reference to primary care, is outlined in some detail in a guide prepared by the workshop coordinator.

Data brought by students varies considerably in quality and completeness. Communities with the most comprehensive sets of data are selected for this exercise, and several student groups are formed, each with an assigned tutor-consultant. The Israeli students are able to visit their study communities, whereas students from other countries are not able to do this.

Through a series of workshop-seminar sessions, groups select at least one community health program in a primary care practice for their particular community. Examples have been: control of tuberculosis, anemia in pregnancy and infancy, hypertension, reduction of infant mortality and gastroenteritis.

Part 3. Study of Community Health in a Region:

This third aspect of the field workshop in community health

care resulted from our increasing concern for students to experience the need for a regional approach to health care. In settings of the various countries involved in the proposed Institute of Public Health in Southern Africa, regionalization would involve coordination and integrated functioning of all regional services. Relationships of COPC units with one another and with other health and development services will no doubt challenge the Institute and students with coordination of various health services, personnel, and environmental as well as community development as a whole, especially agriculture, water supplies and irrigation schemes, schooling and other educational programs.

MEMORANDUM III

A Graduate Curriculum of Studies in Social Medicine and Public Health

Summary Outline of the Program in Israel

This graduate program of studies leading to a Master of Public Health (M.P.H.) of the Hebrew University, Jerusalem, has been developed and modified since its inception in 1960, as part of a Social Medicine and Public Health Project sponsored by the World Health Organization and Ministry of Health of Israel, at the request of the Hebrew University and Hadassah Medical Organization.

The curriculum's general objective is to provide the graduate training for various professional groups required for practice, teaching, and research in the different fields of public health and social medicine.

The foundation courses of the curriculum bring students of different professional groups together, thereby encouraging a common educational experience for future leaders of Public Health in Israel. While recognizing the common interests of the multi-disciplinary groups, the course also aims to meet special needs of different groups, which have included physicians, dentists, nurses, veterinarians, social workers, health educators, nutritionists, biostatisticians, environmental and occupational health workers and scientists interested in community health sciences, including biologists and social scientists.

When the curriculum started, there were very few graduates in public health in the country, and there was little appreciation of its importance to the people's health. Although the program of studies has changed considerably in the past 25 years, it has maintained its objective of meeting the differing needs of students, who are, in fact, professional health workers with varying backgrounds and special interests. There is a growing demand for more specialized training at the Master's level, for example, in epidemiology, environmental health sciences, and occupational health. This will no doubt continue as public health practice becomes more sophisticated, partly due to the stimulation provided by activities of the school itself.

Among the various developments in the program has been a widening of student experience from lecture and seminar rooms into practical field workshops involving study of various community health services. Another feature has been requirement of all students to conduct special investigative studies, and submit a written dissertation on the basis of their study.

From these graduates, there is emerging a steadily increasing number of research assistants conducting investigations leading to the Ph.D. of this university. Thus, a cadre of researchers into different aspects of public health and community medicine in this country is being developed.

The Master's Degree in Public Health studies program consists of:

1. Introductory courses.
2. Required foundation courses and field-workshops.
3. Elective major areas of interest.

1. Introductory Courses:

These "fill-in" courses have been specially introduced for students with no previous training or experience in particular fields of importance for public health. Thus, some students may be required to take special introductory courses in statistics and social sciences, while others may require an introduction to biological sciences, such as microbiology and nutrition. In some cases, interested students have been advised to spend a preliminary year studying various preliminary courses offered by our university or others before becoming candidates for this degree course.

2.Required Foundation Courses and Field-workshops:

The "core" courses and experience required of all students have varied over time. Among the more important have been:

a. Epidemiology and Biostatistics, which include principles and uses of epidemiology, statistics in epidemiology and public health, survey methods in community medicine, social and behavioral aspects of epidemiology.

b. Public health practice and health administration.

c. Obligatory field-workshops in community health care, with special focus on community-oriented primary health care.

d. Sociology in health care.

e. Nutrition.

f. Control of communicable diseases.

g. Growth, development and aging.

h. Environmental and occupational health.

3. Elected Major Area of Interest:

The requirement for studies in elected major areas of interest are met by a special study and dissertation, together with a number of courses relevant to major elected areas.

The special study is aimed at developing students' abilities to undertake scientific investigations in the area which they have elected, and which are of significance in public health and community medicine. Students are required to submit a satisfactory written dissertation on this study, which must be defended in an oral examination. The varied subjects chosen for these investigations reflect students' professional backgrounds and areas in which staff members are themselves engaged, thus stimulating student interest. It is a very demanding element of the curriculum, but a satisfying one, in which students' experiences throughout the course are brought together in the planning, practical build-up, and analysis of their studies.

Elective courses have gradually grown, adding extra studies in subjects of their foundation courses, and additional courses. Among the elective courses have been: Cardiovascular disease epidemiology, nutrition, maternal and child health, health behavior and health education, community mental health, dental epidemiology and oral health, occupational health, community health care, development and use of computer programs, additional courses in health administration, such as hospital administration, environmental health.

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A COURSE LEADING TO THE DEGREE OF MASTER OF SCIENCE (UNIVERSITY OF LONDON) IN MOTHER AND CHILD HEALTH

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October 22, 1984

We run what we believe is a very successful Master's Course in Mother and Child Health here which involves the participants traveling overseas for 8 to 10 weeks and undertaking study of a particularly appropriate or innovative program on which they write a dissertation.

This program was set up in London in hope that it would lead to other universities undertaking similar training programs. It has been successful in that ex-students or colleagues have similar training in Nigeria, Durban, India, Indonesia and the Philippines. Some of these courses have already started; others are in the process of being planned.

Booklets describing the course have been sent to Dr. David Sebina, minister of health, Caberone, Botswana. We have other courses, including a new course for teachers and trainers of community rehabilitation workers.

FROM THE UOL INSTITUTE OF CHILD HEALTH BOOKLET:

Providing basic health services for rural populations and urban communites is a major challenge in all Third World counties; only approximately 20 percent of the population in rural areas and deprived urban communities enjoys regular health care.

Developing countries and international agencies are dissatisfied with existing systems of health care (often inherited from a colonial past) and want alternative approaches for extending healh care through auxiliaries and local health workers ("Health Scouts" who may be part-time health workers and farmers). Doctors, nurses and medical assistants are assuming new roles as teachers and coordinators of the health team.

The UOL M.Sc. in Mother and Child Health's purpose is to train future teachers of Mother and Child (MCH) services for medical schools and auxiliary training institutions of Third World counties. Over 160 Fellows trained in this and a previous UNICEF/WHO course now hold responsible positions in their own countries.

Because women of child-bearing age and children make up approximately two-thirds of a developing country's population, the M.Sc. course emphasizes maternal care, family health and nutrition, and includes new subjects, such as communication of innovations, community organization and leadership, methods of effective communication, patterns of health and sickness within communities, long term results of different child-rearing techniques on the behavior of future individuals and the nation, etc. Application of these disciplines in the training, management and support of local community health workers and middle level personnel in the average health district is the course's main focus.

ELIGIBILITY FOR M.SC. IN MOTHER AND CHILD CARE:

1. Graduates of the UOL Faculty of Medicine or other approved university, who are registered in the country of qualification are eligible. Normally, candidates have been qualified for at least four years. Preference is given to those who have been teaching health workers of the various care levels and those with community health care administrative responsibilities.
2. Certain candidates without a medical degree, but with qualifications for a UOL higher degree, are accepted.
3. Candidates with relevant experience, but not qualified for the degree course, can receive a Diploma in Mother and Child Health.

DIPLOMA IN MOTHER AND CHILD HEALTH OF THE INSTITUTE OF CHILD HEALTH:

Students, who don't qualify for a London University postgraduate degree for various reasons or who have English difficulty are advised to enter the diploma program. They take the same study course up to the end of the summer term in early July. If their work and examinations are satisfactory, they receive the Diploma of the Institute. They don't normally undertake overseas study periods.

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SHORT AND LONG-TERM AIMS OF THE COURSE:

Short Term aims:

1. To develop proficiency in assessing mothers' and children's health needs and to recognize the community's vulnerable groups. To identify health care resources and methods for using them. Equal concern is given to all community members, not just those seeking medical help.
2. To construct teaching curricula for all health care provider levels.
3. To develop teaching skills.
4. To develop learning skills.
5. To contribute to planning, organization, management, administration and evaluation of district health programs using contributions from other sectors including agriculture, water supply, education, sanitation, community development, industy, etc. and drawing on other disciplines such as sociology, economics and anthropology when necessary.
6. To identify innovations arising in wider applications of scientific knowledge and adapt them for action in nutrition, growth and development, control of infections, epidemiology, family planning, waste disposal, rehydration, etc., using new approaches and communications methods found in traditional societies.
7. To develop the ability to establish dialogue will all sections of the local community to create full participation by the people in all phases of health programs.

