Human resources for health in Sri Lanka over the post-independence period: key issues

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Introduction

This year marks the 75th anniversary of Sri Lanka gaining independence from the British Empire. It also marks the 75th birth anniversary of the World Health Organization, the UN agency mandated with spearheading international public health efforts. This article gives an overview of the development of Human Resources for Health (HRH) during this post-independence period and the WHO’s contribution to this important aspect of development over the same period.

Human Resources for Health – Sri Lanka’s perspective

In 1948, Sri Lanka had a sound network of curative and preventive health facilities. As reported in the History of Medicine in Sri Lanka 1948-2018, there was a General Hospital in every Province, and the apex was the General Hospital, Colombo. There were 183 hospitals, 240 central dispensaries, 176 branch dispensaries and 453 visiting stations in total at that time to serve a population of approximately 6.6 million people.

By 2022, Sri Lanka had around 1100 government healthcare institutions including two National hospitals, nine Teaching hospitals, 16 Specialized hospitals, two Provincial and 20 District General hospitals, 81 Base hospitals, 474 Divisional hospitals and 499 Primary Health Care Units, in decreasing order of sophistication. These institutions are staffed by a health workforce of nearly 150,000 persons, providing free health care at the point of delivery to a population of nearly 22 million people. When compared with the 1,532-healthcare staff available in the country in 1923 [1], to serve a population of about 4.5 million [2], this is a 20-fold increase in the availability of human resources for health, from 0.34 to 6.8 healthcare staff per 1000 population, over the last century.

Table 1. Comparison of economies and land extents of three countries with similar populations

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The number of healthcare professionals trained by a country usually depends on its population size and distribution, the size of its economy and the fiscal space, the health system and how it is financed, and the extent of land of the country. Accordingly, the WHO has identified an aggregate density of 4.45 physicians, nurses, and midwives per 1,000 population as the workforce threshold required for 25% achievement of a composite UN Sustainable Development Goals (SDGs) index. This WHO threshold suggests that Sri Lanka requires a total of at least 97,010 physicians, nurses, and midwives. National Health Workforce Accounts (NHWA) is an approach developed by the WHO to support member states in strengthening country-level HRH data systems [5]. The concept of NHWA is closely aligned with the health labour market framework for UHC [6] which provides a comprehensive picture of the education sector and health labour market dynamics. The Sri Lankan Ministry of Health is working towards adopting this approach and has been supported by the WHO Country Office in publication of a recent report entitled Health Labour Market Analysis: Sri Lanka [7].

Current health workforce

Data at the human resources unit of the Ministry of Health indicates that, as of January 2022, the line ministry and provincial councils employed 23,039 doctors, 40,408 nurses and 9,024 midwives (i.e. a total of 72,471 physicians, nurses, and midwives). In 2022, Sri Lanka had an aggregate density of only 3.32 physicians, nurses, and midwives per 1,000 population with a shortfall of 24,539 key health personnel. However, the actual shortfall is probably a little lesser than this figure. An estimated number of 1,500 doctors are engaged in full-time practice in the private sector, either as general medical practitioners or hospital employees. Medically qualified persons are employed by defence establishments (nearly 320) and universities in their permanent cadre (nearly 760). Therefore, the total number of doctors practising in Sri Lanka can be estimated as 25,619. Since there are negligible numbers of fully qualified nurses and midwives working in the private sector, the total number of doctors, nurses and midwives in Sri Lanka adds up to about 75,051 at present - a shortfall of approximately 21,959 doctors, nurses, and midwives. As of December 2022, the Sri Lanka Medical Council, where all Western medical practitioners in Sri Lanka are required to register by law, had 33,284 active registrations. Together, these data suggest that only about 77% of the medical practitioners registered with the SLMC are working in Sri Lanka, while the remaining 23% are either practising overseas or are retired from the active workforce. A previous study conducted about 15 years ago, estimated that about 15% of those with active registration in the SLMC were working overseas, while another 12% were working in the private sector and about 3% were employed by universities as academics [3].

The last two decades have seen growing awareness that lack of human resources is among the most important barriers to improving access to healthcare in developing countries. Even as more money and drugs have been made available for healthcare, the health workforce has remained under-recognized and under-appreciated. In 2016, the 69th World Health Assembly formally adopted the Global Strategy on Human Resources for Health: Workforce 2030, which envisages accelerated progress towards Universal Health Coverage (UHC) and the UN Sustainable Development Goals (SDGs) by ensuring equitable access to health workers within strengthened health systems [4].

Education and training of the health workforce

This occurs mostly through publicly funded education programmes conducted either by state-funded universities or the Ministry of Health.

The domestic education of medical professionals occurs almost completely through the University Grants Commission (UGC) and the Ministry of Higher Education, which have oversight of 11 of the 12 state-funded medical schools; the 12th medical school is part of the Kotelawala Defense University, which is under the Ministry of Defense. Two privately funded medical schools have been established to date (the North Colombo Medical College in the 1980s, and more recently, the Medical Faculty of the South Asian Institute of Technology and Medicine), but because of public outeries, both are now defunct.

