

COUNTRY PAPER

Migration of Human Resources for Health within and out of Sri Lanka – Report and Analysis 2005

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Abstract

The health care system in Sri Lanka is structured to provide a wide range of curative and preventive health care needs to the people. There are two parallel systems namely the allopathic and the indigenous systems. The former being the more utilized in Sri Lanka, this article focuses on this.

The country has done well in health care delivery within the region, as it boasts not only of a high literacy rate, but also of low infant mortality and maternal mortality rates and other indicators of health when compared with other countries of similar per capita income. However, the budget allocated to health care is only 1.7% of the GNP, and the percentage for human resource development (4% of the allocation of the health budget) is abysmally low.

This article addresses some human resource problems amongst which migration of human capital to resourceful settings is detailed as a priority problem. Several factors have contributed to dissatisfaction and human resources, especially those with higher skills and qualifications, migrating towards more resourceful settings, both overseas and within the country. Some examples include inadequate salaries, inadequate facilities to provide health care services and for continuing professional development, inadequate personal benefits, eg. poor prospects for children's education, unsatisfactory work environment, poor general management of human resources, prevalence of a trade union culture, poor collaboration with other organizations such as universities, NGOs in utilizing resources for health development and health care delivery. The system also suffers from the lack of a referral system, lack of guidelines and protocols, poor supervision and poor research ethos with resistance to change. The above factors directly and indirectly, through complex interactions promote migration of human resources for health.

Beginning to solve the human resource problems in Sri Lanka's health sector is a daunting task. This requires immediate action as well as an organized medium and long-term action plan. Recommended actions include the following:

- improving remuneration, both financial, education and professional development (CPD), personal benefits, incentives coupled with mandatory service in remote areas and rewards schemes
- improving work environment, facilities and human relations and promoting a corporate culture
- improving the management system, developing evidence-based methods and research for HR and health system development, organizing data collection and flow with appropriate networking,
- developing and implementing a practical referral system
- building partnerships and networking with all sectors involved in training HR and health care delivery, including Universities, NGOs, private sector and other government bodies such as Social Services, Police, etc.
- capacity building of HR, improving basic education and training, CPD and "soft skills" such as effective communication and people management

It is hoped that developing attractive working environments and incentives schemes including CPD would help to retain HR within the country, improve the equity of distribution and promote their professional development, thereby helping to deliver better health care to the people in both goodness (quality) and fairness (equity of access).

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Health is the state of complete physical, psychological and social well-being and not merely the absence of disease or disability, as defined by the World Health Organization. More recently, spiritual well-being has also been included in the definition. All the organizations, institutions and resources that are devoted to producing health actions together comprise a health system. Health systems have a vital and continuing responsibility to people throughout their lifespan, to deliver safe health care, both in goodness (responding well to what people expect of it) and fairness (responding equally well to everyone without discrimination).[1]

Resource inputs for health care delivery include physical capital, human resources (capital) and consumables [1]. The term “human resources” has various definitions. It was traditionally known as “labor” or “workforce”. However, human beings are not a predictable “commodity resource”, but are creative and social beings who make contributions beyond “labor” to society and civilization. The term “human capital” has evolved, in order to express the complexity of the term [2]. In this paper, we shall refer to human capital as HR to avoid confusion with Health Care (HC). Human capital in health, the different kinds of clinical and non-clinical staff, who make each individual and public intervention happen are the most important of the health system’s inputs. The performance of health care systems depends ultimately on the knowledge, skills and motivation of the people responsible for delivering services.

This paper attempts to:

1. describe structure of the health care system, the situation and trends in health care provision, and priority problems in human resources for health (HRH) care provision in Sri Lanka
2. propose priority actions that are required in Sri Lanka
3. propose recommendations for development of the work plan (focusing on information, research, capacity building and in-country mechanisms to accommodate participatory development of HRH)

(1) The structure of the national health care system of Sri Lanka

Sri Lanka has a long tradition of Indigenous and Ayurveda health care systems dating back to approximately 2500 years. Archeological evidence confirms the existence of hospitals and sophisticated surgical practices during this historical period. Several other systems of medical practice (Unani, Siddha and Allopathic) were subsequently introduced to the country by different foreign groups. This has now resulted in a pluralistic health care system with a varying mix of Allopathic, Indigenous Ayurveda, Unani, Siddha, Homeopathy and Acupuncture. However, the state allopathic system appears to play a key role in the delivery of health care, especially in the preventive and in-patient curative sectors. [3]