Long-term aims:

1. To develop and strengthen teaching for mother and child health in order to train health personnel with knowledge and skills relevant to the needs of their country.
2. By doing so, improve and extend delivery of health care and promote action to remove causes of ill health for the purpose of preventing morbidity and mortality and contribuiting to socio-economic development.

GENERAL COURSE TIMETABLE:

The 15-calendar month course lasts from the beginning of October in one year to the middle of December of the next, and has four stages:

1. Autumn Term (October-December) -- Seminars and discussions to provide a ground work of knowledge relevant to mother and child health, emphasizing nutrition and delivery of health care.
2. Spring Term (January-March) -- Biology of the Mother and Child and current approaches in Pediatrics and Obstetrics.
3. Summer Term (End of April to Early July) -- Study of health care delivery in other countries; includes a 4-week field project in Newcastle upon Tyne in which aspects of the U.K. National Health Service are studied.
4. Major Field Study (6 to 12 weeks, July-September) -- Field study in an area (rural, peri-urban or inner city) in which an innovative program operates. Normally undertaken overseas, often in a county other than that from which the Fellow has come. Field work is followed by data analysis and writing a report or

(6)

dissertation between October and December. (Some Fellows write for publication during this time.)

EXAMINATIONS:

The continuous assessment of students' presentations, projects and essays counts far more in the final pass mark than the written examination. The first examination is at the end of the second term and consists of three written papers of three hours each. After the third term, students proceeding to the M.Sc. degree travel abroad to carry out field studies. When they return, they submit written reports and sit for an oral examination. If both are passed, they received the M.Sc. Students, who do not proceed to field work, but pass the written examination and participate in the full three terms of the course, are awarded the Diploma in Mother and Child Health. Those successful in the M.Sc. may be considered for further field studies for a Ph.D.

COURSE SYLLABUS:

The course program consists of lectures, seminars, individual projects and presentations, and essays.

Among the topics are:

1. Introduction -- Study of main determinants of family health levels in developing countries; place of health in national and local development programs; planning, participation and contributions of various governmental levels; appraisals of teaching hospitals and on-going training of doctors and other health workers.
2. Foundation Course -- Focusses on child-bearing and rearing; nutrition and feeding; growth and development from birth to adolescence; communicable diseases, including common infectious and parasitic illnesses, and their management/treatment/prevention.
3. Teaching and Training of Health Workers for Primary Health Care -- Teaching by objectives, includes on-the-job functions and task analysis; curricula planning; new training methods and on-going training of auxiliaries and village health workers; methods of mass communication and their applicability in the health field.
4. Acute Illnesses and Emergencies -- Includes obstetric and neonatal emergencies; respiratory illnesses; urinary infections; diarrhea and dehydration; convulsions and CNS emergencies; road accidents; domestic accidents and poisoning.
5. Epidemiology and Statistics -- Includes epidemiologic methods and their application to common health problems and management of district health care; using indicators of health and socioeconomic status, health services provision and use, cost and quality of care and people's views of care received; geographical pathology of children's diseases in the tropics; world distribution of genetic abnormalities; epidemiology of mother and child psychiatric problems and developmental disorders; prospective and retrospective studies; record keeping and analysis; teaching epidemiology to local health workers; methods for multi-disciplinary work to tackle health care epidemiology problems.

6. MCH Service Provision, Resources and Evaluation -- Includes finding out about local health problems and resources and identifying their implications for district action, then, making and executing a plan; getting feedback; priority setting; methods of getting the community involved in planning, implementation and program evaluation; studying roles of hospitals, traditional healers and changing concepts of health and disease.

PREPARATION FOR THE COURSE:

A good command of written and spoken English is essential. Also helpful are: rapid reading and typing skills, and ability to work in groups. Also, since students write projects and essays relevant to their country's health problems, it's helpful to bring data and related statistics from their home countries to the course.

Living arrangements need be made as soon as acceptance is confirmed. Fellows are awarded minimum living expenses.

COSTS:

Tuition for the full 4-term M.Sc. in Mother an Child Health course is L6,600 for the year, beginning October, 1984. (Citizens of E.E.C. countries have a different fee scale.) Cost for the 8 to 12-week field program is an additional L1,500, including travel and subsistence.

Commentary

Feasibility of an Extended MPH Degree Program for Fully Employed Practicing Health Professionals

ROBERT B. WAINWRIGHT, MD, DTMH, MALCOM L. PETERSON, MD, PhD, AND JANIS M. FARRIER

Abstract: This report describes the first four years of operation of the Extended MPH Degree Program of the University of Washington School of Public Health and Community Medicine and the features that might explain its initial success. The format of the curriculum is radically different from the traditional two-year program of studies leading to the master of public health degree. Over a three-year span of intensive, on-campus courses and seminars, students are able to fulfill all academic and institutional requirements necessary for the MPH degree.

Many more applicants have enrolled for the Extended Degree Program than for the regular MPH program. The 94 students who have matriculated into the program are employed mainly in government agencies in eight western states and British Columbia; most have their prior professional training in nursing and medicine with a median of nine years professional experience. The academic performance of these students is comparable to that of regular full-time MPH program students. The administrative, fiscal, and instructional problems raised by such a transformation have been overcome and the demand for the program and our experience to date suggest that extended MPH degree programs are both feasible and desirable. (*Am J Public Health* 1984; 74:1258–1262.)

In 1980, acknowledging the desire of personnel in public health agencies and community health care programs for further professional education,[1] the faculty of the University of Washington School of Public Health and Community Medicine (UWSPHCM) established an "extended degree" pathway in the Master of Public Health (MPH) degree program. In this report we describe our initial experience with this Extended Degree Program (EDP).

The Extended MPH Degree Program

Academic Context

When the UWSPHCM was established in 1970, its MPH degree curriculum was designed to emphasize research and included a core of general introductory courses in biostatistics, epidemiology, environmental health, and health services besides a thesis. In each of the three departments in which students can earn the MPH degree (Epidemiology, Environmental Health, Health Services), there are additional course requirements that pertain to the departmental focus (Table 1). In-residence students usually complete the 69 credits, including nine credits of thesis work, in two years.

During its first two years, the UWSPHCM began to act on its commitment to serve the educational needs of mid-career practitioners for the acquisition of skills and knowledge provided in the MPH curriculum. A program was envisioned that would be multi-institutional in sponsorship and instruction and available to persons employed throughout the northwest region of the United States where the UWSPHCM is the only institution with an accredited MPH program.

Based on preliminary planning—much of which was carried out with other schools of public health in the western states[1,2]—a Bureau of Health Professions Special Project Grant (5-004-AH-01656) was obtained in 1978 for the development of the EDP.

Over the next two years, the EDP was shaped by various perspectives on education and programmatic missions and by different perceptions of need and feasibility.[3] For example, the decision to emphasize a management perspective was based on information and opinions derived from surveys of staff members of health care agencies. The decision to initiate the EDP with an emphasis in health services stemmed from the availability of sufficient committed faculty members in that area, although it was believed that there was also a substantial demand for a curriculum in environmental health management.

EDP Format and Content

The EDP curriculum is designed to be completed in three calendar years (Table 2). In the summer of each year, the students are in-residence for four weeks of intensive, full-time classroom work. The courses presented in each of the summers constitute the equivalent of three 10-week quarters (90 or 100 hours of classroom contact in each of the nine or ten credit summer sessions), thus satisfying the Graduate School in-residence status requirement. The remaining courses are taught during the first two years as off-campus "extended" courses through directed self-study, supplemented by four to five two-day on-campus seminars at eight- to ten-week intervals. Thesis work, although initiated earlier, constitutes the bulk of study in the third year.

The 57 credits in required courses and thesis are arranged in a sequence which builds on previous knowledge and skills. The other 12 credits can be taken at any time from categories of elective studies such as regular UWSPHCM courses, appropriate graduate level courses at other institutions (for transfer credit), and established courses offered in-residence but reorganized to become "extended" courses. This curriculum format allows those courses that necessitate

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Editor's Note: See also related editorial p 1197 this issue.

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TABLE 1—Credit Requirements for In-Residence and Extended MPH Degrees

	Subjects	Basic MPH Required Credits	Extended MPH Required Credits
C	Biostatistics	4 or 8	8
O	Epidemiology	3	3
R	Environmental Health	3	3
E	Health Services	4	4
	Thesis	9	9
D	Health Services Courses	16	30
E	or		
P	Environmental Health		
T	Courses	28	39
	or		
	Epidemiology Courses	26	*
	Electives	18 to 30	3 to 12
	TOTAL	69	69

*An extended MPH degree program has not been developed in epidemiology

classroom contact with faculty to be presented during the summer session when students are on campus.

In Table 2, the courses in the Community Health Services Management curriculum are listed by title and sequence. The mix of courses in basic sciences, in health services, and in management and their applications to the health care system achieves the objectives previously established for the in-residence MPH pathway in health services.

