100 YEARS OF INTERNAL MEDICINE IN THE PHILIPPINES

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This paper presents the outstanding achievements and contributions in the field of Clinical Medicine in the Philippines during the last 100 years

Early Achievements

It was in the latter part of the 19th century when the Philippines began to produce its own doctors. The first batch of graduates in 1875 were from the University of Santo Tomas. Subsequently, other universities (University of the Philippines, University of the East, Far Eastern University, Manila Central University, Cebu Institute of Medicine, etc.) graduated their doctors.

The initial graduates were first and foremost internists, but likewise, surgeons.

During the early years, the achievement in Internal Medicine focused in the molding of exemplar Internists - Internists who form the backbone of present day Internal Medicine.

Those years saw the likes of: Dr. Joaquin Pardo de Tavera, Dr. Luis E. Guerrero, who had the distinction of simultaneously holding two chairmanship positions (UP Department of Medicine and UST Department of Pediatrics); Dr. Fernando Calderon, Dr. Ariston Bautista-Lim, Dr. Antonio G. Sison, Dr. Mariano Alimurung, Dr. Francisco Tangco, Dr. Agustin Liboro, Dr. Francisco Roman, Dr. Gonzalo Austria, and others.

Their qualities and ideals were the unmatched achievements and contributions in Internal Medicine.

Present Day Achievements

* The syndrome of conjugated hyprebilirubinemia without either intrahepatic or extrahepatic obstruction was first described by Drs. Arturo Rotor, Angel Florentin and Lourdes Manahan of the UP College of Medicine. This became known internationally as the Rotor-Manahan-Florentin Syndrome (presently Rotor Syndrome). It is mentioned in any standard textbook in Internal Medicine. The importance of the syndrome like in the insight into the basic mechanism of bilirubin mechanism and transport. Subsequently, this knowledge found practical application in the treatment of a number of liver diseases.

- The one and only pathophysiologic description of hepatosplenic Schistosomiasis japonica by Drs. Q.M. Sulit, E.O. Domingo, D. de Peralta and E. Imperial. This contribution provided the basis for locating the block that gives rise to the portal hypertension in this disease and also suggested the hemodynamic consequences. This knowledge is a major contribution to the pathophysiology of the disorder. It also suggested the surgical intervention appropriate for the condition.
- * Basic immunology of the Schistosoma granuloma by Drs. Ernesto Domingo and Edito Garcia which provided the mechanism of the hepatic pathology in hepatosplenic Schistosomiasis japonica. Their works contributed significantly in accelerating research on the immune mechanisms in delayed hypersensitivity reaction as exemplified by the Schistosoma granuloma and set the groundwork and the search for an appropriate vaccine against the parasite.
- * The investigations on viral hepatitis and Hepatocellular carcinoma by the UP Liver Study Group which has produced the most comprehensive epidemiologic data on viral hepatitis. The group also published the most authoritative studies on the etiology, clinical manifestation and treatment of Hepatocellular carcinoma. Its data have been used extensively by the Department of Health in policy making in relation to the control of hepatitis B.
- * The clinical studies on hepatobiliary tuberculosis by Dr. Sol Alvarez and coworkers at the University of Santo Tomas provided clinical information that are among the most comprehensive in the world.
- * Rheumatic Heart Disease/Rheumatic Fever in the Philippines.

The magnitude of the problem was initially pointed out by Dr. Mariano Alimurung in 1955 where he found that the leading etiology of heart disease among hospital admissions in four hospitals in Metro Manila was RF/RHD. This observation was confirmed by Dr. Imperial et. al. on 6,000 autopsies at PGH(1953-60) showing that RF/RHD was the major cause of death (50.1%). Children age 5-15 are at high risk of developing RF/RHD. School children studied in 1978 by Yason showed that the prevalence rate of RF/RHD was 1/1000. Comparative prevalence rate in other developing countries range from 1-20/1000 while in developed countries (USA, Japan and Australia) the rate is 0.1/1000.

* RF/RHD.

Limson (1978-1979) studied the epidemiology of streptococcal throat infection and observed seasonal variation; about 20% streptococcal throat infection during the rainy season and only 7% during the dry season.

Same authors observed higher ASO titer (>200-300 Todd units) among school children coming from the low income group compared to children from middle income group (<200 Tod units).

Mabilangan and Reyes studied the clinical manifestations of acute RF and showed that the most frequent findings are arthritis and carditis; rarely erythema marginatum and chorea.

De la Paz reviewed 511 cases of RF/RHD and found the following clinical manifestations:

Carditis	72.6%
Migratory arthritis	36.5%
Subcutaneous nodules	0.98%
Erythema marginatum	0.78%
Chorea	0.39%

Juvenile Mitral Stenosis was studied by Dr. Lopez and found that signs and symptoms appeared from 5 months to 4 years after the onset of acute RF. In the western countries, the symptoms of MS usually appeared 10-20 years after the onset of acute RF.

Dr. Calleja et al studied 309 cases of RF/RHD and established criteria for those who will undergo surgery and those who benefit more from medical management. The basis for assessment of the cases were by 2D-Echo and cardiac catheterization. Criteria were set for those who need surgical management.

