Students Care for Underserved patients in Prune, India



by Christine R. Birnie PhD with Adrienne Rosenbauer PharmD and Mary Caroline Kosh PharmD

The fourth and final year of phar-**L** macy school is exciting for most students. It is designed to give each student real-life, hands-on applications of the basic and clinical knowledge and skills acquired during the previous three years. Advanced Pharmacy Practice Experiences (APPE) offer exposure to various healthcare practice settings, opportunities to gain wisdom from practicing pharmacists, and direct contact with patients. This expands the knowledge base of students and helps to shape their professional attitudes. Medical mission APPE rotations provide these opportunities in a unique way, teaching students how to practice pharmacy in another country and address the cultural barriers and challenges that exist in this setting. A medical mission APPE allows students to serve in a team environment, gain an understanding of the role of a pharmacist on a medical team, put to use drug information and clinical assessment skills, and address socioeconomic and cultural barriers that impact the patient's care.

The Wegmans School of Pharmacy at St. John Fisher College has provided medical mission activities to students since its inception in 2006. Students have participated in medical mission trips to El Salvador, Kenya, the Dominican Republic and, most recently, India. Mission projects are available to students at various levels of their education, often culminating in an elective APPE rotation in their final year. In January 2010, two APPE rotation students, with a pharmacy faculty member, served as part of a 10 member team in Pune, India.

The team served in partnership with Koinonia Church in Pune, India, providing a free medical clinic and the love of Jesus Christ to the needy.



The free medical camp set up outside the new permanent medical clinic

The clinic was arranged so patients went through various medical stations, getting the care that was needed. Patients started in the registration area, where a card containing their primary information and weight was begun. Next, the patients moved to a waiting area where they were taught disease prevention and health education, through short seminars or skits. When the patient's number was called, a triage area where vital signs were measured was the next stop, and hypertension and diabetes screening occurred. From there, the patient moved to the physician, dentist, or other primary care practitioner, before visiting the pharmacy for their prescribed medication or supplies. In addition to their prescribed medication, all patients were given a month supply of multivitamins. Dental patients received a toothbrush and toothpaste. After stopping in the pharmacy, patients received spiritual care before leaving the clinic. At this stop, pastors and church members talked with patients about Jesus Christ and prayed with each patient. Spiritual care was usually received willingly. Patients were receptive to prayer and hearing about Jesus Christ.



Checking a patient's blood glucose at the diabetes screening station

The pharmacy students were considered an integral part of the team and performed a wide array of tasks. These tasks included blood pressure checks, glucose monitoring, dispensing medications, and patient counseling. Pharmacy students also presented health education programs, assisted in dentist examinations, and served as needed. The small clinic en-



Dispensing medication in the health clinic

vironment allowed great opportunity for physician consults, therapy intervention, and dose adjustments.

Although activities are similar to those at clinics in the United States, there were additional challenges that arose in this clinic. Language and cultural barriers were some of the biggest problems. Without a translator, patient counseling and interactions were extremely difficult, because very few of the patients understood English. Even with a translator there were concerns that information was not communicated accurately and completely in a manner that patients understood. For example, metronizadole was being dispensed to a patient for intestinal amebiasis. Using a translator, the pharmacy team member counseled the patient on the importance of not using alcohol while taking this medication. When the pharmacy team member asked the translator whether this point was fully explained, the translator stated the warning was not given. The reason for not mentioning the warning about alcohol was the translator knew this patient did not drink alcohol, and telling him not to drink alcohol would be an insult. This incident pointed out the importance of making sure the translator undersood the necessity of conveying all information to patients in a culturally sensitive manner.

Another unique aspect of this trip was the screening and treatment of chronic diseases. While bacterial and parasite infections are commonplace in developing countries, and disorders such as acid reflux and headaches are seen worldwide, chronic illnesses are increasing in the developing world.1 According to the World Health Organization, death due to chronic conditions such as heart disease and diabetes are the leading causes of death worldwide.2 In India alone, it is estimated that 53% of deaths are associated with chronic disease.3 However, short term medical mission teams are often ill-equipped to manage these diseases. The treatment, like the disease, is chronic and long-term. Many

common medications, such as beta-blockers may be in limited supply and are dangerous if stopped abruptly without the supervision of a physician. For these reasons, most short term teams focus on treating acute diseases.

This project in India did provide an opportunity for a continuum of care. The free medical clinic coincided with the opening of a new permanent medical clinic to serve the people of that area. Prior to the trip friends and members of Koinonia Fellowship church in the United States, the sister church to Koinonia Church in Pune, raised the funds needed to begin a permanent medical clinic. A small one-room storefront was rented for the permanent clinic and to treat the poor and underserved of the area. One physician member of the Koinonia Church in Pune, agreed to staff the clinic a few days a week, in addition to her private practice. The short term team kicked off the grand opening of this clinic with a week-long free clinic. This allowed the short term team to perform screenings for chronic diseases and to treat these patients, knowing that follow up care is available.



Dispensing medication in the free medical camp

Although the continuum of physical care is a great highlight of this project, the continuum of spiritual care is also vital. The clinic collaborates with the Koinonia Church in Prune. This church is equipped to follow up with patients who are seen in the clinic, providing prayer, counseling, and invitations to church. Opportunities to be involved in medical mission projects such as this one are not easy to take. Life as a pharmacist and a pharmacy student is busy and vacation time is coveted. There is a level of sacrifice to those who choose to participate, but those being served and those serving greatly benefit. For Christians, we are following Christ's example in serving and giving up our lives for others (Matthew 20:28).

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