TABLE 2—Curriculum of the EDP in Community Health Services Management

	Summer (On-Campus)		Academic Year		
Program Year	Course Title	Credits	Course Title	Credits	Yearly Credit Totals
1	Introduction to Statistics in Health Sciences	4	Introduction to Environmental Health	3	
	Principles of Epidemiology	3	Introduction to Health Services	4	
	Health Economics	3	Provision of Health Services	2	
			Issues in Health Services	2	
		(10)		(11)	21
2	Applications of Statistics in Health Sciences	4	Program Evaluation	3	
	Program Planning	3	Organizational Theory and Behavior	3	
	Methods in Applied Community Research	2	Personnel Management and Labor Relations	3	
		(9)		(9)	18
3	Financial Management of Health Programs	3	Thesis	9	
	Systems Analysis	3			
	Integrative Management	3			
		(9)		(9)	18
	Electives (to be taken at any time)				12
	GRAND TOTAL				69

Additional courses are presently available as electives to allow students an emphasis in environmental health management.

Students are encouraged to select as thesis projects descriptive or analytical endeavors that involve some aspect of their professional responsibilities in their employment setting. For example, a student who is employed in the Washington Professional Standards Review Organization is analyzing data from that agency to describe qualitatively and quantitively the determinants of days of waiting for hospital discharge for nursing home placement.

The curricula that have evolved are equivalent to the curricula pursued by in-residence students, with two distinct differences. The EDP curriculum does not permit the students any options for an emphasis in their MPH studies other than the focus on management of community health services or environmental health. In contrast, students in the in-residence MPH program take further courses in epidemiology and biostatistics, attend special seminars in disciplines applied to health services (psychology, economics, sociology, etc.) and can prepare themselves more broadly for research careers. The EDP curriculum is rigid except for 12 elective credits.

Administration of EDP

Instructional contributions to the EDP span several departments of the UWSPHCM and, accordingly, the Dean's Office is the locus of its administrative authority. Administrative oversight for the EDP is the responsibility of the Executive Committees of the UWSPHCM and the Graduate School. For the first three years, approval to accept students to the EDP was granted on a year-by-year basis by the Regents of the University of Washington. When experience showed that the EDP was academically and financially viable, the EDP was accorded permission to operate on the basis of a triennial review.

Budgetary management, as well as the recruitment, selection, admission, registration, and records management of students are functions that are unique to the EDP in contrast with the departmental management and decentralized administrative responsibilities of the traditional, in-residence MPH programs. Since regular tuition payments to the University of Washington become general revenues of the state, and since the EDP was established outside the formula by which the legislature appropriates the fiscal support of the on-campus programs, it was mandatory that the EDP be financed through its own tuition revenues. Thus, the budget of instructional and administrative costs becomes the basis of tuition charges.[4] Development costs of the EDP were borne by the special project grant and have not been included in the determination of tuition charges. The assumption that 30 students enter each year (with an attrition rate of 20 per cent in the three years) established a denominator for setting revenues derived from credit-hour tuition charges. Despite a decline in the projected enrollment (Table 3), the program has maintained fiscal viability with revenues from capitation funds (USPHS Grant 5E03 MB 10800 0) and tuition charges of $92, $92, $120, and $132 per credit hour respectively in each of its four years of operation. Partial subsidy of the EDP through capitation funding awarded to the UWSPHCM was anticipated from the program's inception since EDP students are included in the formula for calculating awards based on full-time-equivalent (FTE) candidates for the MPH degree.

Faculty members who have taught the courses in the EDP are, in most instances, the same individuals who teach the comparable courses in the traditional curriculum in the UWSPHCM and in the Graduate School of Business Administration. However, an additional 0.5 FTE was added to the faculty to provide administrative support and to teach the eight-credit health services overview course. The amount of effort needed to transform regular one-quarter courses into courses that fit the EDP format has varied depending on the context, the intensity of presentation, and the relationship with the content of other courses. Usually the faculty have accepted the additional teaching responsibility as a new challenge; however, the burden of thesis advising remains a problem.

TABLE 3—Application and Enrollment in the EDP According to Year of Entry (As of Summer Quarter 1983)

	1980	1981	1982	1983	TOTAL
Requests for applications	173	150	187	241	751
Applications received	46	56	38	38	178
Acceptances	33	37	26	30	126
Registrants	29	28	17	20	94

Although the faculty effort expended in course development was funded by the special project grant, the time that faculty members dedicate to presentation of the course work in the EDP is reimbursed from the program budget as a proportionate share of their salaries. Considerable debate resolved around the policy of faculty payment. Should it be in excess of their full-time salary? Should the rate be based on some allowance for research time, as well as teaching time? Should the rate be constant regardless of the rank or other differences among salaries of instructors? The policy that emerged reflects opinion that the EDP is an integral part of the teaching program of the UWSPHCM, and therefore within—not in addition to—the scope of faculty responsibilities. Furthermore, the reimbursement of the faculty is specific to the instruction of students in the EDP whose tuition is paid only to acquire their instruction. Just as research grant funds are not generally awarded with the expectation that they support teaching effort, these tuition payments are not made with the intent to support research effort. Since no fully satisfactory basis of relating all faculty instructional activity was ever formulated, the rate of compensation that has been adopted is based on a general agreement that in the regular UWSPHCM graduate program, the presentation of a three-credit (30 contact hours) graduate-level course consumes half of a faculty member's effort in one quarter. Therefore, a salary offset of 12.5 per cent of a full-time salary is paid for each three-credit course. Payment is increased or decreased accordingly for greater or lesser credit courses.

Student Enrollment

Program availability was announced through various public health association newsletters in the western states and through other professional publications, as well as through contacts with health services programs, individual hospitals, and various governmental health care system agencies. Admissions to the EDP are decided by a committee of faculty members composed of representatives from each of the departments offering courses in the EDP curriculum.

Despite a brief lead-time between annual announce-

ments of program availability and the application deadlines (as a consequence of the process of yearly renewal of the program), there have been significant numbers of interested candidates as measured by requests for application materials (Table 3). In almost every instance in which application materials were submitted, the candidate received counseling from one or more administrative staff or faculty members, so that few individuals with inadequate academic backgrounds, insufficient congruence of professionals goals and program content, or inappropriate work-related experience were among the final applicant pool.

The admissions committee used the same general guidelines of the existing in-residence MPH program in establishing criteria for admission to the EDP. Both extended degree and in-residence applications must pass extensive screening procedures. However, the emphasis of the screening procedure differs in the two programs. The in-residence students are screened much more for their potentials in academia and health policy, whereas the extended degree applicants are screened more for applied program and management potentials. Requirements include prior professional degree and/or three years of experience in a health-related position, acceptable academic record in previous collegiate studies, strong letters of recommendation, and an appropriate statement of purpose in seeking the course of studies. Scores in the Graduate Record Examination (GRE) were not used in the admission process for the first three cohorts of applicants (although the test was required for the purposes of retrospective assessment of its predictive utility).[4] In the face of faculty concerns for the ability of students to learn and apply the quantitative skills and concepts, the admissions committee subsequently required that the GRE be used as one of the means of judging whether the candidates were acceptable. This decision was made before sufficient time had elapsed to quantify the complete academic records of the first three cohorts of students. Comparisons of GRE scores with in-residence students was not possible because most in-residence students are physicians and are not required to take the GRE. Studies are currently underway to clarify the usefulness of the GRE and other predictors of academic success in this program.

In the judgments of the admissions committee, most of the applicants met their criteria of acceptability. Of those who were accepted, most matriculated (Table 3). The accepted applicants who did not enroll gave as their reasons: lack of funding, unanticipated increases in job responsibilities (as a result of staff cutbacks within their employing agencies), or uncertainty about their ability to return to the student role.

The students accepted into the program had graduated from college one to 30 years earlier, with the median being eight years. Their overall undergraduate grade point averages ranged from 2.22 to 3.85 (median = 3.05) on a scale of 0–4.0. Of those who had had graduate school experience, their grade point averages in graduate school were approximately 3.2. It should be noted that although transfer credits are permitted, only nine students have taken advantage of this provision.

The students who enrolled in the EDP came from diverse locations, professional backgrounds, and agencies (Table 4). A plurality of the students are residents of Washington State (46 per cent live in or near Seattle). With the exception of one student who moved to California from Washington, all those living outside Washington State came from jurisdictions in which there are no schools of public health. Previous professional education was principally in nursing and medicine (Table 4). The median length of professional employment among all students was nine years. Over half of the students are employees of government agencies and another third are employees of non-governmental providers of health services (Table 4).

TABLE 4—Residence, Professional Education, and Employment Status of Matriculants in the EDP

Data on EDP Students	Number of Students
Geographic Area	
Alaska	18
British Columbia	4
Colorado	1
Idaho	6
Montana	4
New Mexico	2
Oregon	15
Utah	1
Washington	43
Field of Education	
Nursing	40
Medicine	13
Health Education	7
Dentistry	3
Environmental Sciences	2
Hospital Administration	2
Optometry	1
General Arts and Sciences	26
Employing Agency	
State Agencies	16
City/County Agencies	23
Federal Agencies	7
Indian Health Service	7
Community Clinics	15
Hospitals	9
Private Medical or Dental Practices	3
Academic Institutions	8
Private Industry	2
Voluntary Health Agencies	4

Two-thirds of the students are women, of whom over half are married. The median age at entry is 37 years. The students in the dominant age cohort, 30–39 years, include three-fourths of all male students but only half of the female students.

