An Alternative Physician Training Program In the Pacific

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The Pacific Physician Shortage Crisis

Currently the endemic physician workforce shortage among the Pacific island nations is a well recognized and discouraging problem frustrating the best efforts of local health administrators and regional and international health organizations. The contributing causes for this shortage are many and have included poor premedical school educational preparation, too few regional (non-metropolitan) medical schools, academic and/or political instability among the two regional physician training programs, high failure rates of Pacific Islanders in both regional and metropolitan medical schools, and the constant outward migration of medical graduates to developed countries.

The physician workforce shortage among the U.S.-associated Pacific Islands in Micronesia is generally much the same. After World War II Micronesian physicians were initially trained on Guam and then at the Fiji School of Medicine. However, over the last twenty years less than twenty physicians have been trained from the Republics of Belau and the Marshall Islands and the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, Yap). In general the Micronesian medical student failure rates at the Fiji School of Medicine and at metropolitan medical schools (mainly the University of Hawaii) have been very discouraging.

For example, of the 27 students from Pohnpei who matriculated at the Fiji School of Medicine over the last twenty years, only one has graduated and that was after transferring to the Papua New Guinea School of Medicine. To this list of broken aspirations are the over 100 Micronesians who attempted to enter medical school in the U.S. and mostly failed. For the few fortunate ones that endured and graduated, the majority have elected to remain in the U.S. to live and practice.

As a result of too few physician graduates over the last generation and physician outmigration, the numbers of working Micronesian physicians have dwindled through retirement, death, or movement into other professions (especially politics). In professional terms this decreasing critical mass of indigenous physicians has caused the functional collapse of the Micronesian Medical Association, formerly the only professional, political, and educational forum available for Micronesian physicians. This organizational loss has further contributed to the professional isolation of the few remaining regional physicians.

Disturbingly, the decrease in the Micronesian physician workforce numbers, which is currently considered inadequate to meet the clinical and community health care needs of the region, is contrasted against a backdrop of a 3%-4.2% regional birth rate with its expected population doubling times of every 17 to 23 years. In reality because of outmigration the island growth rates are less. However, diminishing physician numbers in the face of needed expansion of health services is alarming.

Not addressed in the above are across the board and chronic shortages in all categories of health workforce personnel in Micronesia which includes health assistants, nurses, and midlevel practitioners (Medexes).

Short Term Solutions

In response to the above physician shortages in Micronesia the U.S. Public Health Service since 1979 has assigned over 100 American physicians to Micronesia and Guam generally at no cost to the region to assist the local governments in meeting their health manpower needs. Currently there are 13 U.S. Public Health physicians assigned to the FSM, Belau, and the Marshalls. Most rotate through the region for 2 to 4 year terms although one physician has notably been assigned to the Marshall Islands for over eight years. Their purpose is to provide support and temporize while the new nations better develop their own health manpower resources - including sending Micronesians away to medical school. On balance their contribution to the region has been impressive. However, even with such a large professional presence, the numbers of total physicians, both indigenous and expatriate, has been inadequate. There still continues the urgency to rapidly develop an indigenous physician workforce self-sufficiency which is professionally and culturally better suited to the special health needs of Pacific islanders.

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Workforce Planning

In the early 1980's Micronesian and American Samoan government health executives in conjunction with the University of Hawaii began the initial planning to develop an alternative regional medical school in the Federated States of Micronesia. The rationale was to develop a technology-appropriate, Pacific-based physician training program with a curriculum relevant to the clinical and community health needs of the region. The goal was not to mimic a metropolitan medical school with its overabundance of inappropriate curriculum and emphasis on high technology clinical medicine nor mimic the educational process of the other regional medical schools which have been the locus of so many recent educational failures.

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Through the vigorous support of the Hawaii Congressional Delegation funding for a physician training program in Micronesia was authorized and secured. The U.S. Public Health Service then contracted the John A. Burns School of Medicine of the University of Hawaii to establish and run the program.

The Pacific Basin Medical Officers Training Program - A New Model

In January, 1987 in Pohnpei State 23 Micronesian students commenced upon a rigorous five-year physician training program at the Pacific Basin Medical Officers Training Program which on February 19, 1992, graduated 15 men and women physicians from the FSM and Belau. This group represented in numbers more new Micronesian physicians than had been successfully trained from regional medical schools in over a generation. Included were five women - three of whom represented the first woman physicians ever from Chuuk and Pohnpei.