The health seeking behaviour of the people varies between urban and rural communities; acute illnesses and chronic illnesses; some specific conditions. Ayurvedic medicine still enjoys a fair proportion of clients in treatment of conditions like bone fractures or joint dislocations, chronic pain resistant to allopathic analgesic drugs (eg. rheumatoid and osteo-arthritis) dermatological conditions for which topical applications are available eg. psoriasis, snake bites and some psychiatric disorders. Following the OXCOL (Universities of Oxford and Colombo) trials in Anuradhapura district, health-seeking behaviour of patients following snake bites in this mainly rural population has shifted towards seeking allopathic treatment. However, urbanized communities preferred allopathic treatment for chronic diseases. A study done in Gampaha District revealed that approximately 99% of the community preferred allopathic medicine for the treatment of chronic diseases. Alternative medicines such as homeopathy and acupuncture are sought for some debilitating diseases that do not respond to conventional allopathic treatment.

Sri Lanka has done well in health care delivery within the region, as it boasts not only of a high literacy rate, but also of low infant mortality and maternal mortality rates and other indicators of health when compared with other countries of similar per capita income and countries in the South Asian region. In Sri Lanka, health care is provided by the state and private sectors and Non-Governmental Organizations (NGOs).

The state health care system is structured to deliver health care by two parallel administration systems viz. the Central and Provincial. The state health services of the government functions under a Cabinet Minister. With the implementation of the Provincial Councils Act of 1989, the health services were devolved, resulting in the Ministry of Health at a national level and eight Provincial Ministries of Health. [5]

The Central Ministry of Health is primarily responsible for the protection and promotion of people's health. Its key functions are setting policy guidelines, medical and paramedical education, management of teaching and specialized medical institutions, and bulk purchase of medical requisites.

The eight Provincial ministries are responsible for the management and effective implementation of health care delivery in the respective provinces. These include the management of curative services including hospitals (provincial, base, district, peripheral and rural hospitals and maternity homes) and out-patient facilities such as central dispensaries (CDs) and visiting stations, and the preventive and promotional health care services through the Medical Officers of Health (MOH) / Divisional Director of Health Services (DDHS). Curative and preventive (and promotional) health care are delivered by two parallel systems. [5]

The alternative medicine system is handled by a minister with a more modest but similar central and peripheral structure.

The basic structure is given in Figures 1a and b below [5]:

NGOs collaborate with the Ministry of Health to carry out some widespread health care delivery services, such as the Anti-Malaria Campaign, Anti Filariasis Campaign, Acute Respiratory Diseases Control Programme, Anti Rabies Campaign, Anti Leprosy Campaign, STD/AIDS Control Programme. Several other programmes sponsored by NGOs cater to various health care needs of the country, such as mental health, reducing harm from tobacco and alcohol, women's health, etc.

The private sector provides mainly curative services. These include hospital based in-patient and out-patient services and General or Family Practitioners.

Financing of health care

Public taxes are utilized to provide these services to the public free of charge through the national health care system. The services provided by the state sector are limited by the available budget allocation. The average percentage of the government spending on health ranged from 4 – 5% in the last 10 years. During 2002, the proportion of public expenditure on health was 4.3% of the national expenditure, and 1.6% of the Gross National Product (GNP). The per capita expenditure on health was Rs. 1339 (equivalent to USD 16) in 2002. [5, 6, 10]

The recurrent expenditure accounted for 84% of the total expenditure. In 2002, Sri Lanka spent 67.4% of its annual health expenditure on curative services, while community and preventive services amounted to only 8.6%. 13.6% was for general administration. The central ministry of health and the Department of Health Services utilized 65% of the total health expenditure. A meager 4% was allocated for training and scholarships. The Ministry of Health funds the Nursing, Paramedical schools and in part, the Postgraduate Institute of Medicine, while medical schools are funded by the Ministry of Higher Education. [5] (Figure 2: Breakdown of National Expenditure on Health; Legend: In 2002, the majority (67.4%) of the national health expenditure was on curative services. Preventive and promotional activities accounted for only 8.6% of the health budget. A meager 4% was allocated for human resource development (scholarships and training). Data from Annual Health Bulletin 2002 [5]) and (Table 1: Public investment: 2005 – 2007 Activity Plan 2005 - Health sector; Legend: Another example of the low priority given for development of HR is seen in this excerpt from the Sri Lanka New Development Strategy 2003, which identifies financial allocations for the year 2003-2004. [7])