Eighty-six per cent of the students who have registered in the program are still actively enrolled, although a few have dropped back by one year after taking leave of absence. Those students who have terminated from the program have withdrawn for reasons related to their inability to maintain their academic performance in the face of competing pressures from work and/or home.

Of the 24 students who have completed the full three years of the program, six have, at this writing, fulfilled all the requirements and received the MPH degree. The majority of the remaining 18 students are currently completing their thesis projects, and it is anticipated that most will finish in the subsequent nine months.

Discussion

The first cohort of students only recently completed the three-year curriculum. Evidence of success is as yet subjective and anecdotal. Almost all students report that some or many of their new skills and knowledge have substantially improved their work performance and job satisfaction. In a few instances, this has been independently confirmed by

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statements from their supervisors. Some students have been assigned new or broader responsibilities by their employers, but it is impossible to say whether this is directly related to learning acquired in the EDP. Several students have changed jobs while in the EDP, but it is not clear if any of these moves were program-related.

The EDP has succeeded in giving students an educational opportunity that otherwise would be unavailable to them. We are not aware of any student in the EDP whose circumstances would have permitted him or her to stop work and enroll as a full-time, in-residence student in the UWSPHCM.

Financial assistance to students in the EDP is exceptionally difficult to obtain. In a few instances, students' costs have been subsidized through tuition benefits paid by their employing agencies. Through the Western Interstate Commission for Higher Education (WICHE), students from Alaska, Montana, and New Mexico can obtain tuition support because these states do not have any institutions that offer an accredited MPH degree. Progressive decreases in the amounts of federal awards for public health traineeships have further curtailed financial assistance to students pursuing the MPH degree. Award of the few financial aid dollars at the UWSPHCM is competitive, based on the needs of all MPH students.

The academic performance of the students in the Extended Degree Program has been comparable to that of the students in the regular MPH program despite the significant differences between the groups in their composition and the scope of their programs. Most students in the in-residence program, having been recently full-time students, have well-developed study habits. Few have the conflicting priorities and pressures of outside employment; and few have had the breadth of experience in the health care system of the EDP students.[6]

Faculty members who have taught in this new curriculum have found the students to be challenging and the format to be demanding. The students' insights and perspectives are often edifying for the faculty, especially to those who themselves have had little professional experience in the health care delivery system. Because the projects which the students execute for their class assignments and their thesis topics are often based on their employment setting, faculty members are exposed to many facets of the operation of health care programs that they would not otherwise have the opportunity to appreciate.

Compressing the teaching into intensive on-campus instructional periods challenges the faculty to find the most effective learning strategies. Their development of courses for the EDP has been the basis for revision of classes for in-residence students.

The institution of the EDP has led the UWSPHCM and the University itself to reconsider some of its educational programs. Other schools within the University have examined the extended degree concept as a means of responding to the desire of professionals for advanced education in other fields. The Graduate School of Business Administration, the School of Social Work, and the School of Forestry at the University of Washington have each taken steps to offer similar extended degrees since the inception of the EDP in the UWSPHCM. A task force within the Graduate School has formulated guidelines, based in part on the EDP experience, by which other extended degree programs should be operated and by which non-degree track, non-matriculated students will have access to graduate level courses.

The fiscal viability of the EDP depends on student enrollment. By presenting the curriculum in the manner we have chosen, the costs of instruction as well as administration become fixed; variable costs as a function of class size comprise only a small portion of the total budget.[4] Thus, optimizing the size of the class requires balancing the quality of instruction and the requisite workload against the willingness of students to pay the necessary tuition charges. However, at a time when funding sources and appropriations by state legislatures for institutions of higher education are receding; revenues such as those described for the EDP at the UWSPHCM become some of the "hardest" funds available for faculty support for they are less subject to the uncertainties of the legislative process and of tax revenues.

Our experience to date has been sufficiently promising to warrant continuation of the EDP. Further evaluation awaits sufficient experience to answer the most fundamental questions about the quality and impact of this approach to professional education in public health.

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THE BOTSWANA/MEHARRY PROJECT: A NURSING ACHIEVEMENT IN PUBLIC HEALTH, MATERNAL AND CHILD HEALTH, AND FAMILY PLANNING

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THE BOTSWANA/MEHARRY PUBLIC HEALTH PROJECT:

The migratory lifestyle of the Batswana impedes delivery of health care services and complicates follow-up in both cities and rural areas of Botswana.

In Africa, nurses have traditionally functioned and continue to function in expanded roles. In Botswana, nurses assume responsibilities beyond the scope of their education because of the physician shortage. The government values nurses as its major health care deliverer, not in competition with but complementary to the physician.

The Botswana/Meharry Public Health, Maternal and Child Health and Family Planning Project was a response to the request of the government of Botswana. The United States Agency for International Development (USAID) collaborated with the government of Botswana to develop a five-year Public Health (PH) Maternal an Child Health, and Family Planning (MCH/FP) Project.

Meharry Medical College of Nashville, Tenn., was granted the contract to provide the following services:

1. To train or retrain personnel for staffing rural health facilities in public health, maternal and child health, and family planning.
2. To prepare an integrated curriculum in the above areas for use in the basic nurses training schools.
3. To train a selected tutorial staff to continue using the integrated health curriculum.
4. To establish a functioning health education unit with trained local staff capable of serving health needs, including maternal and child health services, family planning services and preventive health.
5. To develop field training facilities and field practice areas needed to support the health training program.
6. To establish an effective postnatal and family planning service in the three government training hospitals.

This health project conformed to the government's Five-Year National Development Plan, which focused on preventive health care services and rural development. The health team was comprised of a health educator, senior public health nurse, two public health nurses, and an administrator. This project operated from June, 1973, to August, 1979; nursing was its main component.

(For details see IMPLEMENTATION.)

IMPLEMENTATION

1. To train or retrain personnel for staffing rural health facilities in public health, maternal, and child health and family planning.

An in-service education curriculum was developed after consultation with the Chief Nursing Officer and Ministry of Health staff, a list of teaching areas, health concerns, and MCH/FP objectives formed the curriculum guidelines. The Chief Nursing Officer and Botswana Nursing Council approved the completed curriculum.

Overall objectives for students were to: Identify public health problems and try to eradicate them; develop health education plans for the patient and family; identify and solve problems related to maternal and child health and develop health education activities to promote their health; teach fathers and mothers about all child-spacing methods and implement methods of choice.

The three-month in-service courses included eight weeks in the classroom and four weeks in selected rural clinics -- an important arrangement because it allowed participants to practice new knowledge and skills without their clinical work responsibilities. At the end of each session, public health nurses evaluated and revised the curriculum as indicated. All revisions were submitted to the MOH for approval to implement.

Three different areas of the country were selected as training sites. Originally, public health nurses were to teach aided by Batswana tutors, but, because of the shortage of trained tutors, team nurses assumed all in-serice teaching responsibilities.

A reference library was established at each training site to support in-service activities, and all three sites operated on the same class schedules with the same study materials and handouts.

According to the contract with the MOH, all Botswana nurses (550 registered nurse midwives and enrolled nurses were identified) would receive additional training through the Botswana/Meharry In-service Program to increase their effectiveness as PH/MCH/FP practioners throughout the country. Through excellent cooperation between the MOH, Local Government, and Lands, the missions and mining hospitals, nurses were regularly released from service to participate despite staff shortages that made release of 30 nurses (average 10 per class) for each session a sacrifice.

By the project's end, 501 nurses completed the in-service course. Pre- and post-tests revealed increased Ph/MCH/FP knowledge. (i.e. All midwife participants learned to insert intrauterine devices.) Of the 501 RNs and Ens participating, only 98 failed to successfully complete the course.

In 1977, a returning participant with a baccalaureate degree in nursing was appointed as a counterpart to the senior public health nurse, and she assumed responsibility for in-service education at the project's end in 1979.

2. To prepare an integrated curriculum including appropriate public health, maternal and child health, and family planning programs for use in the basic nurses' training schools.

At the project's end, PH/MCH/FP content was being taught but not on an organized basis. According to the evaluation report, "...given the daily realities of running an on-going program, a severe shortage of teaching staff and lack of clear directives on how to proceed..." there were difficulties in meeting Objective 2.

3. To train a selected tutorial staff to continue use of the integrated health curriculum.

By the project's end, a total of 21 participants were either in training, or had completed training and had returned to Botswana. Participants earned or were in the process of completing work on: one Master's degree in Nursing; six B.S. degrees in Nursing; three B.S. degrees in Health Education; five in the Meharry FNP; four in Diploma in Nursing Education, and two were in a Management Workshop of Planned Parenthood in Chicago, IL. Degree work was in various U.S. universities and University of Nairobi.

4. To establish a functioning health education unit, with trained local staff to serve health needs, including MCH/FP/PH.

