Leading Article

Growth and Development of Paediatrics in Sri Lanka

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During the last few decades, Sri Lanka has experienced the growth of many sub-specialities within the broad umbrella of medicine. This is not a unique phenomenon to Sri Lanka as many developed countries have gone through this phase of specialisation many decades earlier than Sri Lanka. In this context, it is an appropriate time to document the growth and development of paediatrics in our country.

The formative years

It was in 1895 that the one and only children's hospital was opened in Colombo and named after the wife of the then governor of Ceylon – The Lady Ridgeway Hospital for Children (LRH). For well over a century this giant lady has remained "infertile" as it is still the only hospital for children in Sri Lanka. Until the 1940's, adult physicians used to provide paediatric services at this hospital, and very much like in the west, the child was considered as a miniature adult.

The pioneers

The first paediatrician to be trained was Dr. L O Abeyratne who was appointed to LRH in the 1940's. Professor P B Fernando, the Professor of Medicine in Colombo, used to visit LRH and provide cover for the children. In 1949, Professor C C de Silva was appointed as the first Professor of Paediatrics in the Faculty of Medicine, University of Ceylon. His main clinical interests were nutritional disorders, infective diarrhoeas and haemoglobinopathies. However, he had many interests outside the hospital setting. He was instrumental in setting up the convalescent home at Thalagolla for nutritional rehabilitation of malnourished children together with Dr. L O Abeyratne. He was a pioneer in the field of family planning contributing extensively towards it from about the mid sixties. He retired in 1966 and lived for another 20 years or so. Dr. Stanley de Silva was the third paediatrician to be appointed to LRH. On the surgical side, Professor Milroy Paul ran a surgical ward at LRH for over twenty years until he retired in the mid-sixties. Professor M V P Peiris and Dr. F A Sandrasagara were the other surgeons who worked at LRH during that period.

Lady Ridgeway Hospital (LRH)

LRH was opened on 18th January 1895 and is still the only children's hospital in Sri Lanka. In 2000, a new wing was opened increasing its total bed strength to 1100.

LRH caters to about 60,000 in-patients and about 10,000 surgical operations are performed per year. About 35,000 radiological investigations and over 570,000 laboratory investigations were performed in 2004. Radiological services include ultrasound, CT scanning facilities & isotope studies in addition to routine radiological procedures.

The outpatients department caters to about 2500 patients and 200 admissions per day. Surprisingly LRH offers opportunities for patients to walk in without any appointments to obtain medical care; at the same time, it offers very specialised services. Table I gives details of the facilities available at LRH.

Table I LRH- Facilities

Medical units (06) Surgical units (04) ENT unit Rheumatology & rehabilitation unit Cardiology unit Special care baby unit Intensive care unit Accident & emergency unit Burns unit Orthodontic & dental unit Dermatology unit Speech therapy unit Child psychiatry and guidance unit Diarrhoea therapy unit Emergency treatment unit Radiology department Anaesthesiology department Pathology department Microbiology department Clinical pathology department Out Patients Department

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Table 2 provides details of the staff available at LRH.

Table 2 Lady Ridgeway Hospital – Staff

Consultants	42
Medical officers	315
Nurses	550
Allied Health Professionals	108
Ancillary Staff	800

Table 3 provides details of the services provided in 2004.

Table 3 Lady Ridgeway Hospital

Current bed strength	1100
In-ward patients	75,000/year
Laboratory investigations	570,000/year
Radiological investigations	35,000/year
Surgical operations	12,000/year
OPD service	2500 patients/day
	200 admissions/day

Training of medical students

At present six faculties of medicine train medical students in Sri Lanka. Table 4 displays the chronology of establishment of medical schools.

