

The Road to Capacity Building in Honduras

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It is estimated that the need for surgical procedures is one per 21 people alive, with a global rate of surgery of 4664 per 100 000 population (1). There is considerable variation in surgical needs across disease types, but there is relative consistency in needs between various global regions and settings.

Of the nearly 313 million surgeries performed yearly there continues to be an unmet need of 143 million worldwide (2). To compound this shortage is the fact that > 90% of total surgeries performed were in the higher socioeconomic countries of the world, leaving a massive gap in care for the poorest parts of the world (2,3). Global surgical efforts have traditionally been geared toward resource-poor cities in which the most prevalent, and more readily supported, surgical diseases involve those that are communicable, maternal, nutritional, injuries, and non-malignant solid organ disorders. An area of surgical capacity building that has been relatively overlooked has been for diseases that require larger infrastructures (facilities, equipment, medications, specialist trained personnel) and systems such as hepatobiliary malignancies. In some countries, surgical capacity building for complex diseases can be achieved safely.

Background of Honduras

Central America connects the southernmost portion of North America and travels southeast to the continent of South America. It consists of seven countries including: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama. Honduras covers approximately 112,492 km² and has a population 9 of the total 42 million in Central America (4).

In Spanish, Honduras literally means “depths”. Honduras is known for its vast natural resources, including tropical fruit, coffee, minerals, and sugar cane. Recently it has begun to have a presence internationally for its growing textile industry. Not until the 16th century did Honduras become a whole province, as it was divided into a western and eastern parts prior to 1580. Honduras gained independence in 1821 from Spain and was part of the Mexican Empire until 1823 when it became part of the Central American Provinces and has been an independent republic with its own elections since 1838 (4). Since independence, there have been about 300 small rebellions and civil wars with some changes in regime (4).

The 21st century in Honduras is notable for a coup d'état in 2009, resulting in a constitutional crisis that led to a power transfer from the president to the head of Congress. The United Nations condemned the actions, refusing to accept the de facto government even though the Honduran Legislative Assembly declared the coup legal (3). A year later, they retracted they agreed the coup d'état government was illegal (3). Today, the conservative National Party of Honduras has instilled some stability into the political milieu and the current president is Juan Orlando Hernandez since Jan 2014.



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Honduran Surgical Capacity Building

The team has consistently been performing outreach surgical missions 1-2 times per year to Honduras. Again this year, a team of AHPBA members travelled across the ocean in early November 2017 on our surgical capacity building trip to Tegucigalpa, or more popularly referred to as Teguz by the locals. The team included Drs. Zibari, Annamalai, August, Moore, Sky and Oly Bliss who documented the adventures with video/photography, and local Honduras AHPBA chapter leader, Dr. Cooper and spanned from Nov 5-10. The biggest and most integral part of the team included the Honduran Physicians (surgeons, oncologist, pathologists, radiologists, and primary care), nurses, and other supporting staff.

Over the week, the team rallied together to take care of hundreds of patients performing an abundant number of complex surgeries and evaluating patients with malignancies. The focus of surgery was on complex breast and abdominal solid organ tumors, including pancreatic cancer, hepatocellular cancer, gastric cancer, renal cancer, colon cancer, retroperitoneal sarcoma, and breast cancers. Each of these operations were complex cases normally done at equivalent of tertiary level centers in the United States. In addition to the high level clinical activity, we also participated in the 2nd symposium sponsored by the AHPBA and Honduran Society of Hepato-Biliary-Pancreas. Topics included pancreatic cancer, hepatocellular cancer, management of HPB trauma, cirrhosis, and hepatitis and spanned over 2 evenings with attendance of over 40 physicians.

With many capacity building missions under our belt, many relationships with several key local team members, many complex operations, and under Dr. Coopers expertise, we were able to identify a few of the key limitations in the Teguz healthcare system. Some of the major limitations, as is in many nations, is the lack of centralized medical records, interventional radiology, interventional gastroenterology, ICU care, medications, postoperative nutrition, physical therapy, operative equipment, and appropriate staff skills and numbers. Using this knowledge and experience, we started case preparations nearly a month in advance with the local team. This significantly improved the efficiency of the travelling team ability to collaborate with Honduran team to maximize patient care and education. Cases were conducted in a total of 3 operating rooms per day each with a separate OR team of anesthesia, technicians, scrub nurses, circulators, and nurses. Equipment was extremely limited, without central lines, arterial lines, minimal handheld retractors, minimal sutures, lack of appropriate surgical instruments and blood for transfusion if needed. This being said, many tools used were donated for mission purposes and cases were very carefully selected for suitability and safety not just on the operating table but also in the postoperative setting. Of note, many of the operations successfully performed were on patients who had recently undergone surgical exploration and deemed "unresectable". Understanding all of these facets are key components to capacity building.

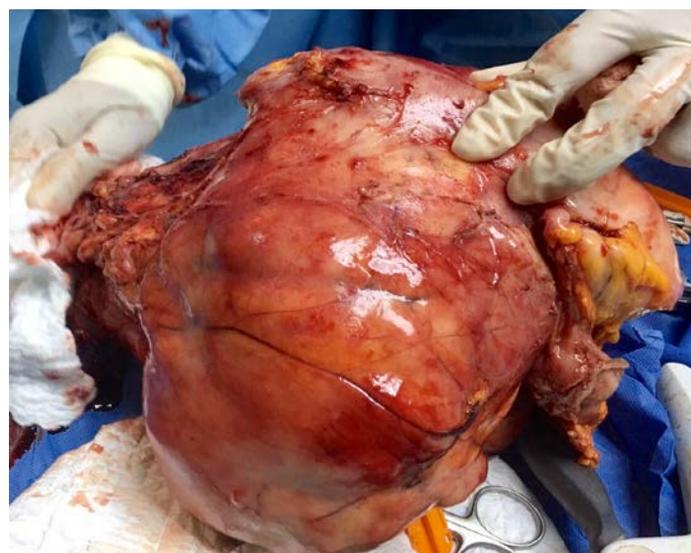


Honduran Surgical Capacity Building

One of the major purposes of missions is education. Our teams vision, is not to "fish" but to teach how to "fish". In this aspect, we started each day with time dedicated to round on patients, do roundtable discussions, and in OR teaching with local Honduran team. Engaging each other and sharing aspects of clinical care greatly improves our ability to exchange knowledge and further enhance capacity building.

Dr. Micheal Moore personally assisted in the care for nearly 120 patients in the oncology clinic over the week in Teguz. Dr. Moore is a one of a kind humanitarian, physician, scientist, and visionary. He has participated in medical outreach across the globe for over 15 years and is one of the pioneers in capacity building. His efforts have been instrumental in the teams' success over the years and has helped thousands of patients. He has prioritized passing on his skills and knowledge to the developing world, and in doing so, will save countless more lives.

We have now started to grow the AHPBA family into Teguz and we were again warmly welcomed by the entire Honduran team. They were engaged for weeks before our arrival and the week there was highly productive. In addition to the clinical work, the team graciously spent time with us each evening as we shared stories and thoroughly enjoyed our time. In the short time Dr. Cooper has been back to Honduras since completing his fellowship he has already begun to enhance the HPB program there. The International Relation Committee of AHPBA is committed with the vision of HPB Capacity Building in Honduras among other countries. This is one of 15 teams AHPBA IRC had send in 2017 to Central America, Latin America, Kurdistan, Africa and South East Asia with collaboration with IHPBA.



References:

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