(Because this objective is not directly related to nursing, it is not discussed here.)

5. To develop field training facilities and field practice areas needed to support the health training program.

MOH selected field training sites and field practice areas in the north, central, and southern areas so that participants could practice in rural settings. MOH equipped the clinic sites, and informed hospital medical personnel of the project and its purpose.

6. To establish effective postnatal and family planning services in the three Government training hospitals.

Public health nurses collaborated with medical officers and matrons of government hospitals to begin postnatal and family planning services, which had not been provided until the project's inception.

During the first year, examinations and loop insertions were done by the physician, nurse midwife, and project participants; thereafter, all methods were delivered by the nurse midwives and project participants consulting with the physician for problems only.

Due to the project, the number of Botswana women accepting use of contraceptives rose dramatically from 1973 to 1977:

Contraceptive:	1973	1977
Pill	3,461	6,751
IUD	231	1,314
Injection/Depro	150	1,094
Diaphragm/Spermacide	--	339

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The project, in meeting its nursing objectives, appears to have made an impact on health services in Botswana and was positively received as evidenced by continuous Government, MOH, USAID, nursing and community support.

Some positive results are:

The request to extend the project.

Nurses became more sensitive to the need for PH/MCH/FP services, which had a positive effect on health care delivery.

Participants believed their education to be important and noted desire to continue study.

A baccalaureate program in nursing was initiated by one of the Master's participants in collabcration with the University Ministry of Botswana and MOH.

The nurse practitioner participants represent MOH support of nurses as primary health care deliverers.

At the projects end, two participants were assigned to the health education unit and all other degree and diploma participants were either teaching or assigned to teach.

Based on the foundation laid by this project, the Government contracted with USAID for a larger, more expanded five-year health service project and used this model for later projects.

INPUT FROM THE MINISTRY OF HEALTH, BOTSWANA

BOTSWANA NATIONAL HEALTH INSTITUTE CURRICULUM

From: Dr. D.B. Sebina
Permanent Secretary MOH
Ministry of Health
Private Bag 0038
Gaborone, Botswana
Ph. 55349
Jan. 6, 1984

Re: Botswana's willingness to coordinate and host a workshop on the Tulane mobile MPH program and the MOH input on the Tulane program.

Your estimated needs seem realistic and reasonable.

Here are qualified personnel to add to your "in Country" list of potential teachers and preceptors:

Dr. E. Maganu, epidemiologist; Principal Medical Officer for Health in Botswana.

Ms. T. Maribe, nutritionist, trained at Master's level, currently head of the Nutrition Unit in the Family Health Division.

Mrs. W. Manyeneng, Head of the Family Health Division, Health Educator trained at the Master's level.

Mrs. Mandevu, Health Educator, trained at the Master's level.

An addition to your "in Region" list of potential teachers:

Dr. Mburu, a Health Planner, who works at the University of Nairobi in Kenya, a very active Community Health Researcher.

Courses listed seem fairly comperhensive. Once articulated, the goals and objectives of the program will provide a more objective and logical basis for fuller identification of both required and desired courses. Once drawn, job descriptions will also provide direction.

As stated in your report, development of a relevant and sound curriculum would necessitate active involvement of persons with expertise and experience in curriculum design at both national and regional levels.

Botswana has a number of nationals with considerable experience and expertise in curriculum design for health professionals. (See p.2)

NATIONAL HEALTH INSITUTE FACULTY (Potential Teachers and Preceptors)

Mrs. T. Finlay -- Nurse Educator; M.P.H., M.S.N., R.N.
Doctoral Candidate, Johns Hopkins
Mrs. V. Ngcongco -- Nurse Educator (Principal Tutor);
M.S., R.N.;
Doctoral Candidate, University of South Africa
Mrs. K. Gasennelwe -- Nurse Educator (Deputy Principal);
M.Sc., R.N.
Mrs. C. Pilane -- Nurse Educator, M.N., R.N.

Mrs. D. Mosiiman -- Nurse Educator
On study leave Chapel Hill studying for M.S.N.

In addition to the above, there are at least 20 nurse educators holding Bachelor of Education in Nursing degrees from the University of Botswana, and three others holding B.S. in Nursing degress from the U.S. Hopefully, in early 1984, the National Health Institute will add three U.S. nurse educators -- one with a doctorate in nursing and a concentration in Anthropology as applied to health care; two others with M.P.H. and M.Sc. in Nursing degrees.

There are three Senior Laboratory Technician Tutors who could be Medical Laboratory preceptors for Bacteriology and Clinical Chemistry. They have all had a one-year formal training program in Teaching Methods and Education.

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BOTSWANA NATIONAL HEALTH INSTITUTE (1973-1983)

In 1973, the Republic of Botswana was in a transitional period. The National Health Institute was begun to meet the health needs of its changing society. It is the central unit for training Health Personnel for the Republic of Botswana.

NHI began with 117 students in four courses -- a Registered Nursing Program, two enrolled schools (Serowe and Francistown), a Health Assistants-Sanitation Program. In 1983, NHI had a total of 720 students in its four Enrolled Nursing Schools (320 students) and the NHI in Gaborone (400 students). It's curriculum expanded to 10 programs: Basic Nursing, Health Assistant, Dental Therapists, Nurse Anaesthetists, Pharmacy Technicians, Health Lab. Assistants, Medical Records, and four Post Basic Courses -- Midwifery, Family Nurse Practitioner, Community Health Nursing, Community Mental Health.

Additions planned for the curriculum in 1982-83 were: Post Basic Community Mental Health Nursing for Registered Nurses (one year), Post Basic Opthalmic Nursing for Enrolled Nurses (one year), Course for Laboratory Technicians (three years).

NHI post-graduate opportunities:

1. Enrolled Nurses can proceed through Enrolled Nurse Midwifery and, if academic requirements are met, to Registered Nursing Program. There is no limit to how far this health worker can go.
2. Health Assistants, who improve their academic qualifications, can proceed to level of Health Inspector and Health Inspector Tutor.
3. Registered Nurses can study for a B.Sc. in Nursing, B.Sc. in Health Education. Some have gone to Master's level.
4. A three-year program for Health Laboratory Technicians began at the Gabarone NHI in Sept. 1983.

Approximately 80 % of the staff are former NHI students. Others are from other African nations, East, Far East, Scandanavian countries and the U.S.

Students's selection includes: open and direct application to NHI, fulfillment of entrance requirements in each program, satisfactory performance in the Regional Testing Center Aptitude Test, special tests required by individual programs, interviews. Final decision is made by the Admission Committee.

Student performance is measured with continuous theory and practice assessments; anecdotal recording of attitude growth; self-evaluation; final theory, oral and practical examinations. Students are assigned to remote rural areas as a requirement for each of the NHI programs. Community Health Practice Theory is emphasized in the schools.

Winston J. Craig Ph.D, M.P.H., R.D.
Associate Prof. of Nutrition
Loma Linda University
(A Seventh-day Adventist Institution)
School of Health, Dept. of Nutrition

INTER-AMERICAN DIVISION PROGRAM OF LOMA LINDA UNIVERSTIY

Winston J. Craig Ph.D, M.P.H., R.D.
Associate Prof. of Nutrition
Loma Linda University
(A Seventh-day Adventist Institution)
School of Health, Dept. of Nutrition
Loma Linda Campus
Loma Linda CA 92350
Ph. 714-824-4598
Feb. 10, 1980

The Office of International Health here at Loma Linda is currently writing up new guidelines and criteria for off-campus LLU MPH programs. The proposal will entail a six-year program with courses offered annually in concentrated fashion for 4-6 weeks at a time. We are presently completing our off-campus teaching sequence for an MSPH degree at four different sites in Central America and the Caribbean.

As I see it, the main need in Africa is to train health promoters to work at the grass roots level as well as giving all undergraduate students a broad understanding of healthful living. Main areas of concern include nutrition, infant and maternal health, and sanitation. Development of teaching aids for use in rural villages is desperately needed for Africa.

March 24, 1983

We have been operating an off-campus program for about 10-12 years, but only since 1979, have we had and off-campus MSPH degree taught in a third world setting. We offered the MSPH degree because we accepted non-health professionals into the sequence, even though physicians, nurses and health administrators were in the majority.

The first graduation for our Central American and Caribbean program will be in Fall, 1983, in Georgia, where all four streams of the program will gather for the final session held at a rented youth camp.

Another program planned for Summer, 1984, at Montemorelos University near Monterrey in Mexico, will operate for about six weeks each summer, during the school's summer recess. It sounds similar to the proposal for South Africa.

(Programs in Africa, with which Dr. Craig is familiar, include: Maternal and Child Health Program in Tanzania, established by Dr. Richard Hart and Dr. P. William Dysinger and others; a Church of the Brethern program in Jos, Nigeria, where village people are trained to deal with specific diseases and health needs at the basic level; a Human Nutrition Unit in the University of Ibadan in Nigeria, led by Dr. Omolulu, which trains students and is a strong graduate research unit.)

