Medical Student's Journal: Emergency Medicine in Rural Cambodia

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Abstract

The author, a visiting medical student, describes her impressions of the public health and medicine in Kep, a rural province in Cambodia. The state of the hospital reflects the enduring impact of the devastating loss of physical and human resources that followed the communist Khmer Rouge regime.

MeSH Words: Cambodia, Public Health, Khmer Rouge, Emergency Medicine, Rural Medicine

Kep is a small, rural province on the south-eastern coast of Cambodia, just a few kilometers from the Vietnamese border to its south, and 137 km south of the capital, Phnom Penn. Kep is subdivided into two districts and five communes, and its population of 35,434 is dispersed throughout 16 villages [1]. Most of the working population are fishermen and subsistence farmers. The Cambodian health system is ranked by the World Health Organization (WHO) as 174 out of 191 countries [6]. Populations living in resource poor rural areas such as Kep have the lowest health status in the country [5].

On June 4th, 2006, I arrived in Kep along with four other medical students and one engineering student. Upon spending six weeks there, it was evident that the Khmer speaking population is generally poor, relatively uneducated, and lacking in basic resources such as clean drinking water, safe sewage disposal, and electricity.

Entrance to Kep Referral Hospital

Water sources are often shallow wells or ponds that have been contaminated by humans and livestock. The majority of the roads within the small villages are simple dirt paths, inaccessible by foot during the rainy season. While some families can afford to build with concrete, the bulk of the population live in wooden huts with palm leaf roofs that are in constant need of repair.

Patient ward at Kep Referral Hospital

During our stay in Kep, we worked on various research projects for the Centre of International Health funded by the University of Toronto and the Medical Alumni Association. Research topics included HIV/AIDS awareness, maternal health, water quality assessment, and immunization knowledge and practices. Not only were we able to interact intimately with Kep residents through translator-assisted interviews, but we were also warmly welcomed into the community, health centers, and hospital.

Ultrasound Room

Kep is served by one referral hospital and three health centers, which act under the direction of the Operational District Office and the Ministry of Health (MOH). The Kep Referral Hospital is one of many hospitals in Cambodia lacking adequate resources to effectively practice emergency medicine. Fifty to sixty patients are treated at the hospital per week; of which four to five are emergencies. The majority of emergency cases are obstetrical emergencies, and injuries from traffic accidents and assault [7].

Cambodian men with baskets of goods, heading off to market

The state of the hospital reflects the enduring impact of the devastating loss of physical and human resources that followed the communist Khmer Rouge regime [2]. The communist regime ruled the country between the years of 1975 and 1979. On April 17th, 1975, troops marched into Phnom Penn and forced residents, at gunpoint, to leave their homes to live in the country side and work as peasants. Education was abolished, and money became worthless [3]. Between 1970 and 1980, it is estimated that there were 2.2 million to 2.8 million excess deaths in Cambodia, attributable to a regime of starvation, execution, and forced labor [4]. With the help of the Vietnamese, the regime was overthrown in 1979. Cambodia was left with less than 50 doctors and a complete lack of public health infrastructure [5].

Medical services suffer from the lack of monetary and human resources. Hospital staff included five general practitioners, three midwives, five nurses and a driver – all underpaid and poorly trained [8]. The team lacks the ability to deal with many of the cases they are presented with. For example, a blood pressure of 210/130 was not seen as an emergency, and the patient was sent home with a diuretic. Fractured bones are x-rayed, splinted

Working in the Rice Field

with a soft wrap and patients are sent to the Kampot Referral Hospital 40 minutes away for further treatment, providing they can find their own transportation. The small government salary paid to physicians makes public hospital work an unappealing option for trained specialists. Physicians that have been recruited are often unavailable due to other commitments - such as private practice or businesses – that they undertake to supplement their income [9]. As a result, there are no internal medicine specialists or surgeons on call. The single laboratory technician resigned from his position many months ago as he could earn more money elsewhere, and has yet to be replaced. Investigations are therefore limited to kit testing for malaria, tuberculosis, typhoid fever, and HIV [7]. It is not uncommon to see a patient lying in a hospital bed with an intravenous drip of normal saline, undiagnosed for days due a lack of laboratory testing.

Child with water buffalo

The area's lack of resources further contributes to the poor quality of care. Funding from the Ministry of Health is perceived as inadequate [9]. The hospital is in desperate need of a reliable source of clean water as the quality of water in the well is questionable, and clean rain water is only collected during the rainy season. The government is now working to restore electricity by 2007, which has not been available since the Khmer Rouge era. The hospital does own a generator, yet power is often unavailable due to the prohibitive cost of fuel. Imaging is restricted to x-ray and ultrasound, and a broken ECG machine sits unrepaired. An ambulance is parked on hospital grounds, largely unused due to the lack of available communications to call for it. The nearest hospital is inaccessible to all but the few with motorbikes [7].

Informal conversation with community members reveals a general distrust of the public health care system, primarily due to the many acute and chronic medical problems that remain untreated. While hospital staff often follow prescribed government guidelines, many patients prefer immediate treatment such as injections and multiple drug regimes. The general perception of quality of care by the community is low [7].

Emergency medicine in any rural area poses unique obstacles. In developing countries such as Cambodia, the challenges are even greater due to the considerable need for resources. Patients in need do not receive optimal medical treatment. The solution lies with increased funding - whether from the Royal Government of Cambodia or outside parties – for human resources and infrastructure. Money would allow for improved salaries to attract physicians, a better equipped laboratory, a properly installed water purification system, and a reliable source of electricity [7].

For more information about elective and research opportunities, please contact the Centre for International Health at the University of Toronto at centre.ih@utoronto.ca or visit http://intlhealth.med.utoronto.ca

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Competing Interests: None declared.

Funding: External funding for this project was granted by the University of Toronto Faculty of Medicine and the University of Toronto Medical Alumni Association.

This manuscript has been peer reviewed

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