

**REPORT OF THE MEDICAL MISSION TO THE PAMS POLYCLINIC IN CHINCHA, PERU
OCTOBER 16 – 20, 2023**

This was a special medical mission to the PAMS Polyclinic in Chincha, conducted in collaboration with members of the Alberto Hurtado Faculty of Medicine of the Peruvian University Cayetano Heredia (UPCH). The mission included faculty, senior specialty residents and senior medical students of the UPCH who collaborated with PAMS members of the US, specialists coming from Lima and members of the medical, nursing, administrative staff of the PAMS Polyclinic in Chincha. Several additional participants were graduates from other medical schools such as San Fernando (UNMSM), University of Applied Sciences (UPC) and Scientific of the South (CDS). The medical mission was possible through donations received from the Cayetano Heredia Alumni Foundation - CHAF - UPCH and from the Polyclinic of the Peruvian American Medical Society (PAMS).



The medical mission started with an orientation at the Polyclinic on Sunday evening, October 15 where Dr.

Manuel Valdivieso, the mission director and President of the Polyclinic Directory, and the Medical Director, Dr. Solania Tello, described the overall objectives of the medical mission, the different specialties, and services available during the mission. Following a tour, Dr. Tello and Administrator Veronica Leiva provided refreshments as everyone mingled and became familiar with the clinic and its services.

The mission was the combined effort of 35 people including 27 physicians, 3 students, 1 dentist, 1 administrator and 3 volunteers. Included were two teachers (Drs. Javier Astudillo and Manuel Rodriguez), five senior specialty residents (Drs. Christian Coripuna, Augusto Bautista, Milagros Gil, Jessica Apaza and Angel Gomez), and three senior medical students (Renzo Antay,

Claudia Castillo and Gabriela Guevara) all from the UPCH. Additionally, there



was a senior Neurology Resident from San Fernando (Dr. Nicole Kradolfer), two specialists from the US (Drs. Manuel Valdivieso and Pablo Perez), eight specialists from Lima (Drs. Roxana Gallegos, Maria Torres, Sarita Gonzales, Nataly Echevarria, Walter Sanchez, David Ramos, Mayita Alvarez and Nataly Uria). Representing the medical and administrative staff of the Polyclinic were Drs. Solania Tello, Silvia Amaro, Ronald Malca, Iris Ramos, Zulma Hernandez, Nelson Calderon, Pedro Hernández, Hector Orta, Maria Tello, Fernando Aguirre, and Eng. Veronica Leiva. Additionally, there was a Physician Assistant (Dr. Clarena Perez) and Mrs. Astrid Valdivieso from the US and, Ophthalmology Assistant, Diana Zapata, from Lima.

The following specialties were represented: General Medicine, Internal Medicine, Cardiology, Dermatology, Gastroenterology, General Surgery, Hematology/Oncology, Gynecology, Neurology, Pediatrics, Ophthalmology, Urology, Traumatology, and Dentistry. Of special interest was the participation of representatives of the Glaucoma Lima Center who conducted a one-day large campaign of screening and diagnosis of patients with glaucoma and cataracts for specialized care by members of this Center in Lima.



Mission support services included laboratory, EKG, cardiac stress test, ophthalmologic evaluation, upper and lower gastrointestinal endoscopy, ultrasonography, and dental care.



The medical mission had three components to include:

1. Daily, free of charge Health Fairs
2. Daily, subsidized specialty consults and procedures
3. Free of charge medical care in medical posts and at a Nursing Home for the elderly

At the Health Fairs, medical students and physicians from the mission evaluated patients for anemia, chronic bleeding, hyperglycemia, high blood pressure, and visual acuity problems. Glasses donated by the PAMS Polyclinic were provided as needed. We sent teams of general and specialty care physicians along with medical students to the medical posts of Sunampe Health Center, San Jose- El Carmen Health Center and a Nursing Home for the elderly in Chincha. We were fairly impressed by the organization and interest to collaborate of the Sunampe Health Center. In addition, we contributed to the celebration of the International Day of Breast Cancer on October 19 by presenting talks on prevention, risk factors and early detection of breast cancer at Textil Del Valle and at IQF of the Corporative Group La Calera.

During the medical mission we cared for 805 patients who received 1250 consultations and procedures. There were 507 females and 298 males. By age, there were 63 children (0 to 10 years), 44 adolescents (11 to 18 years), 494 adults (19 to 65 years) and 204 elderly (66 years or more). By site, patients were served with consultations and procedures as follows:

Polyclinic	926 (74%)	Note that a visiting team from the Glaucoma Lima Center brought portable equipment to conduct a campaign to rule out the presence of glaucoma. 49 patients were evaluated on a single day and such campaign was successful.
Campaign, ruled out Glaucoma	49 (4%)	
Health Fair	141 (11%)	
Extramural	134 (11%)	
TOTAL	805 (100%)	

Among the 122 patients seen at extramural sites and overall, we provided a total of 134 consultations and



procedures. Among patients, 42 (34%) were seen at the Medical Post San Jose/El Carmen, 59 (48%) at the Sunampe Medical Post and 21 (17%) at the Nursing Home “Hogar de Ancianos Santa Ana y San Joaquin.