THE MASTER OF SCIENCE IN PUBLIC HEALTH
INTER-AMERICAN DIVISION PROGRAM OF LOMA LINDA UNIVERSTIY

Recognizing that successful public health programs in technologically developed areas frequently fail when applied directly to developing areas of the world, the Office of International Health administers interdisciplinary master's degree progress in international health. Graduates are prepared to deal realistically with socio-cultural, environmental, and economic barriers, deficiencies of education and sanitation, overpopulation, administrative complexities, and the special health problems often associated with developing countries.

OBJECTIVES:

1. Coordinate teaching, research and service efforts of faculty having the expertise and interest in solving public health problems of Third World countries and the underserved areas and groups in developed countries.
2. Serve the world church of Seventh-day Adventists as a resource center for planning, development, and evaluation of innovative approaches to Christian health ministry and outreach to the Third World.
3. Train crossculturally sensitive public health specialists who are competent trainers of trainers, crosscultural communicators, health science generalists, public health specialists, primary health care service managers and supervisors, practitioners of the integrated approach to community development.
4. Provide information services for those who work in the Third World.

MASTER OF SCIENCE IN PUBLIC HEALTH

The M.S.P.H., offered for those without professional health training and experience, teaches basic sciences, crosscultural understanding, nutrition, sanitation, infectious disease control, management of primary health care delivery systems in developing countries, and integrated rural development. Also, courses in one of the following areas: maternal and child health, environmental health/human ecology, health education, nutrition, basic sciences, epidemiology, biostatistics, applied medical anthropology, rural development, health services administration. Requirements are minimumn of 72 units of course work and 800 hours of field practicum. One major world language other than English is recommended.

The program is also offered in affiliation with the Inter-American Division of Seventh-day Adventists, in which four different streams of students study at different locations -- Haiti, Trinidad/Jamaica, Mexico/Costa Rica, Colombia/Puerto Rico (alternating locations spring and fall). Coursework includes one stream given in English, two in Spanish, and the fourth in French. Offering this degree program in the field and in local languages of Inter-America is expected to produce church health leaders with practical service skills.

Financial arrangements for the off-campus program have been

negotiated as a package with the Inter-American Division. Students not sponsored by IAD who want to take some of the courses need contact the School of Health for details. Courses offered in this program are regular School of Health courses also offered on campus.

Prerequisites:

1. Acceptable college credit in chemistry, microbiology, general biology or anatomy and physiology, basic nutrition.
2. Other prerequisites may be specified for certain areas of concentration.

MASTER OF PUBLIC HEALTH

The M.P.H. degree in international health prepares health professionals to help solve developing countries' special problems and emphasizes primary health care provision. In the international public health context, students receive a foundation in health care organization, manpower development, environmental health, infectious disease control, maternal and child health, populations programs and the sociocultural aspects of planned change. Although designed for developing countries, the program is also useful in underserved rural and inner city areas of the U.S. and other developed countries. Students are from both developed and developing countries. A minimum of 56 units are required to complete the degree program.

Prerequisites:

Degree is restricted to persons with health professional degrees.

SERVICE ACTIVITIES

Among the Office of International Health coordinated international projects are: A training program for village health workers in Pakistan; rural health service program in Sarawak; education program for rural development in Haiti; maternal and child health program in Tanzania; health planning project for the Marshal Islands.

The School of Health in the Philippines provides faculty and consultation to Philippine Union College for its Master of Health Science degree program. Students are from the entire Pacific area, Asia and Africa. Provision of a University faculty member each quarter facilitates meaningful interchange between academics and local programs.

To meet the need for public health workers in Central America and Caribbean countries, Office of International Health offers an M.S.P.H. degree program in three languages at four different sites -- a four year curriculum which prepares Christian health workers to return to their communities capable of managing primary health services at local levels. (See details in M.S.P.H. description.)

The goal of Office of International Health programs is to help people help themselves to better health. The school seeks to assist existing organizations increase effectiveness and to encourage development of local health training programs. Assisting Christian missions to use their world-wide organizations, facilities, and personnel to promote human health is a special concern.

M.S.P.H. I.A.D. CURRICULUM (Off Campus Program)

Courses include:

1. Core Courses (16 units): Tropical Housing and Sanitation, Principles of Epidemiology, Philosophy of Health, International Public Health Nutrition, Methods in Medical Evangelism, Public Health Statistics.

2. Major Courses (21 units): Program Planning and Evaluation (I and II), Concepts of International Health, Dynamics of Planned Sociocultural Change, Integrated Rural Development, Integrated Rural Development Field Laboratory, Delivering Rural Health Services, Directed Study/Special Project(s), Nutr. Chem. and Micro.

3. Cognate Courses (10 units): Etiology and Control of Infectious Diseases, Physiological Bases of Health, Basic Nutition, Health Survey Methods.

4. Elective Courses (19 units): Health Behavior Change, Methods of Crosscultural Communication, Alcohol and Drug Dependency, Home Health Care, Concepts of Physical Fitness, Principles of Health Counseling, Community Nutrition.

From: Dr. Jose Romero Teruel
Coordinator, Analysis and Strategic Planning
Pan American Health Organization
Pan American Sanitary Bureau
Regional Office of the World Health Organization
525 Twenty-third St. N.W.
Washington D.C. 20037
Ph. 202-861-3200
May 6, 1983

To: Dr. James Carter

Re: Names of persons who can help with the MPH program, and those who can also contact other professional teams in addition to their own staffs.

Also, Dr. Romero Teruel's offer to call and encourage participation in the Tulane program.

Names with * are persons who have additional contacts.

Dr. Sebastiao Souza e Silva
Coordenador, Mestrado em Saude Comunitaria
Departamento de Medicina Preventiva
Universidade Federal da Bahia
Rua Padre Feijó 31
40000 - Salvador - BA - Brasil

Dr. Reginaldo Zacarra do Campo
Director
Departamento de Medicina Preventiva e Social
Faculdade de Ciencias Médicas
Universidad de Campinas - UNICAMP
Rua Dr. Quirino, 1856 - 1
Campinas, Sao Paulo, Brasil

Dr. Ayrton Fisherman
Curso de Saude Publica
Escola de Saude Publica
Secretaria da Saude e do Meio Ambiente
Avenida Borges de Medeiros, 1501
90.000-Porto Alegre-RS-Brasil

• Dr. Nagib Haddad
Director
Departamento de Medicina Social
Faculdade de Medicina de Ribeirao Preto
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Dr. Lenani Braga
Director
Escola Nacional de Saúde Pública
- Fundação Oswaldo Cruz
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Rua Leopoldo de Bulhoes 1480
Manguinhos
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Dr. Guilherme Rodriguez da Silva
Director
Departamento de Medicina Preventiva
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Av. Dr. Arnaldo, 455, 2° Andar
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Dr. Paulo Marchiori Buss
Secretario Executivo
Associação Brasileira de Pos-Graduação em Saude Coletiva (ABRASCO)
Rua Leopoldo Bulhoes, 1480
Rio de Janeiro, Brasil

Dr. Alonzo Kiato Meiro
(Same address as Dr. da Silva shown above)

Dr. Hesio Cordeiro
Coordenador, Mestrado em Medicina Social
Instituto de Medicina Social
Universidade do Estado do Rio de Janeiro
Pavilhao Nacoldo Lisboa da Cunha
Rua Sao Francisco Xavier, 542 -4o. Andar
Maracana
Rio de Janeiro - RJ - Brasil

Dr. [illegible] - SC - Brasil

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interaction with the planned local MOH Institute For Health Education (SIC) must await establishment of the institute and information on its focus and design.

(Also noted in this communique: The contract of FHS project director Dr. P. Ngakane was not renewed, and reportedly, Dr. Ngkane will not be replaced.)

From:USAID, Lesotho
To: USAID, Wash.D.C.
February, 1984

Re: Mobile Public Health Training for Southern Africa Feasibility Study:

USAID has received no communication (as of Feb., 1984) from the Ministry of Health (MOH) concerning the Tulane proposal for public health training.

USAID's comments and reactions on the establishment of a local institute/faculty of health sciences capability in Lesothro are as follows:

1. Establishment of a Faculty of Health Sciences (FHS) was recommended in a second five-year development plan of the National University of Lesotho (NUL). The initial plan, as USAID understands is for establishment of FHS (to be built) at NUL Maseru campus complex. To date, this complex has not been built, nor has any donor indicated interest in supporting/constructing such a complex.
2. Both residential and science facilities at NUL Campus (ROMA) are reported to be fully utilized. Addition of FHS would mandate expansion of the present university complex. No funding has been identified for such class and residential construction/expansion/modification.
3. Due to the severe financial crisis facing the Government Of Lesotho (GOL), funds for capital investment are severly limited. It's highly unlikely that GOL would be willing or able to finance any FHS expansion at NUL.
4. With respect to the Tulane plan to offer classes during summer session when other classes are not in session: This could be feasible. However, USAID is not clear as to the MOH and NUL attitudes toward such a plan. The MPH program, as designed, addresses one aspect of the overall training needs. It is unlikely that a broad range of programs associated with FHS, particularly as envisioned by Lesotho planners, could be offered without the expansion mentioned in items 3. and 4. above.
To begin, it would seem unwise for the MPH program to operate for a summer session without a clear idea of future health training programs and without clear identification of monies to support such a program.
5. Recurrent costs of the proposal will be a problem, given continuing financial crisis in the GOL.
6. USAID understands that the present plan of MOH is to establish an Institute of Health Education in Maseru. The purpose of the institute would be to put under one office, and possibly under one roof, all ongoing MOH health training activities. The idea does not include an expansion in health education programming but is rather a consolidation/coordination of existing programs. Focus is on increasing the quality and cost effectiveness of ongoing programs.