The private sector also provides a significant proportion of health care services to the public. The Annual Health Bulletin 2001 states that in 1997, the state and private sectors each accounted for approximately 50% of the Total Expenditure on Health (similar for 2002). 43% of the private sector health expenditure was paid out-of-pocket by the user, and less than 5% by employers or health insurance. Most of the private sector expenditure was for out-patient primary care and purchase of medicines from private pharmacies. [5]

Curative services are expensive when compared to the cost-effectiveness of preventive care. The proportion spent for prevention declined from 11% in 1990 to 6% in 1999 and in 2002, amounted to 8.6%. Preventive health accounted for less than 1% from private sources. Eg. the Expanded Programme of Immunization accounts for bulk of the state preventive health expenses. [5]

Another example of the low priority given for development of HR is seen in the excerpt from the Sri Lanka New Development Strategy 2003 (Table 1), which identifies financial allocations for the year 2003-2004. [7]

It is evident that HRH development is low priority when one looks at the overall picture of health financing in Sri Lanka.

Priority health problems

Some priority areas have been identified by the Perspective Plan for Health Development in Sri Lanka (1995-2004) [8], which followed the National Health Policy of 1992 [3]. These include:

- maternal and child health
- nutrition
- care of non-communicable diseases (NCD)
- primary care, prevention and health promotion (eg. tobacco, alcohol abuse)
- mental health issues
- occupation related illnesses
- care of the elderly, disabled – physical and psychological, victims of war and violence, child abuse

The Sri Lanka HRH Situation - Country analysis

There are various categories of human resource staffing the Ministry of Health. HR involved directly in health care delivery in the curative sector include doctors, dental surgeons, nurses, hospital midwives, assistant medical practitioners (AMPs), pharmacists and other paramedical staff (Medical laboratory technicians (MLT), radiographers physiotherapists, occupational therapists, etc.), attendants and labourers. The preventive and promotional sector includes additional field staff such as dental therapists, public health midwives (PHM), Public Health Inspectors (PHI), Food and Drug Inspectors (FDI), and others shown in Figure 1b. Administrative staff and non-medical staff such as accountants and clerks are also part of the HR in the Ministry of Health. All health care professionals - doctors, AMPs, dental surgeons, nurses, midwives, PHMs, pharmacists and paramedical personnel are required to register with the Sri Lanka Medical Council (SLMC). The body responsible for issuing the certificate of competence for those trained by the Ministry of Health is the Ceylon Medical College Council (CMCC).

Doctors are graduates of mostly state universities, with a few qualifying from other countries, after having passed an examination under Act 16 of the Medical Ordinance. Following 1 year of internship provided by the Ministry of Health, they are registered with the SLMC. To-date, all doctors are absorbed into the Health Ministry unless they opt to leave to join another institution in the state or private sector. After a period of service in the Ministry, they may follow postgraduate courses conducted by the Postgraduate Institute of Medicine (PGIM) with special clinical training to become specialists.

Dentists receive a graduate training at the University of Peradeniya. They are not given a period of internship. The last two batches have not been employed by the Ministry of Health. However, they perform fairly well in the private sector. The country's need for dentists is 1:5000 population. At present, the ratio is 1 dentist per 15,000 population. It is much higher in towns, where the dentist : population ratio is approximately 1:3000, while in rural areas, it is around 1:30,000. Community dental therapists were trained at a School for Dental Therapy, which has been closed. Dental surgeons may follow a distance learning course conducted by the PGIM and College of Dental Surgeons to attain postgraduate qualifications as consultant dental surgeons.

Nurses are trained at the Nurses Training Institute of the Ministry of Health which has 13 branches islandwide. They receive a certificate level training, although selection is based on GCE 'A' level performance and university entry criteria. A graduate training programme for nurses is commencing at University of Sri Jayawardenapura. Further professional development is a post-basic training at the Post-basic School of Nursing. Public Health Midwives receive certificate level training at the National Institute of Health Sciences (NIHS).

