

## **Penn Medical Student Participants at Khambhat General Hospital in Khambhat, Gujarat, India**

### Entries:

Payal Shah, MS4, 2008

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#### Description of the program:

The Cardiac Care Center at Khambhat General Hospital, Khambhat, Gujarat is a 5-year old institution funded by private donors, with government support from the state of Gujarat. It consists of a 10 bed ICU/CCU, an 8 bed step-down unit, a dialysis unit, a diabetes clinic, and a general outpatient clinic. The CCC is adjacent to and contiguous with Khambhat General Hospital. The hospital has, on the upstairs level, a spacious apartment with a kitchen, 2 bathrooms, bedrooms, a dining area, and a living area, and this is where I stayed. I stayed alone, but I had very friendly neighbors. Meals involved tiffin service with typical Gujarati meals, consisting of vegetable and bread based items. Transportation was not an issue as my residence was at the hospital itself.

As a student, my activities were threefold: clinical/hospital-based; clinical/village-based; and community outreach-related. I was able to rotate through the ICU and the clinics. I also went to the general hospital to experience a different medical environment, perhaps more representative of healthcare in most of India. The hospital also runs various camps that involve a team of doctors and nurses taking histories, performing physicals and dispensing medications. Some of these camps are at schools (I went to a school where we performed histories/physicals on students in grades 1-7), while others are more adult-based. The third major part of my experience, community outreach, involved my visiting and giving speeches (in Gujarati) to schoolchildren about my experiences as a medical student in the USA and as a daughter of Indian immigrants to America. Overall, I had a very positive experience.

In terms of the hospital cases, I saw such ailments as snake bites of varying severities, cerebral malaria, organophosphate poisoning, a parasitic hepatic abscesses, and a number of other cases which I would probably not have the opportunity to see in the US. Aside from learning about medical conditions that I have not seen at Penn, I witnessed a different approach to more familiar medical conditions such as DKA, MIs, COPD, and CHF. I was able to witness how the complex social, economic, and environmental architecture of a rural Indian society affected every aspect of illness, from the causes of illness, the reluctance or willingness to seek medical attention, the expression of pain or discomfort, the type of medical attention first sought (Ayurvedic or medical), the differential diagnoses considered, the diagnostic tests ordered, and the level of treatment that the patient was able to afford. I witnessed the management of DKA when repeated chloride levels could not be obtained, preventing calculation of an anion gap. I saw the treatment of STEMI and intracranial hemorrhages when percutaneous interventions and neurosurgical evacuation were not options due to practical and financial constraints. In general, I saw financial concerns play a decisive role in medical treatment in a more outright way than I have ever seen before.

In terms of the medical treatment we provided in the village, I was astounded by what I saw. Worm infestations and nutritional deficiencies were extremely common; an alarming number of children aged 7-10 were pale with complaints of dizziness and palpitations. Most disturbing, though, were a few cases of relatively serious, longstanding ailments in young children. For example, a young, seemingly healthy 7-year old presented to us, but we saw that he had a sling (made of a dirty rag) around his left ankle. Upon removing the sling, we saw a deep, open, obviously infected wound, about 1.5 inches in diameter, which had occurred during a street accident a month earlier. We cleaned the wound, prescribed antibiotics, and set up a follow-up appointment at the Charity Hospital. We also instructed the student and teacher (to be conveyed to the parents) as to proper care, and gave the child some first aid supplies to take home. But if the child has no access to clean or running water, no access to nutrition important for wound healing, financial and practical limits to transportation to and from a medical appointment, I can only hope that his recovery goes well.

Finally, my experience was rounded off by the opportunity to speak at various schools and events about my experiences as a daughter of Indian parents living in the USA and about my experiences in medicine in the USA as compared to India.

Information for future program participants:

I learned a tremendous amount during this experience; particularly, I think I sharpened my clinical acumen since oftentimes, clinical skills, rather than a battery of tests, formed the foundation for clinical decisions at this hospital. I performed insertion of IV catheters, Foleys, and nasogastric tubes, as well as paracenteses. More importantly, I think that my contributions were important to the community I served.

Good months to go are winter months, because there are a few doctors from the US who go there yearly around this time, and learning will be best with them because of language and teaching style. Also, you should speak Gujarati decently well - it is certainly a limiting factor if you do not. Third, if you go during monsoon, and in general, please be prepared for lots of creatures that you might not have seen before. Even if you have been to certain parts of India, an area as rural and undeveloped as Khambhat is very different from a bigger city such as Bombay or Ahmedabad. Snake bites are not uncommon, and lizards and large bugs will almost definitely enter your home. Furthermore, in terms of clinical practice, this hospital is an entirely different arena from Penn, due to international differences and also due to strong financial constraints of the population being served. Doctors will make clinical decisions without doing the tests we are accustomed to performing, and they may manage patients differently from the way we are used to as well. It will be useful to carry around your Pocket Medicine and confirm the treatments of certain conditions and compare them to what you are seeing implemented. Finally, it is a hospital financed largely from donations, so as a Penn student from the US, your presence might be somewhat helpful to the process of furthering the institution - you should expect to receive a lot of attention, and you might be asked to speak at events that may require negotiation of timing with your clinical plans. If you are not comfortable doing this, you might want to bring this up with the program directors beforehand. Finally, Penn is a teaching hospital, while this hospital clearly is not. While there are a few doctors, including the visiting doctors from the United States, who are focused on teaching, gaining a lot out of this experience requires that the student be an active participant in his/her learning, because physicians may not feel they have the time to teach as much as we might otherwise be used to.

Please contact me personally (pdshah@mail.med.upenn.edu) if you are considering this opportunity and I will send you further details.