

Leading Article**Tracing the Progress of Pathology in Sri Lanka – Part II
Undergraduate and postgraduate teaching in Pathology**Janaki Hewavisenthi ¹ MD, Lakmini Mudduwa ² MD

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This is the second of the three-part series documenting the birth and evolution of Pathology in Sri Lanka (Part one was published in the previous issue of this volume). In this part the development of postgraduate teaching in pathology is addressed.

Dr. S.A Cabraal, the first Director of the Post Graduate Institute of Medicine (PGIM), University of Colombo, writing in the *Journal of Pathology* on postgraduate training in Sri Lanka states, that “prior to the establishment of the PGIM in 1974, the University of Colombo conferred the Degree of Doctor of Medicine in Pathology on candidates who had passed such examinations or submitted material as prescribed by the then regulation”. Since there was no organized teaching or training taking place in the island at that time, the training was done in the UK and the postgraduate Diploma of The Royal College of Pathologists was a recognized qualification for consultant appointments.

In 1974, the Government of Sri Lanka decided that postgraduate medical education should be organized locally, and candidates should be prepared for examinations held by local universities. Thus, the PGIM was established with the objective of training doctors to a level of competence in his or her chosen discipline, which would enable them to undertake health care responsibilities at a consultant level. The training programmes formulated by this

institute were entrusted to the Boards of Study in the various disciplines. The first Board of Study in Pathology was constituted under the Ordinance Nos 1 of 1979 and 2 of 1980. The first Chairperson was Professor Daphne Attygalle, Professor of Pathology of the Faculty of Medicine, University of Colombo and the Secretary of the Board was Dr. H.R. Wickremasinghe. The other members were representatives of the College and Departments of Pathology of the Faculties of Medicine, of Universities of Colombo, Peradeniya and Jaffna. The period of office was three years. The office of the members of the first Board of Study expired in April 1983 following which Prof Daphne Attygalle was unanimously reelected for a further term. Dr Ranee Perera was then appointed Secretary to the Board and needs special mention as a person who took an avid interest in postgraduate teaching, organizing the first course of study for the trainees.

The prospectus for the Pathology training programme was formulated by the Board of Study in September 1980 in order that the qualifying Part I examination could be held in February 1983. According to this prospectus, the MD in Pathology programme consisted of 5 parts. This included a MD in Pathology - Part 1 examination (MD Part 1), followed by an in-service training for 30 months, which enabled candidates to appear for the MD in Pathology - Part 2 examination (MD Part 2). Successful

candidates would then proceed for one year of training in a field of his or her choice at an overseas center approved by the Board of Study followed by the final phase of training which was a one-year period of service as Assistant Pathologist in a hospital in Sri Lanka.

The first MD Part 1 examination was held on the 15th of February 1983. The examination consisted of two written papers only. Two candidates, Drs (Mrs) N. Dahanayake and (Mrs) S K. Lokuarachchi sat the examination which they both passed. The Board then decided to hold the MD Part 2 examination for those who had two years in-service experience in Pathology and to exempt candidates from the theory and certain parts of the practical examination based on their postgraduate qualifications and practical experience gained at the time of application. Prof. B.N. Dutta from the Postgraduate Institute of Medical Education and Research, Chandigarh served as the External Examiner. Thus, five candidates enrolled for the Part 2 examination held in May 1983. Only a single candidate Dr (Mrs) O.M. Babapulle appeared for the examination and she became the first pathologist to be produced by the PGIM in 1983.

The Board of Study then revised the prospectus for the Pathology training programme replacing the MD Part 1 with a Diploma examination. Only candidates holding the Diploma in Pathology were eligible to sit the MD examination. Those possessing the DCP (Lond) and D Path (UK) were exempted from the Diploma in Pathology examination and allowed to sit the MD examination.

The first batch of twelve trainees enrolled in the in-service training programme which was of two years duration, in May 1984. The training was supplemented by a weekend lecture course to enable them to sit the Diploma in Pathology examination where all four disciplines of Pathology were tested.