To summarize, there is evidently little or no visible interest in establishing a Tulane Institute of Public Health office/campus/center at NUL. The possibilities of

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FROM: USAID, Swaziland
TO: USAID, Wash. D.C.
February, 1984

Re: Tulane Mobile Health Training for Southern Africa
Feasibility study

The Ministry of Health (MOH) has a lengthy reviewing process for consideration of all proposals. No decision (as of February 16, 1984) on the Tulane proposal had been made partly because the MOH's priority was assessing problems caused by Cyclone Domoina which hit Swaziland Jan. 29-30, and partly because of the lengthy review necessary for a project as important as the Tulane proposal.

Informally, MOH has indicated to USAID its two major areas of concern:

1. Swaziland, with its estimated population of 600,000, has a small, but critical need for trained persons at the M.P.H. level. In two or three years all training requirements for the MPH level would be fulfilled with only occasional students continuing within the system to fill posts vacated due to retirement, promotion, etc. At maximum, only 10 new MPH degree holders would be required, although an MPH might be desirable for some physicians, nurses, etc. The question is: How appropriate is the project's mobile aspect with such projected utilization levels?
2. Some sentiment in both MOH and USAID is that it would be more efficient, as well as in keeping with SADCC collaborative efforts, to support a single regional school of public health with a guaranteed number of places reserved for participants from each country. (Mission Director's comment: AID has used this approach hundreds of times successfully. Why tinker with it?)

From: James D. Shepperd
Regional Health Officer
Agency for International Development
Regional Economic Development Services Office,
West and Central Africa

U.S. Address:
ABIDJAN (REDSO)
Department of State
Washington, D.C. 20520

International Address:
REDSO/WCA
c/o American Embassy
01 B P 1712 ABIDJAN 01
Ivory Coast

January 14, 1984
To: Dr. James Carter
Re: Botswana meeting/workshop focusing on Africa Bureau's Health Training Center's Project Fy 86 698-0460.

Unable to attend the Botswana meeting due to a prior committment, Shepperd sent information on to the Washington Office of the Africa Bureau so that another representative could be sent to Gaborone. His responsibilities are limited to West and Central Africa.

He said: Having representation from Strengthening Health Delivery Systems Project would be very useful. No one has any comparable experience in African Manpower Development, and their staff could play a real leadership role. We will give SHDS staff permission to attend your meeting. We hope that you will also invite a representation from the Regional Office of WHO in Brazzaville.

Dr. F.J. Bennett
Regional Adviser in Community Health
UNICEF
Eastern Africa Regional Office
PO Box 44145
Nairobi, Kenya
UNEP Headquarters
Gigiri (Limuru Road)
Ph. Nairobi 520671/2/3 or 520734/5
May 3, 1983

Mobile Public Health Training sounds like a very good idea because there is a great need for District Medical Officers of Health/PHC Coordinators.

At present, doctors leave their countries (and vital positions) for a year or more to acquire a Master's Degree and vision of high living in the USA. Upon return, many go into the private sector where they make enough money to continue with the USA life style.

Ideally, a course would be tailored so that:

1. Candidates can continue to serve their own countries while taking the course, even if it's only to evaluate district activities or design good information systems, etc.

2. Candidates could add on locally available courses, such as the Nairobi Epidemiology five-month course.

3. You create a cadre of teachers in participating countries.

4. The training has a spin-off in providing/creating locally relevant learning material.

Dr. H.R. Folmer, Course Director
ICHD(International Course in Health Development)
Koninklijk Instutituut Voor De tropen
Royal Tropical Institute
1092 AD Amsterdam
63 Mauritskade
Ph 92 49 49

April 19, 1983

We have studied the document "Mobile Public Health Training Program for Southern Africa" and our first reaction is that it is a subject in which we clearly share a common interest. It would be illogical if we would not cooperate in some way and if we would try to establish or strengthen existing training capacities in Public Health in African countries along separate lines.

A number of questions arise from our side; the most important are:

1. How does your concept of a mobile training program match with the eventually envisaged Regional Institute of Public Health?
2. Will this mobile program eventually result in one institute being the regional center?
3. Has your feasibility study already identified one or more suitable locations for such an institute?
4. What did the feasibility study reveal about available training potential in the region, to country involvement, to educational objectives, etc?
5. Are there any cost estimates and indications of possible contributions of other donor-agencies, however tentative?

From: Dr. Folmer
October, 30, 1984

We all know too well how complicated preparatory steps in a major international cooperation like this are, and how important these steps are on the diplomatic as well as on the technical level.....

Two other questions keep me puzzling:

What is the current position of SADCC towards the plan this moment?

I am sure that you are aware that there is a UNFPA initiative to start a regional training program in public health in Zimbabwe.

I cannot see this initiative unrelated to the Tulane plan, nor competitive. ...Has some form of integration of the two plans been envisaged?

(Feb. & March, 1983

From: Phyllis Jenkins, M.A.R.N.
FNP/TA
Swaziland
To: Chuck DeBose, RHDO
Agency for International Development
USAID Mission to Swaziland
PO Box 750
Mbbabane, Swaziland

My response to the Tulane concept for Mobile Public Health Training is based on several constraints, chief being that a diploma or certificate course for nurses usually leads to dead-end career situations.

In my estimation, Tulane can assist IDM in up-grading its Public Health/Administration courses and that these should be open to all cadres of health personnel who want to earn a diploma/certificate.

I strongly feel that UNISWA needs to grant all graduates of SIHS credits toward a B.S. after scrutinizing each candidates performance. This would develop a pool of potential graduate level applicants for an M.P.H. jointly granted by UNISWA and Tulane.

From: Naomi Baumslag M.D., M.P.H
Director Mobile MPH Program
Tulane University Medical Center
To: Dr. Chuck DeBose
Re: Phyllis Jenkins letter

Since Tulane is concerned that University degree level public health training can count toward University credit for baccalaureate degree, entry qualifications must conform to university requirements and university must be involved. We do not want to provide any more terminal diplomas or certificates.

IDM trains a wide variety of students with different educational levels. This is unsatisfactory because university students and junior matriculation level students, for example, haven't the same depth and intensity of training and it compromises higher level education. It's advisable for students with experience, who haven't passed the University Entrance Examination, to take an exam that assesses their knowledge and permits them to enter with the same basic knowledge as their peer group. Mixing students from junior high and university levels compromises the education system and compounds accreditation problems. Presently, IDM caters to students below university level. If it is to include university students, it must upgrade courses and specify qualifications. Currently, IDM could try to get high school credits for its courses and Tulane University credits for its certificates.

Extension Training Programs for high school as well as universities and institutes of nursing and nursing schools should all be involved in setting up health training that provides upward mobility with clear standards for creditation at high school and university levels.

G.I.H. Chittenden
Academic Registrar
University of Zimbabwe
PO Box MP 167
Mount Pleasant
Harare
Zimbabwe
Ph. 303211
Telex: 4-152 ZW
July 29, 1983

The University of Zimbabwe offers a two-year part-time Master's degree program in Public Health. (Prospectus available.)

Present tuition fees for this program for Zimbabwean citizens are $350 p.a. (Tuition fees for non-Zimbabweans are double this rate; fees are under review and likely to be increased in 1984.)

From: Jack Finlay
Health Education/Nutrition Training
PO Box 992
Gaborone, Botswana
Feb. 28, 1983

Here are some calculations on costs of our Health Education/Nutrition course:

Roughly, I would estimate the Health Education/Nutrition course to run about P 110,000 (Pula = US $.93, Feb.,1983) per year, or a little over P 9,000 (US $8-8,500) per student. I'm using a P 3,000 estimate for each of the 12 students as cost for their salaries and minimal accommodation costs at NHI; approximately P 25,000 for course support costs (budgeted books, transport, materials, etc.); the rest is based on total salaries of myself and two other full-time local staff. (If an AID funded person were involved, the cost would be increased somewhat as additions and fringes are considerable.

Prior to this calculation, I had not thought of the cost as being this high. Nigeria may actually be competitive, though from our own experience and from the tone of your correspondence, the in-country program was deemed both more desirable and more appropriate.

