

Clinical Experience at Pasteur Clinic Đà Lạt, Vietnam

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History of the Pasteur Clinic Đà Lạt

The Pasteur Clinic is associated with the *Institut Pasteur*, part of the international network of research institutes dedicated to the prevention and treatment of infectious diseases. The Đà Lạt branch of Vietnam's *Institut Pasteur* was built between 1930 and 1936 under the direction of Dr. Alexandre Yersin, a physician remembered for identifying *Yersinia pestis* as the causative agent of Plague and a student of the eponymous French chemist and microbiologist Louis Pasteur. While many overt references to the French colonial tradition have been supplanted in Vietnam by nationalist sentiments, the *Institut Pasteur* retains its reputation thanks to a history of serving the needs of the Vietnamese population. Yersin, who lived out the final years of his life in Vietnam after overseeing the acclimatization of the quinine-producing *Cinchona* tree for the treatment of malaria, is remembered as a friend to the Vietnamese people. Since its founding, the *Institut Pasteur* in Đà Lạt has conducted infectious disease research and served as a major hub for vaccine production in central Vietnam.

Prior to 2014, the Pasteur clinic was located inside the *Institut Pasteur* complex and focused primarily on the administration of vaccines. The clinic's medical director, Dr. Nguyễn Thị Thủy, began to explore ways the clinic could serve the significant health needs of the community in a broader way and subsequently received permission to build a free standing clinic within the *Institut* compound to provide an expanded array of services to the populace. Using loans, grants, and the clinic staff's own finances, the newly independent clinic opened its current facility and officially began its expanded operations on October 24, 2014. A dedicated staff of physicians, nurse practitioners, nurses, medical assistants, and clerks now oversee the administration of the clinic and its daily provision of health services to patients from Đà Lạt and the surrounding areas.

Patient Population



- ❖ Đà Lạt is the capital of the largely rural Lâm Đồng province of the Vietnamese Central Highlands.
- ❖ The population of Đà Lạt is roughly 200,000, but many of the clinic's patients came from surrounding villages, often travelling for an hour or more.
- ❖ The clinic is fee-for-service, so patients tend to be of somewhat higher socioeconomic class or to utilize the clinic for care that is needed urgently or emergently.
- ❖ Access to government-run hospitals is limited by funding constraints, overcrowding that leads to extremely long wait times, and a geographic favoring of much larger urban centers.
- ❖ Patients of all ages utilize the clinic's services, including infants and young children for routine vaccines, injuries, and illnesses, and older patients for chronic and acute disease treatment.

Clinical Services and Provision of Care



- ❖ Primary care delivered by three physicians, focusing on chronic conditions like hepatitis, diabetes, and hypertension, acute illnesses and minor injuries, and the diagnosis and treatment of infectious diseases like malaria, tuberculosis, HIV, HBV, HCV, and various parasitic infections.
- ❖ Obstetric and gynecologic care provided by a senior nurse.
- ❖ Vaccine administration provided by a nurse practitioner, nurses, and various medical assistants. Routine vaccines based on the WHO child vaccine schedule are offered, as well as vaccines and/or immunoglobulin for Rabies, HPV, Japanese Encephalitis, Typhoid, and Yellow Fever.
- ❖ A high volume of phlebotomy overseen by nurses and technicians, with blood draws often done by visiting medical students.
- ❖ Microbiology laboratory services offered by a lab director and technicians. Available tests include numerous rapid antigen and antibody tests for infectious diseases and cancer markers, CBCs, WBC counts, urinalysis, blood typing, and blood chemistry and liver enzyme panels. The clinic is also using a brand new PCR machine for sequencing specific strains of infections.
- ❖ Radiology and imaging services, including x-rays and ultrasonography, conducted by technicians and interpreted by a nurse practitioner and physicians.
- ❖ Electrocardiography conducted by nurses and technicians.
- ❖ Dental services, including exams, cleanings, and basic surgeries, provided by a nurse practitioner.
- ❖ Spa services are provided in a second floor suite as a way to offset costs, but these services are also prescribed by physicians to promote relaxation and reduce stress.
- ❖ Intake, billing, and basic screening of symptoms are overseen by a team of clerks.



Reflections on the Experience

- ❖ Despite a national health system, there are significant barriers to accessing care in Vietnam.
- ❖ Language differences can have a significant deleterious effect on the understanding of patients and providers, even with the benefit of translation.
- ❖ There is much less concern surrounding patient privacy in Vietnam; medical conversations and physical exams are often conducted in the presence of unrelated patients and bystanders.
- ❖ Interactions between staff and patients are short and curt by our standards, limiting wait times and maximizing patient flow. Greetings and small talk are considered superfluous to the healthcare experience.
- ❖ The ELI staff and the clinic physicians and nurses were extremely welcoming and excited to work with us; their patience with our lack of Vietnamese and limited clinical experience was impressive.
- ❖ Working in the microbiology lab increased our understanding of commonly used clinical tests.
- ❖ A weeklong rotation in phlebotomy allowed us to hone our skills and gain confidence in a basic medical procedure.