By the site of procedence, in descending order, patients came from Chincha Alta (516), Pueblo

Nuevo (132), Sunampe (68), Grocio Prado (26), Chincha Baja (15), El Carmen (15), Alto Laran (11), Tambo de Mora (6), Pisco (5) and less commonly from Castrovirreyna/Huancavelica, Chavín, Huancavelica, Lima, San Juan de Luriganchu, San Juan de Yanac, San Pedro de Huacarpuna and Yauyos.

It should be noted that 334 patients (41%) had their care completely free of charge to include those cared for in Health Fairs and at extramural sites. The remaining 471 patients (59%) had the cost of their care reduced by 50% while being subsidized by the medical mission.

The most requested specialties were, in descending order, general medicine and internal medicine, ophthalmology, neurology, gastroenterology, cardiology, ultrasonography, pediatrics, dermatology, gynecology, urology, odontology, oncology, traumatology, endocrinology and general surgery.



OBSERVATIONS MADE AT THE HEALTH FAIR COMPONENT:

This was an important component of the medical mission, and it was run by the medical students under the supervision of a mission’s physician and the support of the Polyclinic’s administrative staff. Of the 141 patients seen by this team, there were 104 females (74%) and 37 males (26%). By age, there were 6 adolescents (6%), 102 adults (72%) and 33 elderly (23%).

PATIENTS ACCORDING TO BODY MASS INDEX	
Overweight	60 (43%)
Obesity I	39 (28%)
Obesity II	9 (6%)
Obesity III	3 (2%)
Normal	26 (18%)
Underweight	3 (2%)
Not done	1 (1%)
TOTAL	141 (100%)

HEALTH FAIR:

Obesity
Diabetes
Anemia
Hypertension
Visual disturbances



PATIENTS WITH FASTING BLOOD SUGAR	
Normal (70 -99)	47 (33%)
Pre Diabetes (100-125)	50 (35%)
Diabetes (\geq 126)	21 (15%)
Took breakfast	22 (16%)
Not done	1 (1%)
TOTAL	141 (100%)



PATIENTS ACCORDING TO HEMOGLOBIN	
Woman, normal (\geq 12g)	63 (45%)
Woman, anemia ($<$ 12g)	39 (28%)
Male, normal (\geq 13g)	21 (27%)
Male, anemia ($<$ 13g)	17 (12%)
Not done	1 (1%)
TOTAL	141 (100%)



PATIENTS ACCORDING TO BLOOD PRESSURE	
Normal (PAS $<$ 120 y PAD $<$ 80)	83 (59%)
Pre Hipertension (PAS 120-139 y/o PAD 80-89)	22 (16%)
Hipertension, Grade 1 (PAS 140-159 y PAD 90-99)	26 (16%)
Hipertension, Grade 2 (PAS \geq 160y/o PAD \geq 100)	9 (6%)
No se hizo	1 (1%)
TOTAL	141 (100%)



PATIENTS ACCORDING TO VISUAL DISTURBANCES	
Alteration of visual acuity	123 (87%)
Normal	14 (10%)
Not done	4 (3%)
TOTAL	141 (100%)

A rapid analysis of the population served at the Health Fair showed that the population served was affected by several potentially serious issues. Most were adult women and elderly men and women. There was a

prevalence of being overweight (43%) or obese (36%) which together came to a risky BMI of 79%. The incidence of pre-diabetes and diabetes was 50%; that of anemia 45% being worse in women (28% vs 17% respectively); pre-hypertension and hypertension 38% and, 87% of the entire population had alterations of visual acuity. These data are extremely important for the development of health prevention programs for the population of Chinchá.



OTHER OBSERVATIONS DURING THE MEDICAL MISSION:

At the Health Fairs and at the specialty consultations, we identified several patients with abnormalities that required specialty care. Several patients with severe anemia (6 and 7 gm) and history of chronic vaginal bleeding were referred to Hematology and to Gynecology. Several patients with hyperglycemia of over 300 and 400 mgs respectively were



referred to Endocrinology and to Internal

Medicine. Several patients with perceived gastric and colorectal complaints were referred to Medical Oncology and to Gastroenterology for evaluation and endoscopies. Dr. Roxana Gallegos and her resident, Dr. Augusto Bautista, deserve special recognition for coming to help us from Lima to conduct many consultations and upper and lower gastrointestinal endoscopies that were very helpful and much appreciated. The same special recognition is extended to Dr. Nicole Kradolfer, senior Neurology Resident from San Fernando, who came to assist and she kept very busy at the Polyclinic and at the medical posts. In fact, she saw a patient with hemiparesis y mental changes who had brain metastasis with edema and shifting of the brain midline requiring emergency evaluation and steroids treatment by her. Similarly, Dr. Maria Tello, Urologist, came from Lima with her husband to care for many urology patients. Dr. Mayita Alvarez also came from Lima on Wednesday 18 of October and helped us caring for several internal medicine patients.