The first Diploma examination was held in November 1984 and 4 candidates appeared for the examination. Only two candidates namely Dr (Mrs) M.C.N. Ekanayake and Dr (Mrs) N.V.I. Ratnatunga qualified, and they subsequently

qualified in Haematology and Histopathology respectively.

Dr (Mrs). N.V.I. Ratnatuge was to become a key figure in the field of Pathology in Sri Lanka and served as the Chair Professor of Pathology at the University of Peradeniya, Chairperson of the Board Study and the President of the College of Pathologists in 2001.

The Board of Study also entertained applications from practicing pathologists with a minimum of six years post-qualification experience in Pathology to sit the MD examination on the presentation of either a thesis/dissertation of a study carried out by the candidate and or published papers or papers awaiting publication. Under this category 'C' two candidates sat the examination, held in December 1984 but were not successful. The only candidate who sat the entire MD examination under category 'A' which included theory, practical and oral components was Dr (Mrs) Phyllis Gangegoda. Prof. A.K. Saraya, Head of the Haematology Unit of the All-India Institute of Medical Sciences, New Delhi served as the External Examiner for the MD (Pathology) in the Haematology examination. Dr (Mrs) Ganegoda was successful at this examination and was board certified as a consultant on 3rd May 1985. She later took up the post of Consultant Haematologist, General Hospital Colombo becoming the first to do so.

The development of postgraduate training in the discipline of chemical pathology is remarkable since there were no qualified chemical pathologists at the time to undertake training of postgraduates. Dr (Mrs) Saroja Siriwardena elected to train in this field following completion of the Diploma in Pathology in 1988, as advised by the Director PGIM, Dr S.A. Cabraal. In a far-sighted policy, he envisaged a three year overseas training period. This, however, did not materialize and the Board of Study appointed Dr H.R Wickremasinghe and Professor C. Canagaratne (University of Colombo) as supervisors. Dr Siriwardena successfully completed the MD in Chemical Pathology achieved largely due to her immense commitment and dedication to self-study. She subsequently underwent

overseas training at the Royal Brisbane Hospital in Australia. On completion of her training and Board Certification, she was appointed as Chemical Pathologist, General Hospital Colombo and commenced training future chemical pathologists of this country. Her almost single-handed effort in this regard is indeed highly laudable.

The Diploma and MD in Transfusion Medicine was commenced thanks to the valiant efforts of Dr (Mrs) Mangalika Bindusara a former director of the National Blood Transfusion Service.

At the inception, very few doctors chose pathology as a career. The earliest post graduate trainees recruited to the in-service training programme were those motivated, encouraged and even gently coerced by the senior pathologists in service and in the Universities at that time. Over the years the number of doctors opting to select pathology as a career increased, necessitating a selection examination which was introduced in the year 1995. Candidates were required to pass this examination in order to obtain a position in the in-service training programme leading to the Diploma in Pathology. In most years the competition was so high, that all candidates could not enter the in-service programme even though they had passed this examination. The two years of in-service training leading to the Diploma in Pathology included training in the fields of Histopathology, Haematology, Chemical Pathology and Microbiology. On successful completion of the Diploma, candidates underwent two years of further training in their chosen field which was either Histopathology, Haematology or Chemical Pathology. Microbiology was not offered as an option because, there was a separate training programme and a Board of Study for Microbiology.

Often, board certified pathologists had to work as the sole pathologist in government hospitals and hence required proficiency in all four specialties of laboratory medicine. This was the rationale for such broad-based training during the first two years of training leading to the Diploma in Pathology.

The Pathology Curriculum underwent further minor revisions in the ensuing years including more standardized rotations in specialized centers. A notable addition was the incorporation of a research study to be conducted by the candidate which was considered a prerequisite for board certification as a consultant.

