

#### PERU OCTOBER 2016



#### The ISHI Impact in Peru

Over the last 19 missions, ISHI has provided free surgeries to over 1000 patients across the world. Every mission is uniquely different depending on the location, local culture, barriers to health care and most importantly, the patients themselves. The one commonality among all missions is the undeniable fact that ISHI leaves a positive *impact* on the patients and communities it serves. ISHI continuously strives to evolve as an organization focusing not only on the surgeries themselves, but also on a multidisciplinary approach to local training and education. Our most recent mission to Trujillo, Peru in October 2016 exemplified the growth of ISHI as a humanitarian organization. This 19<sup>th</sup> mission for ISHI was one of many firsts that included a new location at a regional hospital, the first laparoscopic surgery on a mission, multidisciplinary lectures at the local medical university, in-services and teaching throughout the hospital and research driven data collection.

As a team, we learned about the barriers that Peruvians must circumvent before they can receive surgical care. These barriers include long wait times for surgery, prohibitive costs, and insurance restrictions and are what ultimately lead the patients to ISHI. Although each patient had their own narrative, there were a select few who felt comfortable enough to share their story and express their deep appreciation for ISHI. It is these few we share with you to give you a sense of humanity as it relates to global surgical health care and more specifically, the wonderful team that is ISHI.

#### Trujillo, Peru

October 28-November 5, 2016

Hospital Regional Docente
De Trujillo

Mission Leader –Dr. Ziad Sifri





#### An ISHI Milestone- The First Laparoscopic Case on a Mission

Most cholecystectomy surgeries are routinely performed laparoscopically in the United States. On each of the 18 previous ISHI missions, not a single location had laparoscopic equipment available to perform the surgery as is done in the US. Instead, all the previous cholecystectomy surgeries performed on missions have been done with an open incision under the rib cage. The 19<sup>th</sup> mission to Trujillo Regional Hospital marked a milestone for ISHI as the first laparoscopic surgery. While this site had the capacity to perform the laparoscopic surgery, the milestone wasn't without some unique local challenges and subsequent improvisations before it was deemed successful.

The team for this first laparoscopic cholecystectomy case comprised of Dr. Andrew Camerota, a general surgeon from New Brunswick, NJ; Dr. Franchesca Hwang, a general surgery resident from Newark, NJ; Emaad Iqbal, a medical student also from Newark; and Nicole Walliser, an OR nurse from Columbus, Ohio. The first local challenge encountered was the difference in the laparoscopic instruments and the lack of surgical supplies typically used in the US. The second challenge came during the actual procedure. After multiple unsuccessful attempts to keep a good seal, the surgeons improvised by using part of sterile gloves and rubber bands to cap the trocar openings. The operating room also did not have the clips for the clip applier and ultimately had to be ordered from a local vendor. With such a limited supply of clips, the surgeons proceeded with the upmost care during each application to the cystic duct and artery.

Lack of the pre-manufactured bag to remove the gallbladder also made the surgery challenging. Once again, the mission surgical team improvised. The team fashioned a version of the bag using a portion of a glove and successfully removed the gallbladder. After 2 hours of troubleshooting, the ISHI surgical team completed the first laparoscopic case on an ISHI mission. Afterwards, they continued with their endeavors to complete a total of seven laparoscopic cholecystectomy cases with each case duration getting shorter and shorter. Each surgery was a success with all the patients being able to go home on the same day or the next day without any complications.



#### Above pictures:

Left: Surgical team entering the abdominal cavity

Right: Dr. Camerota dissecting around the gallbladder (gallbladder and the liver seen on the screen)

Left: A gallbladder with a very large stone inside, removed from the abdomen using a bag made from a glove

"Sure I will share my story and let you take pictures of me as long as you share it with the whole world. Will you please put this on the Internet? I want everyone in the world to know who I am and how you helped me"- AC Teran



If you met AC Teran on admission, you would never believe he was in any pain. He was always smiling from ear to ear — beginning at triage, through PACU and all the way to discharge. He said he smiled often because it made people want to talk to him, especially women. Despite his past hardships and difficulty getting financially settled, he felt hopeful that the free surgery ISHI provided would change his future.

AC Teran had surgery for an inguinal hernia 18 years ago. As he puts it, "life was good" after the surgery. He was a successful retail business owner until 10 years ago. His life abruptly changed when he was forced out of business as a result of corruption and extortion. He lost everything. He desperately tried to rebuild what he had lost, never having time or money to get married or have any kids.

Approximately 2 years ago, he recalls being in the "jungle" and suffering a fall through a "muy grande" tree and its branches. He declined to speak further about the fall but insists it lead to his recurring inguinal hernia. He felt the jungle "cursed" him. Over the last 6 months, his pain became progressively

worse. Just 15 days prior to ISHI's arrival, he spent most of his days in bed, unable to ambulate without severe pain. He heard about ISHI's campaign for free surgery through one of the doctors at the hospital. He stated he knew the reputation of the doctors in the US and how they were "grandioso" and would heal him.

AC Teran smiled the whole way through his hospital stay speaking to everyone that came to his bedside. As he got dressed for discharge, he expressed his profound admiration for ISHI. His parting words were that of gratitude stating that the inguinal surgery ISHI performed will finally allow him to live pain and debt free. This gives him hope to pursue his dream of opening up a business again and maybe even find himself a wife and have kids...at the "young" age of 58, as he put it



Hope. In impoverished countries, for many, hope is the only thing that sustains them from day to day. In C. Chavez's eyes, ISHI did more than provide him a free surgery, ISHI restored his hope. Ironically, C. Chavez is blind.