Pharmacists are trained mainly by the Ministry of Health, at NIHS and at the NHSL, in collaboration with the University of Colombo, where a diploma level course is conducted. A diploma level External Pharmacists' Examination is also conducted by the CMCC in collaboration with the University. The University does not provide tuition for this examination. Candidates are required to follow a two year apprenticeship with a "master pharmacist". A small number of BSc (Pharmacy special) graduates are produced by the University of Colombo – 10 per year for the past four years. Plans are underway to commence a B.Pharm course at University of Sri Jayawardenapura.

Other paramedical staff such as occupational therapists, PHIs, are trained similarly by the Ministry of Health, and some categories at Universities. Eg. speech therapists are given a diploma level training at University of Kelaniya. The majority receive certificate level training. AMPs are a group of people trained to make a limited diagnosis and treat simple common disease conditions, as well as to manage drug stores. The tasks of AMPs above are being taken over by the increasing number of graduate doctors and pharmacists respectively.

The distribution of health resources, with emphasis on HRH in Sri Lanka, and trends in HR distribution, numbers of training institutions and outputs during the past 10 years and the trends are shown in the annexure – Table 4 on Basic Information on Human Resources for Health in Sri Lanka.

Some categories of health care HR are gradually increasing in numbers and also branching out in specialities, eg. specialist doctors, and paramedical staff such as speech therapists, occupational therapists. Some others are gradually being phased out, eg. dental therapists, AMPs. This move appears to be a sensitive issue responsible for trade union action.

A SWOT analysis of the HRH in Sri Lanka

Below is an analysis of the strengths, weaknesses, opportunities and threats faced by HRH during health delivery in state and private sectors.

SWOT Analysis

<u>Strengths</u>	<u>Weaknesses</u>
<p>Strengths of State sector</p> <p>Doctors</p> <ul style="list-style-type: none">• Clinical skills rated on par with international standards due to good training programs both graduate and postgraduate• All medical schools are state-owned at present, providing free education to highly competitively selected candidates• Several options for postgraduate qualification by PGIM. Continuing professional development (CPD) actively carried out by various professional bodies but needs implementation of the formal structure. There is some discussion in professional bodies to link CPD programs to revalidation of SLMC registration. <p>Dental surgeons</p> <ul style="list-style-type: none">• High level of competence• State sponsored free University undergraduate education• CPD – postgraduate course conducted by PGIM	<p>Weaknesses of State sector</p> <p>Doctors</p> <ul style="list-style-type: none">• Inadequate skills in management, especially people management within the health care team and with the public (at present only 1/6 medical schools include inputs on management in the medical curriculum), leading to poor cooperation from other members of the health care team• Inadequate remuneration – financial and educational, eg. library, IT• Inadequate equipment and support services to carry out professional activities• Inadequate infrastructure for social welfare, eg. housing, schools and leisure at stations of service• CPD is difficult in peripheral stations due to unavailability of learning resources• Waste of human resources due to mismatches in training and recruitment, eg. trained neurosurgeon serving in the periphery as general surgeon, long delays in giving internship and post-internship appointments <p>Dental surgeons</p> <ul style="list-style-type: none">• No longer guaranteed employment by the Ministry of health• Self-employment involves a large capital for purchase of equipment• Not offered internship• CPD is by distance learning

