

Introduction

The Pfizer Global Health Fellows Program is an international corporate volunteer program. Through the GHF program, Pfizer colleagues are paired with leading international development organizations in short-term assignments in key emerging markets designed to transfer their professional expertise in ways that promote access, quality and efficiency of health services for people in greatest need.

This annual essay collection illustrates how Pfizer's Global Health Fellows are working together with partner organizations in underserved communities to solve global health challenges.

To learn more about the Pfizer Global Health Fellows Program please visit www.pfizer.com/ghf.

Background

Papua New Guinea (PNG) is often dubbed the “land of the unexpected” or the “land of mysteries.” Juxtaposed with the country's rich natural resources (timber, copra, coffee, gold, copper and natural gas) and lush tourist destinations are problems that most developing nations face—inadequacy and weakness in health care infrastructure, health management systems and health care personnel capacity. PNG is also under-resourced in terms of medical infrastructure. Although steadily improving, the overall standards of health care in PNG still face significant challenges.

As a Prevention Fellow with [FHI 360](#) (formerly Family Health International) in the [PNG Country Office](#), I provided technical mentorship and capacity building of staff in three clinics, two in the National Capital District—(Lawes Road and Nine Mile Clinics)—and one (Id Inad Clinic) in the rural northern province of Madang. The PNG office's focus is to strengthen health systems using evidence-based methods to improve care coordination, streamline patient referrals, and enhance HIV/AIDS service linkages at the provincial and district levels. Their goal is to build long-term partnerships and collaborations with local health organizations while gradually transferring project responsibility to ensure future sustainability [1].

The objective of my assignment was to assist clinical staff to strengthen the comprehensiveness, quality, and effectiveness of clinical patient care while conforming to national procedures, algorithms, and/or international guidance and guidelines. The intimate working relationship and professional alliances and rapport that I built with local staff have enabled me to identify similarities and pragmatic differences in terms of health care personnel, workforce, and various scopes of practice and responsibilities between the U.S. and PNG.

By describing the health care workforce (physicians, nurses, health extension officers, and community health workers) in terms of educational structure, scopes of practice, and professional growth and development, one can begin to gain better understanding of how they work despite limitations on material, technology, and human resource.

Physicians

The practice of medicine in PNG is relatively straightforward—the physician sees and assesses the patient, performs physical examination, orders treatments, then arranges for follow-up visits for re-evaluation.

Entry-level students who wish to become physicians must study for the five-year, full-time Bachelor of Medicine, Bachelor of Surgery (MBBS) degree at the [University of Papua New Guinea](#). Clinical rotations are held at various provincial health care agencies. Specialization requires another two years of advanced education and clinical residency. After completion, a post-graduate diploma is awarded, e.g., Postgraduate Diploma in Obstetrics and Gynecology. A Doctorate in Medicine (M.D.) is available and can be completed only after the MBBS program, a thesis and dissertation. Due to the high cost of living and education, most of the practicing physicians complete their coursework at the MBBS program level [2].

PNG physicians face daunting professional challenges. They have learned to adapt well to an environment where important medical equipment and necessities are either lacking or scarce. Another prominent challenge is the lack of adequate continuing medical education for career enrichment and professional growth and development. The Medical Society of Papua New Guinea conducts yearly medical symposium where distinguished local and foreign physicians are invited to present research and/or medical practice updates. Physicians subscribe to the only medical publication—[Papua New Guinea Medical Journal](#) [3]. There are neither specialty organizations nor journals for reference use. Physicians rely heavily on partnerships with nongovernmental organizations (NGOs) like [FHI 360](#) when it comes to medical updates, scientific advances, in-service trainings and refresher programs. NGOs often invite foreign specialists to provide technical advisement and assistance in areas such as sexual health and care of sexually transmitted infections. Donor support from New Zealand and Australia also provides technical and professional assistance in terms of continuing medical education.

Nursing

Professional nursing in PNG augments the services rendered by professional medicine and aims to provide health care services in both urban and rural settings. Working alongside physicians, nurses are at the forefront of delivering holistic care in primary and specialty patient care areas. In 2008, there were 333 physicians and 3,159 nurses (including midwives) in PNG, which is about 0.5 physicians and 5.1 nurses per 10,000 populations [4]. There are two subsets of nurses—community health worker (CHW) and the professional registered nurse (RN). The educational preparation of CHW nurses is lesser compared with that of RNs. The program of study is offered at various technical and vocational schools around the country and usually takes two full-time years to complete. Scope of practice is somewhat limited with most day-to-day duties involving medication administration, wound treatment and counseling. CHWs are somewhat similar to Licensed Practical Nurse/Licensed Vocational Nurses (LPN/LVN) in the U.S. In PNG, most nursing schools offer a certificate or diploma program from a vocational or trade school. The program of study takes about three full-time years to complete. After successful completion, graduate nurses sit for a national Nursing Council Examination before licensure (RN). Graduates of the Diploma/Certificate program work as staff nurses in healthcare facilities. Should a licensed nurse wish to pursue a career in nursing management, the incumbent can matriculate at the [University of PNG](#) and take the only terminal nursing degree in the country—Bachelor of Nursing. The degree program takes one full-time year to complete and includes classes in health care management, statistical methods, research methods and aggregate community health. Graduates of the degree program often work in leadership positions in various health care facilities around the country [5].