C. Chavez is a 74-year-old quiet, kind gentleman who was referred to ISHI by his local doctor. He has been blind for 4 years as a result of untreated glaucoma and in the past 4-5 months, suffered in discomfort from an umbilical hernia. C. Chavez worked as a private security officer for 30 years. His deteriorating medical condition forced him into an early retirement. As the sole provider for his wife, children and grandchildren, the inability to work caused an insurmountable financial burden. He also took great pride in helping his wife with household duties such as laundry and cleaning. As the pain from the hernia worsened over the last several months, he could no longer perform those tasks and required help to dress, bathe and walk. He was told the wait time for his surgery would be a year at the Trujillo Regional Hospital. As unfavorable as that sounded, he said it afforded him the time to borrow the money from friends; money that he would never be able to repay back.

The ISHI surgeons performed an umbilical hernia repair with a mesh on C. Chavez. As I sat down with him post- operatively, he blindly reached for my hand and said the word *hope*. ISHI gave him newfound hope to go back to work as a security officer and provide for his family. When I discreetly asked him about his blindness, he replied, "I don't have to see the crime, I can hear it also."

"I would have waited a year for this surgery and owed my friends and family money that I would never have been able to pay back"

-C. Chavez

The Impact of ISHI in Trujillo, Peru
October 2016







"I work as a farmer to support my family but this thing growing under my arm makes it hard for me"



The ISHI surgical team restored this patient's ability to provide for her family as a farmer. Over the course of 3 years, her lipoma grew so large, it made it difficult for her to work and care for her children. Without the ability to farm, she could not earn money to support her family. After the removal of a 25x17cm lipoma, she was able to fully extend her arm down at her side for the first time in 3 years.



These touching stories only begin to highlight the vast number of patients across the world that lack access to adequate surgical care. Their stories are ones of financial burdens, long surgical wait times, limited access to surgeons, and disability resulting from their diseases. ISHI worked closely with local affiliates to maximize the number of surgeries and patients they could help during this mission. ISHI not only had a significant impact on the patients, but also on the medical community at large. With the focus of improving the sustainability of our missions, ISHI team members provided local education and training to surgeons, nurses, physical therapists and medical students. ISHI formed collaborative partnerships with Trujillo Regional Hospital and Universidad Privada Antenor Orrego Medical College.







Above left: Angelica Parmegiani RN BSN Blunt Trauma and General American Healthcare and Resources

Above right: Angelica Parmegiani RN BSN, Cassie Thomas FNP-BC IV Insertion

Left: Angelica Parmegiani RN BSN, Cassie Thomas FNP-BC MVAs and Blunt Traumas







Left: Dr. Ziad Sifri Traumatic Brain Injury and

Traumatic Brain Injury and the Novel Oral Anticoagulants: A New Challenge

Middle: Dr. Lorena Gonzalez *REBOA*: *Resuscitative Endovascular Balloon Occlusion of the Aorta* 

Right: Weronika Jakubowska 4<sup>th</sup> year MD-MSc

Tissue Engineering: New Therapeutic Applications for Vaginal Reconstruction





Left: Vickey Patel PT, MS Early Patient Mobilization Barriers to Treatment and Strategies for Improvement



The heightened need for global surgery has become increasingly recognized within the international public health sector. Consequently, there has also been a shift in the paradigm of how surgical missions are run. ISHI recognizes that success of a surgical mission can no longer be defined solely by the number of surgeries alone, but also one that includes an education model. To that end, ISHI continues to expand its effort in educating future doctors on the need for global surgery initiatives. ISHI's founding president, Dr. Ziad Sifri, leads the Benjamin F. Rush Jr. Global Surgery Fellowship at Newark's University Hospital and is also the director for the global surgery elective at Rutgers New Jersey Medical School (NJMS). This elective aims to promote an increased awareness on the lack of access to surgery worldwide and educate medical students on surgical missions.

On our recent mission to Trujillo, Peru, Dr. Peter Johnstone, University Hospital's global surgical fellow, guided and directed a group of fourth year Rutgers NJMS students. Each of these students had the opportunity to engage in their own research projects and education aimed at collecting data to improve the efficiency and efficacy of ISHI's global surgery missions. Additionally, these medical students gained invaluable exposure to the methodology of running surgical missions.







Left: Jeremy Badach- Short Term Study on Health Equity, Pre-post operative Disability and Local Perceptions of ISHI

Middle: Hamil Patel- Long Term Outcomes from Pervious ISHI Missions; Introduction of iTrauma to Regional Hospital of Trujillo

Right: Emaad Iqbal- Comparative Analysis of Methods for Endoscopy Simulation and Feasibility of Replicating Rutgers Simulator in Peru

Not pictured:

Dr. Peter Johnstone- Benjamin F. Rush Global Surgery Fellow Newark University Hospital

Steven Ellwood- Survey on Effects of ISHI on the Local Health Care Team; Effectiveness of the Knowledge Exchange through ISHI Endeavors

Newsletter pages 1, 3-8 written by Vickey Patel PT, MS; page 2 written by Dr. Franchesca Hwang