<p>Strengths of State sector</p> <p>Nurses</p> <ul style="list-style-type: none"> • Skilled nurses in government sector (extensive clinical exposure) • Hard-working • Graduate education available for small number of nurses • Training inputs in management and communication skills, post-basic nursing program for Nursing Sister training gives more comprehensive inputs in management and administration 	<p>Weaknesses of State sector</p> <p>Nurses</p> <ul style="list-style-type: none"> • Basic nursing course is a Certificate level training program, Traditional training program – no scientific thinking skills imparted, poor supervision of clinical work during training • Intake for courses conducted by Ministry of Health is not streamlined for annual intake, and intermittently politically initiated intakes (sometimes very large batches), hence, difficulties in organizing and maintaining consistency of conducting teaching-learning activities (see Annexure - Table 1) • Poor CPD, few CPD activities by Sri Lanka Nurses Association, poor participation, no journals/newsletters published or circulated; no re-validation of registration • Training conducted in mother tongue (Sinhala/Tamil) limits the nurses' communication and functioning in the health care team, as doctors train in English and write notes in English, and largely converse in English during ward rounds. This creates obvious difficulties in delivery of care, as well as the nurses' CPD. The number of text books and other learning resources in the mother tongue is limited. • Nurses have to work long hours to earn a reasonable wage. Majority being females, the problems of service to the family, travel by public transport, rising cost of living leaves very little room for enthusiasm for CPD. • The trade union culture limits development of professional standards in nursing. Job descriptions are given by the trade union, rather than by the employer, which limits CPD. Unfortunately the Nursing Council, though recognized by statute, is still not operational.
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<p>Weaknesses of State sector</p> <p>Pharmacists</p> <ul style="list-style-type: none"> • Few graduate pharmacists from University of Colombo. • Pharmacy diploma, internal and external cater to government and private sector needs for different competencies, eg. those in charge of stores and drug procurement, and those in retail outlets. • Virtually no CPD • University consultancy sought to a limited extent for intellectual national decision making process <p>Paramedical and Support staff</p> <ul style="list-style-type: none"> • A variety of paramedical staff categories are developing and branching out, eg. physiotherapists, speech therapists, X-Ray technicians • Their contribution in the face of human tragedy is outstanding 	<p>Weaknesses of State sector</p> <p>Pharmacists</p> <ul style="list-style-type: none"> • Grossly inadequate numbers (4.8 per 100,000 population in 2004) lead to work overload, and poor quality service, dissatisfaction and difficulty recruiting and retaining HR • Inadequate physical facilities and working conditions to function efficiently • Graduate pharmacists not recruited into key posts where they are needed due to pressure from trade unions and inability to displace the less qualified but fairly experienced personnel serving centrally at present, leaving an “intellectual gap” at the top of the system (waste of available HR) • Inadequate Internal Pharmacy training programs conducted by Ministry of Health. <ul style="list-style-type: none"> ○ Difficulty in coordinating due to ad-hoc intake, ○ inadequate staff to conduct training and ○ poor remuneration for teachers • Poor quality of training for External Pharmacists’ as University does not conduct training. <ul style="list-style-type: none"> ○ Training programme is poorly supervised by a “Master Pharmacist” ○ Poor quality of training due to inadequate numbers of trainers resulting in poor quality of service <p>Paramedical and Support staff</p> <ul style="list-style-type: none"> • The large category of support staff receive little or no training prior to recruitment and learn “on the job”. • Very little opportunity for career development prospects • A fair percentage of them are “political appointees”, hence they have difficulty in fitting in and taking orders from their heads of departments. They may contribute to trade unionism within their group. • Unfavourable attitudes, indiscipline and insubordination interferes with efficiency of teamwork
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<p>Strengths of Private sector</p> <ul style="list-style-type: none"> • HR gain skills in providing client oriented services with courtesy, sensitivity, privacy and confidentiality • Risk of litigation drive HR to provide safer medical care • Recently developed faster than the state sector, especially in diagnostics and sophisticated clinical care 	<p>Weaknesses of Private sector</p> <ul style="list-style-type: none"> • Variable quality and skills • Inability to retain skilled HR – due to inadequate recognition, medical professional development opportunities and financial remuneration • Clinical and decision making skills of most categories of HR (other than Consultant / Nurse /Pharmacist-in-charge may be poorer than in public sector, due to constant fear of litigation) • Poor coordination/collaboration with public sector and sometimes within private sector • Limited availability of data, poor formal medical communication, patient records, reporting for national statistics, eg. communicable diseases, drug problems, etc. • Very little research initiatives • Few preventive and promotional medicine (health screening programmes, well-woman clinics, cancer screening programmes, health checkups, etc.) are gaining popularity
<p><u>Opportunities</u></p> <p>Opportunities for State sector HR</p> <p>Doctors</p> <ul style="list-style-type: none"> • Medical skills and knowledge of English – recognized and employable internationally • Employment is guaranteed in Ministry of Health at present. Cabinet has agreed to provide jobs for all who pass out till the year 2009 	<p><u>Threats</u></p> <p>Threats for State sector HR</p> <p>Doctors</p> <ul style="list-style-type: none"> • “Brain drain” at both levels, both emigrations to other countries as well as from peripheries to the capital. Concentration in capital is high in both private sector as well as Ministry of Health • Increasing community awareness of patients rights and litigations adversely affect the functioning by promoting unnecessarily excessive medical care and waste of resources, both in public and private sector • Trade union culture also affects CPD and patient care adversely in the public sector • Errant officers doing private practice out of hospital during working hours compromises the quality of care