QUESTIONS, SUGGESTIONS, AND OTHER INPUT

Course Costs:
National Health Institute, Botswana
Health Education/Nutrition Training

University of Zimbabwe Tuition

Responses from:
Swaziland (Upgrading Nurses Training and Status)
ICHD, Royal Tropical Institute, Amsterdam, Holland
UNICEF Eastern Africa Regional Office
AID Regional Health Officer, West and Central Africa
USAID, Swaziland
UAAI , Lesotho

the families who receive food, as well as those who do not receive it initially.

C. Since expected morbidity consultation will increase under famine conditions, triage procedures need to be established, especially for oral rehydration in cases of diarrhea. Once relief arrives, it usually includes additional health personnel who will need briefing from PHWs on the ongoing situation. Relief personnel and the PHW work as a team until the emergency subsides.

TRAINING NEEDS CURRICULUM

It would be futile here to outline a training needs curriculum for PHWs relative to their expected disaster prevention and relief roles. These needs flow from activities expected of the PHW as PARTIALLY listed above. Skills to cope with these activities -- many of logistic and managerial nature -- need to be incorporated into ongoing programs for preparing new PHWs as well as continuing education for personnel already in the field. Other health personnel of higher echelons such as nurses, doctors and health administrators, will definitely need the same special skills training. Existing published disaster relief books or articles should be used to more exhaustively identify necessary activities and skills.

It cannot be overemphasized how critical these skills are for health personnel at all levels in countries or regions prone to cyclical disasters of one kind or other. The PHW certainly has a frontline responsibility in this task and active steps should be taken to provide him or her with these life-saving skills.

lower than average weight gain by pregnant women, increased infant and child mortality, increased incidence of kwashiorkor in already prone areas, etc.

Reporting of these trends (if possible in writing) by PHWs to regional and central authorities and organization of the local community for the anticipated crisis are the first steps taken by a PHW in the early stages of disaster. PHWs need to deliberately research information for these reports by talking with knowledgeable community members (especially for agricultual information), and whenever possible, quantifying the situation's severity. If agricultural extension personnel exist, the PHW should coordinate activities with them.

Regarding epidemiological trends noted above, successful reporting depends on PHC structures being in place that regularly carry on some kind of nutrition surveillance and-or keeping some kind of statistics on morbidity, mortality, birth weights, pre-natal control and others. If the latter are not in place, disaster prevention is an added incentive and reason to put them in place as part of the PHC package. In the early stages of pre-disaster drought, the PHW gets early information of worsening trends and should get involved in curative and preventive actions as needed and as prescribed by the local PHC program. At that time NOBODY knows if the situation will lead to a disaster, but all should keep in mind that the agricultural data of a downturn in trends always anticedes the worrisome trends in health indicators by as much as six months (sometimes less). This is why the PHW has to keep current in prevailing agricultural situations, something not difficult in small agricultural communities where everybody talks about adverse weather conditions. The challenge is to tentatively quantify deficits. Organizational meetings with community representatives need to be called as early as this stage.

2. Activities During Declared Disaster

If authorities have been notified, are aware, and are planning central relief operations, the PHW needs to get involved with community participation in several activities before relief arrives. Of primary importance are:

A. Preparation of census with emphasis on children under 5, pregnant and lactating women in each household. The census should include information on expected household food crop harvest, remaining stored stocks of food and household water availability, among other information. This data should allow the PHW to classify (though subjectively) each household as high or average risk, the latter being of primary importance, if triage procedures will have to be implemented due to insufficient food relief supplies. Anticipated needs of medicine and vacine for times of higher morbidity should also be evaluated by the PHW so that supplies can be ordered, if available.

B. The PHW has to prepare and arrange for emergency storage space for relief supplies (including food); prepare implements for and participate in distribution of rations; estimate (if capable) all total food needs for the community using recommended international standards (This is not easy and may be asking too much); quickly identify and call in high risk families to get food and other supplies; and to monitor as much as possible, both

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THE ROLE OF THE PHW IN FAMINE RELIEF

Claudio Schuftan M.D.

TRAINING NEEDS

Because of their unique position, PHWs hold a key role in initiating relief operations. Not only are they on-site when disaster strikes, but being in the area months before a situation becomes critical enables them to provide early warning signs (e.g. drought-related disasters as opposed to, for example, earthquakes).

If PHWs are to function efficiently, their curriculum needs to include elements of disaster relief and early warning systems. Otherwise, we cannot assume that PHWs can perform a leading role in these situations. Of course, incorporation of these elements into the curriculum depends upon specific historical experiences of the country or region in which the PHWs will work. Relief operations and early warnings differ for cyclical drought or floods, occasional earthquakes, expected or unexpected civil strife, or sudden arrival of refugees. Specific conditions will direct curriculum content.

PHWs play a major disaster relief role in the early hours and days of a sudden disaster, before any central relief supplies and personnel arrive. With whatever meager resources available, the PHW has to cope with the situation -- triaging victims and quickly organizing community members into some sort of health brigade. Ideally, disaster-prone communities should be organized BEFORE disaster strikes, which is the biggest challenge and best chance for success. They need to act on pressing needs with minimum delay.

The community leadership roles of PHWs acquire a new dimension in times of emergency either because the worker assumes an even more active leadership role or because, due to prior arrangements, he or she becomes the right hand of whomever is in control. When external relief arrives, the PHW becomes the main liason between external teams and the community for all health and nutrition purposes. Health and first aid operations take priority over any other rehabilitation and reconstruction efforts after disaster strikes.

Using a case of drought and famine as an example, here is a review of expected PHW activities before and during disaster:

(It has rightly been said that droughts are natural occurrences and famines are man-made. Here we are talking about a phenomenon that moves in relatively slowly and therefore, allows more time for effective preventive actions, at least in theory.)

1. Early Warning

Early warning signs for droughts and famines basically come from two factors:

A. Agricultural -- lack of rain, high % of pre-harvest food crop loss, occasional dry-season over-imposed pests, drying up of wells or other water sources, etc.

B. Health -- increased incidence of diarrheal diseases in children, flattening of growth charts both in weight and height in children under 5 years, lower than average birth weights,

THE ROLE OF THE PUBLIC HEALTH WORKER IN FAMINE RELIEF

Claudio Schuftan M.D.

2. Medical Legal Services: Offer medical legal services.
3. Administrative Duties: Staff control and discipline; compile/submit objective periodic reports; ensure finance and stores are properly managed; evaluate reports on health activities and decide on appropriate action.

5. PREREQUISITES:

Candidate are admitted if they have:

A. M.D. (Dar) or its equivalent after 2 years service.
B. Assistant Medical Officer with at least 2 years experience.
C. Diploma in Environmental Health Services; Royal Society of Arts Certificate in Public Health or their equivalent with 5 years experience.
D. B.Sc. - Civil Engineering (Dar) or equivalent with 2 years experience.
E. B.A. Social Sciences (Dar) or equavalent with at least 2 years experience in public health.
F. B.A. (Dar) in mathematics or statistics or equivalents with at least 2 years experience in public health.
G. Other baccalaureate degrees or equivalents with at least 2 years research experience in public health may be considered.
H. Public Health Nurses with at least 2 years experience.

6. CRITERIA FOR AWARD OR DIPLOMA:

Candidates must attain minimum of the 80 required units. Each subject listed above must be passed in continuous assessment with a minimum C grade to obtain the full number of units against the subject. The final examination will consist of a written and oral examination; the oral being the last examination after theses has been accepted.

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Our curriculum for the DPH was drawn after a series of workshop meetings in Postgraduate Studies in Public Health held in 1977. (See below.)

1. DETERMINANTS OF DPH CURRICULUM:

a. A course to provide doctors with skills needed to be the District Medical Officer.

b. Curriculum which is flexibile so that people of different educational backgrounds can be admitted (e.g. students with equivalent qualifications from other universities with little undergraduate training in public health) or students without M.D. or equivalent but employed in Public Health (e.g. Public Health Nurses).

2. COURSE CONTENT (including units):

a. Epidemiology (7.2)
b. Biostatistics/Demography Introduction to Computers (6.2)
c. Development Studies (3.0)
d. Health Economics, Planning Management, Administration, Principles of Accounts, Teaching Methodology (6)
e. Behavioral Science and Health Education (6)
f. Environmental Sanitation (6.2)
g. Parasitology/Entomology (6.6)
h. Laboratory Practicals in Parasitology/Entomology, Microbiology, Pathology (2)
i. Field Work Project (Epidemilogy) (2)
j. Field visits arranged jointly by various subjects (1)
k. Theses(16)
Total of 80 units.

3. DURATION OF COURSE:

Candidates must pursue approved program of study involving full-time attendance for minimum of one calendar year or maximum of 3 years for part-time students.

4. DUTIES OF A DISTRICT MEDICAL OFFICER:

A. Public Health:

1. General -- Define health problems within the district with view of promoting health and combating major preventable illnesses in the community, and take charge of all environmental health work.

2. Disease Control -- Organize mass treatment schemes and vaccination programs.

3. Maternal Child Health -- Supervise: satellite MCH clinics in the district, health of school children, family planning activities.

B. Hospital:

1. Curative Services: Provide general and specialized curative services.

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PUBLIC HEALTH DIPLOMA PROGRAM