Table 4 Establishment of Medical Schools in Sri Lanka

1870 - Colombo Medical School

1961 - Faculty of Medicine, Peradeniya

1980 - Faculty of Medicine, Galle

1980 - Faculty of Medicine, Jaffna

1981 - NCMC Ragama

1991 - Faculty of Medicine, Kelaniya

1993 - Faculty of Medicine, Sri

Jayawardenepura

At present in all medical faculties, paediatrics is given due recognition; a professorial paediatric appointment in the final year together with separate evaluation as a subject in the final MBBS examination. Medical students would become interested in a subject if it is given due recognition such as separate evaluation. It is the Peradeniya medical faculty that led the way by making paediatrics a separate subject. Colombo made it a separate subject in the 1980s and the other four medical faculties made it a separate subject from their inception. Tables 5 to 10 give details of staffing of the university units.

Table 5 University Paediatric units at LRH

Paediatric Medical Unit	
(Prof. P.B. Fernando	until 1949)
Prof. C.C. de Silva	1949 - 1966
Prof. Priyani E Soysa	1966 - 1991
Prof. Sanath P Lamabadusuriya	٦
+ Prof.Manouri P Senanayake	₹991 to date
·	J
Paediatric Surgical Unit	
Prof. Milroy Paul	1940's -1965
Dr. Ranjan Dias	1993 to date

Table 6 Faculty of Medicine –Peradeniya

1961 – 1965	Professor C C de Silva
1969 - 1976	Professor W J Gomes
1977 – 1993	Professor H A Aponso
1993 to date	Dr. Lali Jayasena and
	Prof. A S B Wijekoon
	& Dr. C K Abeysekera

Table 7 Faculty of Medicine – Ruhuna

1980 – 1991 Professor Sanath P Lamabadusuriya 1991 – 1999 Professor D G H de Silva 1999 to date Professor. T S D Amarasena

Table 8 North Colombo Medical College (NCMC) Faculty of Medicine Kelaniya

NCMC

1981 – 1988 Dr. Stella de Silva

Faculty of Medicine, Kelaniya 1989 – 1999 Dr. N P S Gunaratne Dr. K A W Karunasekara 1999 – 2000 Professor D G H de Silva 2001 to date Dr. Aswini Fernando

Table 9 Faculty of Medicine – Jaffna

1980 – 1988 Professor S Ramadas 1988 - to date Acting arrangements

Table 10 Faculty of Medicine Sri Jayawardenepura

1996 – 2004 Professor Narada Warnasuriya 2004 to date Dr.Deepthi Samarage

Post Graduate Training in Paediatrics

Until the 1980's specialisation in paediatrics involved acquisition of the MRCP (UK) degree without a formal training programme. Medical officers proceeded to the UK on study leave to acquire the MRCP. Most of them worked for the National Health Service during this period.

In 1980, a Post Graduate Institute of Medicine was established in the University of Colombo and it became the responsibility of the Board of Study in Paediatrics to train the specialists. A formal in-service training programme was established culminating in the local MD examination conducted with the assistance of external examiners. The Board of Study in Paediatrics have been chaired by Professor Priyani Soysa, Professor Sanath Lamabadusuriya, Dr G N Lucas and Dr B J C Perera during the last 26 years. At present 143 paediatricians have been board certified and a large number of trainees are being trained locally and abroad. At present, the training programme has extended beyond the LRH and other teaching hospitals to include provincial hospitals in Anuradhapura, Badulla and Kalutara.

The distribution of paediatricians in Sri Lanka is shown in Table 11.

Table 11 Paediatricians in Sri Lanka

Ministry of Health	162
Universities	28
Private sector	35
Paediatric Surgeons	10

Progress in Child Care

With the expansion of paediatric services and emphasis on primary health care, Sri Lanka has demonstrated to the rest of the world how a poor country with limited resources can achieve major milestones in healthcare. Major inputs have been in,

- **G** Growth monitoring
- O Oral rehydration
- **B** Breast-feeding
- I Immunisation
- **F** Family Planning, food supplementation and female literacy

Growth Monitoring

With the assistance of UNICEF, the Family Health Bureau has been providing a Child Health Development Record to be given to every child (in both the public and private sectors). Paediatricians have led the way in the maintenance of such records.