PNG's nursing scope of practice allows for licensed nurses to undertake responsibilities commonly performed by physicians, e.g., physical examinations and writing prescriptions. In health care institutions such as Lawes Road and Nine Mile Urban Clinics, the nurses often take the medical histories, perform simple physical exams, prescribe treatment recommendations and dispense medications. A good example is the adoption of *Syndromic Approach* in management and treatment of sexually transmitted infections (STIs). Under this approach, both physicians and licensed nurses are able to treat all the common causes of STI syndromes at the first visit [6]. Using this approach as the primary guideline in treatment of STIs ensures the provision of patient care—from medical history and interview, physical/gynecologic examination, to prescription of antibiotics.

At the present time, the [University of PNG](#) does not offer Master's or Doctoral degree programs in nursing. Therefore, nursing science is relatively stagnant and relies heavily on physician training for current practice updates. There are nurses who immigrate to developed nations (Australia or New Zealand, to name a few) to further their studies and/or seek greener pastures and they seldom return. Just as with their physician colleagues, PNG nurses have a great need and demand for professional growth and development through continuing education, especially with expanded scopes of practice and levels of responsibility. The [PNG National Nursing Association](#) does, however, host an annual nursing symposium on changing trends in practice as well as latest developments in the profession. But there are no professional, peer-reviewed nursing journals. There is heavy reliance on external partnerships with NGOs to provide clinical updates and technical advisement.

Health Extension Officer

In order to address the nursing and physician shortage, the National Department of Health decided to create another health care worker—the Health Extension Officer (HEO)—described as a professional health care provider between physicians and nurses. Often dubbed as the “rural doctors,” HEOs deliver comprehensive care and health education, especially in the provinces and deeper parts of the country. Since scope of practice is almost similar to that of physicians, HEOs are also able to perform physical examinations, order treatments, and interpret laboratory and diagnostic results. They are identical to [nurse practitioners](#) (NPs) and [physician's assistants](#) (PAs) in U.S. Their educational preparation is almost similar to that of physicians where problem-based learning is enmeshed into the medical didactics and theoretical background. Students take courses for three years, including biological sciences, principles of internal medicine and public health. Theoretical courses and clinical rotations running simultaneously add to the overall rigor of the program, and once completed, a Diploma in Health Science is awarded.

Dien Wama, an HEO at Nine Mile Urban Clinic, was forthcoming in revealing of the great need to advance HEOs' medical knowledge and expertise in PNG. She acknowledged that medical practice and skills stall as soon as students come out of the academic environment because there is no system in place for continuing education after graduation. As with nurses and physicians, there are no specialty organizations or peer-reviewed journals available to HEOs.

Key Learnings

PNG is a major consumer of medicines—brand or generic—used to treat HIV/AIDS, sexually transmitted infections, malaria and tuberculosis. The appropriate distribution and use of successful treatment regimens to fight and control epidemics in developing nations such as PNG lies in strengthening human resources through ongoing professional development opportunities that strengthen the capacity of health workers to expand their expertise and scope of practice.

It is very important for global pharmaceutical companies to realize that patient care around the globe has moved on from the common and traditional setting of doctor-patient relationship to one that involves other “mid-level” practitioners. In PNG, serious medical conditions, medical products and drug advertisements are seen, read or heard in television, radio, billboards or newspapers admonishing the public to “**talk to your doctor about X, Y and Z (drugs) if you experience A, B or C (signs and symptoms).**” The language of these advertisements and educational campaigns will be better aligned with current best practice if instead changed to: “**talk to your [medical provider, health care practitioner and prescriber] about... if you experience...**” to be inclusive of all licensed and practicing medical practitioners. Not only is this dialogue open, honest and transparent in the eyes of the public; it is also a profound acknowledgment and validation of the intelligence, talents, skills and advanced training these health care professionals possess, as well as the much-needed harmonious and collaborative working relationship they foster within the health care community.

References

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