Dr. Ortiz studied 28 patients with ARF by 2D-Echo doppler. An important observation was the findings of cardiac enlargement, prolapsed of thaortic or mitral valve and or increased in echodensity of the valve leaflets in patients with no evidence of clinical carditis. These observations are important because they indicate that the heart can be involved early in the process of the disease even in the absence of clinical carditis.

Dr. Ongtengco reported on the use of balloon catheter in performing valvotomy in rheumatic valvular disease. This is a percutaneous procedure which reduces mortality and is cost effective in properly selected patients.

Dr. Viscayno et al reported the results of utilizing primary health care workers in the recognition and secondary prophylaxis of patients with RHD. Midwives and nurses were able to recognize heart murmurs. These were referred for confirmation to designated consultants. Once cases were verified to have RHD, secondary prophylaxis were administered by these primary health workers in the rural health unit.

RF/RHD Hospital Registries for secondary prevention. Registries were established in the Philippine Heart Center (PHC) and UP-PGH in 1976-78. The penicillin given to registry patients were subsidized from grant-in aid from NSDB. Patient compliance on secondary prophylaxis was 80-85% when penicillin was subsidized and dropped to 30% when penicillin subsidy was discontinued.

Respiratory Tract Infection

The research works of Drs. Thelma Tupasi and M.E. Velmonte on incidence and risk factors of respiratory tract infections in a community and in hospital provided information on how government sectors, health workers, and non-government organizations could help reduce morbidity and mortality.

Research works of doctors from the Philippine College of Chest Physicians, Lung Study Group (UP PGH) help formulate guidelines on the recognition and initial antibiotic treatment for community acquired pneumonias, thereby implementing a cost-effective approach to treatment.

Pulmonary Tuberculosis

The National Consensus on Pulmonary Tuberculosis (Part I -1989; Part II - 1992; Part III - 1996) established a common consensus on the diagnosis and management of Pulmonary Tuberculosis in the country. This was organized by the Philippine College of Chest Physicians. Its aim was to address controversies in Tuberculosis therapy, thereby have a cost effective approach to patient with PTB.

- In the field of Clinical Allergology, foremost achievements are the works of Drs, F. Cua-Lim, Payawal, Laserna and the works of Agbayani, Bulalacao and Ferreria. Their initial description of aeroallergens in the Philippines include housedust mites (D. farinae and D. pterimyosinus), mold spores (Penicillium, Aspergillus, Hormodendrium, Curvularia) and pollen (mainly Cynodor dactylor and Sorghum halepense). Tree pollens and weed pollens are not as significant as grass pollens. Other common allergens include cockroach, kapok, feathers, tobacco, wool, perythruom and horse danders.
- Their findings are clinically significant in the management and treatment of patients with Bronchial Asthma, Allergic Rhinitis and other allergic conditions.
- The investigative work on the 'Pre-Diabetic' kidney (Annals of Internal Medicine April 1961) by Dr. Alberto Daysog contributed significantly to the understanding of Diabetes Mellitus. The study consisted of doing needle biopsies of the kidney of pre-diabetic subjects without clinical renal disease. These were selected on the basis of a family history of diabetes and other stigmata of it. The author and his associates were the first to show the presence of glomerular basement membrane changes similar to that seen in overly diabetic subjects. This finding contributed to a better understanding of the pathophysiology of renal disease in Diabetes Mellitus. The same author has done extensive work on the Nephrotic Syndrome, Leptospirosis and Renal Failure.

Hypertension

Clinical Practice Guidelines on the Detection and Management of Hypertension headed by Drs. Ramon Abarquez, Antonio Dans and Bernadette Tumanan. The objectives were: (1) the identification of priority issues or concerns in hypertension control that should be addressed in the Philippines; (2) draft the guidelines thru multisectoral task forces for addressing these priorities.

- * Cancer in the Philippines
- Studies on survival of Filipino cancer populace from a population-based data source (1987-1993) were a major achievement in the cancer control program in the Philippines. This was conducted by doctors from the Department of Health and the Philippine Society of Medical Oncology. Since treatment and stage data were poor and unavailable, only overall observed survival rates were estimated (regardless of stage/treatment) except for survival by stage of breast and cervix cancer patients. Survival from breast cancer was the most favorable while liver cancer had the poorest survival rate. Survival from stage II Breast Cancer was 73.2% compared to 24.4% for stage III and 6.67% for stage IV. Survival from stage I Cervix cancer was 46.7% compared to 23.6% for stage II, 12.17% for stage I and 9.5% for stage IV. The difference between stages was significant, depicting the need for implementation of early detection of breast cancer and primary prevention/early detection of cervix cancer. This study reflects the survival of cases with the top ten sites in an era where primary, secondary, and tertiary prevention are wanting. Perhaps the survival picture will change for patients diagnosed in the year 2000.
- * Algorithms for the management of common medical oncology problems and guidelines on chemotherapeutic agents were done by doctors from the Philippine Society of Medical Oncology (1994-1995). This project was necessary to continuously review and/or fortify the medical oncologist's practice of his/her skill.