The next major revision came into practice in 2008. This was to offer separate Diplomas for the disciplines of Histopathology, Haematology and Chemical Pathology. The candidates were invited to choose their discipline at the point of entry into the in-service training programme, after the initial selection examination. This was followed by a one-year period of basic training in all three disciplines and included Microbiology as well. An examination, termed the Certificate of Basic Laboratory Sciences (CBLS) was conducted at the end of this period, following which the candidates underwent a two-year period of in-service training in their chosen subspecialty which made them eligible to sit the Diploma in Pathology in his/her selected discipline. Successful candidates then entered the training programme leading to the MD in one of the three disciplines Histopathology, Haematology or Chemical Pathology.

The next revision of the curriculum took place in 2016 resulting in the production of separate prospectuses for the three specialties: Histopathology, Clinical Haematology and Chemical Pathology. However, these three specialties shared a single selection examination, CBLS lecture course and CBLS examination. Examinations for Histopathology, Chemical Pathology and Haematology were separated into MD Part 1 and 2 instead of Diploma and MD, to fall in line with the Sri Lanka Qualification Framework. The prospectus of 2016 which is currently used for post graduate training in Pathology includes many new training tools encouraged by the PGIM. These are the learning portfolio, direct observation of procedural skills (DOPS) and six-monthly progress reports. A decentralized practical

assessment was also introduced to encourage MD Part 2 trainees to achieve certain skills such as specimen handling in histopathology. At the time of writing further revisions are envisaged and undertaken in keeping with the everchanging landscape of post graduate education.

The growing numbers of Haematology and Transfusion Medicine trainees and the complexity of the training programme, including a more clinical based training resulted in the establishment of a separate specialty board in Haematology and Transfusion Medicine at the PGIM in 2011.

In the sphere of academic pathology, the Colombo Medical School has boasted of many illustrious Professors and academics throughout the years, some of whom have already been mentioned. The Peradeniya Medical Faculty was the second to establish a Department of Pathology in the island, with Drs. Tennakoone and R.G Panabokke being asked to set up this department by Professor G.H. Cooray. Professor Panabokke in a personal communication revealed they were apprehensive of the undertaking at the outset. However, these extremely dedicated and talented gentlemen were successful in developing a very strong pathology department and subsequently becoming the Chair Professors in this Department. Later Professor Panabokke also served as Director PGIM from 1990 – 1995. This was a golden era for postgraduate training in Pathology and a boon to trainees in Pathology, having a director who understood their problems and concerns and was also capable of addressing most of these issues.

It is sad to note that out of the eight Medical Schools in this country, only Colombo, Peradeniya, Kelaniya, Sri Jayawardenapura and Ruhuna have pathology departments that are adequately staffed. The Departments of Pathology of the University of Peradeniya, Colombo, Kelaniya and Ruhuna are fortunate in having Chair Professors, namely Professors, Neelakanthi Ratnatunga Chandu De Silva, Janaki Hewavisenthi and Lakmini Mudduwa respectively. Professor Lakmini Mudduwa

during her tenure as the Chairperson of the Board of Study in Pathology introduced many innovative training and assessment modalities and spearheaded the curriculum revisions that took place in post graduate education. The medical faculties of Rajarata, Jaffna and Eastern University are currently severely understaffed.

Pathology teaching in the undergraduate medical curriculum, has also undergone many changes with most medical faculties opting to revise their traditional discipline-based curriculum to a more integrated one with accent on student and problem-based learning resulting in a significant reduction in teaching of Pathology in many medical schools. This comes in the wake a burgeoning belief among medical educationists and other stake holders that ‘Medicine comprises more than a science and that more attention must be given to the humanist elements of medical practice and medical education’ and that ‘greater understanding of the pathological basis of disease has not contributed substantially to improve morbidity and mortality rates’. On the other hand, it would be wise to keep in mind that proper communication with colleagues and patients depends on a proper understanding of the pathophysiological basis of disease and that many advances in public health have been based on the understanding of the underlying pathology of a disease. It would be very interesting to see how far “the pendulum would swing” with regard to Pathology teaching in the undergraduate medical curriculum in Sri Lanka.