We saw a 35-year-old female with retracted nipple and an adjacent painful mass on the left breast was identified at the El Carmen Medical Post, brought to the Polyclinic for an ultrasonographic evaluation and found to have a suspicious malignant lesion of the breast. This and other cancer patients were referred to the National Institute of Neoplastic Diseases (INEN) in Lima for evaluation and treatment. A previously operated and "unresectable" hydatid cyst below the liver was evaluated by echography at the Polyclinic and found that such large cyst was inferior and posterior to the liver. The patient was evaluated by General Surgeon Dr. Manuel Rodriguez



who recommended a tomographic evaluation of the abdomen and referral of the patient to Lima for a possible posterior laparoscopic surgical approach. The location of the cyst made it “unresectable” to a local surgeon by an anterior approach. In total, these experiences were remarkable and only covered a few of what we saw during the mission.

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Cancer on October 19 by presenting talks on prevention, risk factors and early detection of breast cancer at Textil Del Valle and at IQF of the Corporative Group La Calera.

Several social events were organized for the mission volunteers. On Wednesday evening all volunteers were



invited to a welcome dinner hosted by the Polyclinic at the Princess Restaurant in the Chíncha Plaza de Armas. This was a spectacular dining experience of 10 delicious dishes of Peruvian Chinese fusion cuisine, and as in the past, many volunteers said "it was the best they had ever eaten". On Friday, our Medical Director, Dr. Solania

Tello, organized an excellent farewell luncheon which included delicious dishes from the region as well as poetry and dancing accompanied by guitar and cajon played by local artists. Dr. Tello joined the performers on the cajon. Luncheon was topped off with picarones prepared on site! Both dining experiences were delicious and very well received.



Thank you to both Dr. Solania Tello and Administrator Veronica Leiva who provided excellent support to the organization and execution of this mission. Thank you to the leadership, faculty, medical residents, and students of the UPCH for their support and excellent participation at this medical mission. We extend our appreciation to all other physicians and volunteers who participated in this medical mission.

A special thanks to those who provided resources to make this medical mission possible including free Health Fair services at the Polyclinic, free care at the Medical Posts of Sunampe and El Carmen, and subsidized consults and procedures to many patients at the Polyclinic.

We invite members and friends of PAMS to join us in future medical missions to the PAMS Polyclinic in Chincha. At the present time, we are planning to hold our next medical mission in January 2024; exact date to be defined.

The impact that medical missions have on the life of the Polyclinic and the patients it serves is exceptional.

Respectfully,

Manuel Valdivieso, M.D.
President, Directory,
PAMS Polyclinic,
Chincha, Peru

PHYSICIANS	SPECIALTY	DATES	CITY/COUNTRY
Valdivieso, Manuel	Oncology, Hematology, Internal medicine	Oct 16-20	USA
Gallegos, Roxana	Gastroenterology	Oct 18-20	Lima
Torres, María Félix	General Medicine	Oct 16-20	Lima
Gonzales, Sarita	General Medicine	Oct 16-20	Lima
Echevarría, Nataly	General Medicine	Oct 16-20	Lima
Astudillo, Javier	Gynecology	Oct 16-18	Lima
Rodríguez, Manuel	Cirugía general	Oct 17-20	Lima
Sanchez, Walter	Ophthalmology	Oct-18	Lima
Ramos, David	Ophthalmology	Oct-18	Lima
Perez, Pablo	Internal Medicine	Oct 16-17	USA
Alvarez, Mayita	Internal Medicine	Oct-18	Lima
Uriá, Nataly	Ophthalmology	Oct-19	Ica
POLYCLINIC PERSONNEL			
Tello, Solania	Medical Director	Oct 16-20	Chincha
Leiva, Veronica	Administrator	Oct 16-20	Chincha
Amaro, Silvia	Dentist	Oct 16-20	Chincha
Malca, Ronald	General Medicine	Oct 16-20	Chincha
Ramos, Iris	Gastroenterology	Oct 16-18,20	Chincha
Hernandez, Zulma	Pediatrics	Oct 16-18-20	Chincha
Calderon, Nelson	Ophthalmology	Oct-17	Lima
Hernandez, Pedro	Ophthalmology	Oct-18	Ica
Orta, Hector	Traumatology	Oct-19	Chincha
Tello, María	Urology	Oct 16-20	Lima
Aguirre, Fernando	Dermatology	Oct 18-20	Lima
RESIDENTS			
Coripuna, Christian	Gynecology	Oct-16	Lima
Kradolfer, Nicole	Neurology	Oct 16-20	Lima
Bautista, Augusto	Gastroenterology	Oct 18-20	Lima
Gil, Milagros	Cardiology	Oct 16-17	Lima
Apaza, Jessica	Cardiology	Oct 16-17	Lima
Gómez, Angel	Cardiology	Oct 18-20	Lima
MEDICAL STUDENTS			
Antay, Renzo	6to año	Oct 16-20	Lima
Castillo, Claudia	6to año	Oct 16-20	Lima
Guevara, Gabriela	6to año	Oct 16-20	Lima
VOLUNTEERS			
Valdivieso, Astrid	Mission's support	Oct 16-20	USA
Perez, Clarena	Nurse Practitioner	Oct 16-17	USA
Zapata, Diana	Ophthalmology Assistant	Oct-18	Lima