Oral Rehydration

The mortality rate due to diarrhoeal diseases has been drastically cut down with the availability of Jeevani throughout Sri Lanka. In addition, diarrhoea therapy units (DTUs) have been established in a few teaching hospitals.

Breast Feeding

Exclusive breast feeding for 4-6 months, which is the national policy, has been actively supported by paediatricians. A few senior paediatricians have played a crucial role in national policy matters dealing with maternity leave, marketing code for infant milk foods etc. At present maternity leave has been extended up to 1 year to promote breast feeding.

Immunisation

Milestones in immunisation are depicted in Table 12.

Table 12 Immunisation milestones

- 1886 Smallpox vaccine
- 1949 BCC vaccination for adults
- 1961 Introduction of Triple (DPT) vaccine
- 1962 Introduction of Oral Polio vaccine
- 1963 BCG vaccination for newborns
- 1969 Tetanus Toxoid for pregnant mothers
- 1978 Expanded Programme for Immunisation
- 1984 Introduction of Measles vaccine
- 1989 Universal Child Immunisation
- 1991 Introduction of TT 5 dose schedule for pregnant mothers
- 1995 Launching of NID's to eradicate Polio
- 1996 Introduction of Rubella vaccine for fertile females
- 2000 NID's to SNID's
- 2001 Introduction of new immunisation schedule and MR vaccine at 3 years
- 2003 Introductionn of Hepatitis B vaccine

The immunisation rates of children are very high with over 90% coverage for the EPI vaccines. In addition, Hib vaccine and MMR vaccines are available in the private sector for those who can afford.

Family Planning

Limitation of family size and spacing between pregnancies have been actively supported by paediatricians. The average family size has been reduced to two children and the paediatricians have a tremendous responsibility to keep such children healthy. The growth rate is 1.2%, which is comparable with Japan.

The Infant Mortality Rate (IMR)

The IMR which was 141/1000 live births in 1946 has been reduced to 13/1000 live births in 2000. It is less than those of wealthier countries such as Russia, Ukraine and Argentina. A further reduction in IMR would require greater investment in neonatal care such as the provision of high-tech equipment.

Professional activities

The Sri Lanka Paediatric Association came into existence in 1953 and its first president was Dr. L O Abeyratna. The official publication was the Ceylon Journal of Child Health, which was published annually. In 1997, the Sri Lanka Paediatric Association became the Sri Lanka College of Paediatricians and Dr. B.J.C. Perera was elected as its first president. The name of the journal was changed to Sri Lanka Journal of Child Health and is currently being published quarterly. It is edited by two joint editors and has an international editorial panel. In addition, a newsletter is also published quarterly. Annual scientific sessions have been held by the professional body for over 50 years. In 2001, the Perinatal Society of Sri Lanka was formed and has embarked on many professional activities including a national audit on perinatal deaths.

The current scenario

Paediatricians are currently serving in remote areas of Sri Lanka such as Mannar, Medirigiriya, Puttalam, Vavuniya, Kamburupitiya etc. During the last few years, neonatologists have been appointed to many teaching and provincial hospitals. Subspecialisation in paediatrics has taken place in the university units and the Ministry of Health has ventured into this aspect as well. Paediatric surgical units have been established in Galle and Kandy in addition to LRH. Present day medical students go through their careers without seeing, TB meningitis, diphtheria, poliomyelitis, neonatal tetanus etc. which have become diseases of the past.

The future

During the next few years Hib vaccine and the Rotavirus vaccine are likely to be made available in the EPI programme. A paediatric cardio-thoracic unit will be established at LRH very soon, which would undoubtedly contribute to a reduction in mortality due to congenital heart disease. Sub speciality units such paediatric cardiology and nephrology are likely to be established in the teaching hospitals. A second Children's Hospital (Sirimavo Bandaranayake Hospital for Children) is due to be opened at Peradeniya soon.

This article is based on the Darrel Wijeratna memorial lecture, which was delivered in November 2001.

Resource material: LRH Annual Bulletin 2004