The universities under the UGC are fully financed by the government and undergraduate students are not required to pay any tuition fees. This zero-tuition policy, matched with guaranteed employment in the state sector for all medical graduates, relatively high wages and a large set of benefits for medical officers, combined with the possibility of dual practice in public and private sectors, makes studying medicine a very attractive option. The number of places to study Medicine in the state funded universities under the UGC has remained relatively static (at about 1,100 - 1,200) up to 2015/2016, but there has been a marked increase in the number of Sri Lankan students studying medicine in other countries.

Foreign medical graduates are required to pass a licensing examination conducted by the Sri Lanka Medical Council (Examination for Registration to Practice Medicine, ERPM) before they are granted registration to practice medicine in Sri Lanka. The number of candidates completing the ERPM doubled, from just over 100 in 2010 and 2011, to an average of more than 200 per year in the four-year period 2014 - 2017, while the output of medical graduates from the eight medical faculties under the UGC during the years of 2015 and 2016 was between 1,135 - 1,145 [8]. Thus, foreign medical graduates now comprise about 15% of new entrants to the medical workforce. Moreover, based on estimates of students currently studying medicine overseas, a recently published system dynamics model of the medical workforce in Sri Lanka predicted that this figure would rise to about 500 by 2023.
The training of nurses for the Health Ministry is conducted in 18 Nurses Training Schools (NTS) run by the same ministry. Those who complete the 3-year training programme offered by the NTS are awarded a Diploma. Six of the state-funded universities now offer BSc Nursing degree programmes, with a combined annual intake of about 350 [10]. However, in the past recruitment to Nurses Training Schools under the Ministry of Health has not been done on an annual basis. This has created volatility in the output of nurses, with concomitant difficulties in planning and projecting the nursing workforce [7]. Although there is a clear international distinction between recognition of nursing degrees obtained at a university, and nursing diplomas, in Sri Lanka, they are considered equivalent and follow the same pay structure.

The Health Ministry recognizes only its own training facilities for nurses, and absorbs all of the nurses produced by them. The large private hospitals have therefore created their own training programmes for nurse assistants. Although the BSc Nursing degrees are recognized for recruitment and promotions in the Ministry of Health, the private sector training programmes and the nurses trained by them remain unrecognized by the Nursing Council of Sri Lanka, and data on their numbers is not available [7].

Training for the five professions supplementary to medicine (PSM) categories (radiographers (diagnostic and therapeutic), medical laboratory technologists (MLTs), physiotherapists, occupational therapists and pharmacists), consists of a basic course of two years in the relevant training schools, all run by the Ministry of Health.

In addition to the five PSM categories, the Health Ministry is solely responsible for training more than 20 health workforce categories known as paramedical personnel, including primary healthcare providers (public health inspectors and public health midwives), technical and non-technical. The Health Ministry plans to speed up selection of candidates for the training by replacing the manual process with an online system.

The state universities also offer four-year Bachelor’s degrees in pharmacy (four universities, intake of 253 in 2020), medical laboratory sciences (four universities, intake of 254 students in 2020), physiotherapy (two universities, 136 students), radiography (one university, 104 students) and speech and hearing sciences (one university, 50 students) [10]. This shift from the training of allied health personnel within the health services, to university-level education, reflects a global change.

It is estimated that each year, the Ministry of Health recruits about 1,250 medical officers, 3,000 nurses and 750 midwives into the system. Since this works out to an average of about 5,000 more doctors, nurses, and midwives a year, then it is possible that the shortfall in the health workforce may be met in approximately 6 - 7 years, after factoring in retirement and migration.

It has been estimated that in 2010, there were about 5,700 Sri Lankan-born medical professionals working in high-income countries belonging to the OECD [7]; the equivalent of about 25% of the current medical workforce in Sri Lanka. Given that undergraduate and postgraduate medical education in Sri Lanka is funded by the state, this migration of trained professionals represents a substantial loss of investment. Job opportunities in countries such as the United Kingdom and Australia are largely dependent on their migration policies and are subject to change from time to time. For example, the decision of the UK to leave the European Union has dramatically increased job opportunities for Sri Lankan doctors in the UK.

Data on the outflow of trained nurses is sparse, but it appears to be low, perhaps because most nurses in Sri Lanka hold diplomas rather than degrees. The Sri Lanka Bureau of Foreign Employment is said to actively encourage the migration of skilled manpower, which includes doctors, nurses, and paramedics, as a policy to augment the quantum of remittances sent back to Sri Lanka.

Labour force survey statistics showed that the growth of jobs in the health and social sector in Sri Lanka has been slow compared to other service sectors such as education and public administration [11].

**Governance and health workforce policies in Sri Lanka**

The Sri Lanka National Health Accounts 2018 found that the public health sector accounted for 45% of the annual health expenditure while the private sector contributed around 48% [12]. The government health sector allocation increased from LKR 70 billion in 2013 to LKR 190 billion by 2018. Despite this increase, the health sector accounted for only 3 - 4% of the Gross Domestic Product (with the public sector contributing about 2%), which is well below the world average, where health accounts for about 8-10% of GDP.