The goal of the program is to train about 90 physicians by 1997 to meet the estimated physician workforce needs for Micronesia. Currently 83 undergraduate students from the FSM, Belau, the Marshall Islands, and American Samoa are in the program.

Unique features of this competency-based program are its study skills courses, integration of relevant basic sciences over five years, a problem-based learning approach, early introduction of students into the clinical setting, certification and licensure of students in a step-wise, career ladder fashion, and emphasis of the curriculum upon the community health needs of the region.

The first three years of the curriculum are dedicated to an educational format which emphasizes self-directed learning based upon practical sets of problems grounded upon the technology limitations and the clinical and community health realities of the region. The clinical format is outpatient oriented and community-based with an expanding involvement of students in the underdeveloped public health and community medicine needs of Pohnpei State. At the end of the three years students are certified as Assistant Medical Officers (AMO's) and are licensed as Medexes - the practicing mid-level practitioner in the region. To date 42 PBMOTP students have been licensed as Medexes - the first to be licensed as such in over 15 years underscoring similarly the paucity of ongoing regional midlevel workforce development and training.

Years four and five of the training scheme are dedicated to inpatient medicine, community health projects, training primary health care workers, mental health training, and community health projects. The in-patient training is conducted primarily at Pohnpei State Hospital with other components of Year 4 and 5 training conducted in almost all the jurisdictions of Micronesia including Guam.

PBMOTP faculty have included medical educators with extensive experience in the Pacific, Africa, Britain, and North America currently or formally affiliated with the John A. Burns School of Medicine, the University of Auckland School of Medicine, the Fiji School of Medicine, University of the South Pacific, UNICEF, and the U.S. Public Health Service. Former faculty have included Dr. Jimione Samisoni, Head of the Fiji School of Medicine, Dr. Sitaleki Finau, Health Coordinator for the South Pacific Commission, and Dr. William Alto, former Assistant Secretary of Health of Papua New Guinea. Visiting faculty and consultants have come from the World Health Organization, the Universities of Newcastle, Pittsburgh, Rochester, Dartmouth, Texas at Dallas, and the University of Hawaii School of Public Health.

Regional Impact

Although the impact of the program will not be fully realized for a decade or more, the program is achieving a moderate measure of international recognition and is now viewed by the World Health Organization as a major focal point in a network of institutions serving the training needs for health professionals in the Pacific - a network that includes the Fiji and Papua New Guinea Schools of Medicine. In the keynote address at the first PBMOTP graduation Dr. S.T. Han, Director of the Western Pacific Regional Office for WHO, stated,

"The World Health Organization recognizes the curriculum of this program as a valuable prototype and one worthy of being shared internationally... The importance of the work that went into constructing this programme goes far beyond today's graduation ceremony. The young men and women who graduate today will be shaping the health services of the future in the Region and will have an important influence on training and health care in the Pacific. In addition, this training programme has already contributed significantly to the development of the Fiji School of Medicine..."

Additionally the PBMOTP has been recognized by the South Pacific Commission and commended for its efforts in the area of innovative community health curriculum. States Atanraoi Baiteke, Secretary General of the SPC,

"...the SPC notes with appreciation the important contribution that the PBMOTP has made to the establishment of appropriate medical education in the Pacific..."

Strategic Planning

Currently the 15 new Micronesian physician graduates - more than all the number of Micronesian physicians that have graduated from regional medical schools in the last generation - have been employed throughout Micronesia and have commenced their respective internships. Soon between 80 to 90 newly trained physicians will be reshaping health care throughout the region, reestablishing the **Micronesian Medical Association**, creating a new ethic in medical professionalism and education, and decreasing the dependency of the region upon expatriate physicians.

In looking to the future the PBMOTP has entered into a formal relationship with the Fiji School of Medicine for the purposes of assisting Fiji in carrying out a WHO mandate to develop relevant, level appropriate, Pacific-based post graduate physician training programs suitable to the special health needs for the Pacific Islands.

Given the generally dismal predictions of the physician shortage crisis anticipated for Micronesia, the health leadership of the region in partnership with the University of Hawaii has implemented an innovative physician training program in the region which will impact regional health for the end of this century and beyond. □