The Health Labour Market Analysis published by the Ministry of Health in 2018 identified several key issues that pertain to governance and health workforce policies [7]. These include the lack of an internal mechanism in the Ministry of Health to manage human resources for health and uncertainty regarding health workforce requirements as well as the lack of coordinated long-term policy regarding the health workforce. There is limited transparency and little information on the private sector and in general, fragmentation of information systems leads to limitations on health workforce data.
Impact of the current economic crisis on the health workforce

Given the current economic crisis in Sri Lanka, professionals including medical specialists, doctors, and nurses, increasingly seek opportunities abroad. There is no consensus on the number of doctors who have migrated during the most recent past. The largest number, however, appeared to be from the category of post-graduate trainees, who are in their overseas training. Usually, around 270-280 postgraduate trainees go abroad each year for mandatory overseas training and around 250-260 return. However, only about 100 had returned in 2022; a few more may return in 2023. The country appears to have lost 100 - 150 budding specialists this year [13].

The recently introduced five-year leave scheme for government officers to engage in foreign employment has given further impetus for out migration of key healthcare professionals. Under the five-year leave scheme 70 medical specialists, 82 doctors and 97 nursing officers have migrated by February 2023 [14]. In addition, it appears that a similar number of health professionals has gone overseas using other schemes of short-term leave.

WHO's contribution to the development of HRH

WHO has contributed to the HRH development in Sri Lanka through its assistance to strategic partnerships, health professions education, and capacity building programmes.

At present, Sri Lanka has three WHO collaborative centers, namely the Centre for Training and Research in Occupational Health, the Collaborating Centre for Medical Education Development, Training and Research and the Collaborating Center for Blood Transfusion Services. The former two are directly related to human resources development in the health sector. WHO was at the forefront of developing the Human Resources of Health Strategic plan for Sri Lanka and Global Strategy on Human Resources for Health: Workforce 2030.

WHO has assisted in improving the financial governance in the health system in Sri Lanka. It introduced and trained staff (including the first author of this paper) for the preparation of National Health Accounts for Sri Lanka. This was based on the System of Health Accounts (SHA), which is an internationally accredited framework for systematically tracking the flow of expenditures in the health system.

The National Health Workforce Accounts (NHWA) is a system by which countries progressively improve the availability, quality, and use of data on health workforce under the auspices of WHO. Sri Lankan health managers have been trained by the WHO and the system has been maintained since 2018. The Health System Review and Health Labor Market analysis are two praiseworthy technical reports, produced by WHO for Sri Lanka, which has helped planning and strategic development in the domain of Health HR.

The Alma-Ata Declaration of 1978, to which Sri Lanka is a signatory, emerged as a major milestone of the 20th Century in the field of public health. It identified primary healthcare as the key to attaining the goal of “Health for All”. This declaration is used as the guide in human resource and infrastructure development in primary care.

The first Medical Education Unit in Sri Lanka was established at the University of Peradeniya in 1973 with the assistance of WHO. This laid the foundation for establishing the discipline of medical education in Sri Lanka. This unit became a WHO recognized Regional Teacher Training Centre (RTTC), catering to the health professionals in South-East Asia. The RTTC at Peradeniya provided an impetus for the establishment of centers for medical education in other countries in the region. It has also helped broaden ‘medical education’ to ‘health professions education’ extending the discipline to other healthcare professions in Sri Lanka.

WHO helped to establish a Training and Planning and Management Unit at the National Institute of Health Sciences (NIHS) in Kalutara, which has been the premier institute for training primary healthcare staff since 1979. Through this venture, WHO has helped to develop the technical capacity of the Primary Health care staff in Sri Lanka. The WHO office in Sri Lanka has also been instrumental in capacity building for staff attached to most of the vertical programs under the Ministry of Health. The Maternal and Child Health (MCH), TB, Leprosy, Malaria, and Filariasis control programs and National Blood Transfusion Service are a few such examples.

Conclusions

There are three key issues relating to human resources for health in Sri Lanka that need urgent attention:

1. Opportunities for nurses and other key health personnel for training and education are fewer than those available for doctors. Training of nurses and other health workers has been largely restricted to the Ministry of Health at present. The educational facilities are pushed to their limits and major investments are required to develop infrastructure and human resources to cater to the growing needs.

2. The Ministry of Health must identify the health workforce requirements for the country with due consideration of the out-migration of healthcare professionals. This should encompass the expansion in the delivery of preventative and curative health care through both the public and private sectors. In parallel, the Ministry of Health should strengthen internal mechanisms for the management of its own workforce.

3. The Ministry of Education should focus on expanding educational opportunities for all health professions, not only medical graduates.
Addressing these issues will require substantial investments by the state and private sectors, and further support from WHO. These investments will help increase the numbers to meet the standards, and enhance the quality of health labour force, which will contribute to sustaining and improving the health status of the people and support the economic growth in Sri Lanka.

References