Opportunities for State sector HR	Threats for State sector HR
<p>Dental surgeons</p> <ul style="list-style-type: none"> • Private sector / self employment is profitable 	<p>Dental surgeons</p> <ul style="list-style-type: none"> • No longer guaranteed employment by the Ministry of health • Self-employment involves a large capital for purchase of equipment
<p>Nurses</p> <ul style="list-style-type: none"> • Nurses trained by Ministry of Health – employment guaranteed. • Highly skilled nurses - have good employment opportunities overseas 	<p>Nurses</p> <ul style="list-style-type: none"> • The trade union culture is the most significant threat. Frequent labor disputes and trade union action (eg. strikes) cripples patient care as well as development of the health sector. The professional development of nurses, too is limited by this. Job descriptions are given by the trade union, rather than by the employer, which limits CPD. • Migration to foreign countries is growing. Approximately 40 nurses left Ministry of Health in 2004. At present, daily 20-25 requests for recommendations received by Director Nurse Education and Training. However, emigration is limited by the limited fluency in English. • However, concentration around the capital is highlighted in the distribution of nurses: 100,000 population. • Mushrooming private nursing training programs with poor validation or monitoring by a regulatory body
<p>Pharmacists</p> <ul style="list-style-type: none"> • Trained by Ministry of Health are guaranteed employment. External pharmacists enjoy profitable employment (often self-employment) in private sector 	<p>Pharmacists</p> <ul style="list-style-type: none"> • Grossly inadequate numbers lead to work overload, and poor quality service. This is a threat to the health of the patient or client, and also impedes their CPD. • Mushrooming private tutorials with poor validation. Candidates sit for a Pharmacists' External Examination, conducted by the Ceylon Medical College Council in the University of Colombo. However, the pass rates are very low (10% in 2004) • Political The trade union culture in public sector is a threat here too. Frequent trade union action (strikes) cripples the service and retards the development of the health sector.

<p>Opportunities for State sector HR</p> <p>Paramedical and Support staff</p> <ul style="list-style-type: none"> • The need in the private sector is not yet filled. Opportunities in private sector available for additional income as well as full time employment. <p>Opportunities for Private sector HR</p> <ul style="list-style-type: none"> • Increasing demand for services creates more employment opportunities • Surplus of doctors – available as HR for private sector • Pleasant working conditions and cleaner environment attract HR • High demand for training courses 	<p>Threats for State sector HR</p> <p>Paramedical and Support staff</p> <ul style="list-style-type: none"> • External politics influences trade unions, with frequent disputes over salary, uniforms, overtime, suddenly crippling services <p>Threats for Private sector HR</p> <ul style="list-style-type: none"> • Rising cost of care • Fear of litigation lead to over-investigation and overmedication, and also difficulty in recruiting and retaining HR • Undue influence by commercial advertising without independent situation analysis may affect patient management decisions, leading to wasting resources • Mushrooming of poorly planned and non-validated commercial training courses– lead to poorly trained HR
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(2) Some HRH priority problems in Sri Lanka

From the trends in Table 1 and the SWOT analysis above, some of the main problems that retard the progress of HRH development and health care provision can be identified are given below. These problems are interrelated to each other.

1. **Migration of HRH** during training from resource-poor to resourceful settings – “brain drain” due to migration to greener pastures both abroad and within the country migration towards the capital and major cities. The former applies more to doctors and dental surgeons, but is a growing problem among other groups. The latter applies to all groups of medical and paramedical HR. This is evident in the distribution of HR in the capital and other parts of the country in the Annexure - Table 4.

Contributing to the migration of HRH are some factors, which are priority problems themselves. i.e.

- 1.1. **“Trade union culture”** rather than a “corporate culture” in Sri Lanka, permeating the health sector, crippling the provision of health care at times and limiting the continuing professional development of the HR. This is present among all medical staff – doctors, nurses, pharmacists and other paramedical HR. The Sri Lanka New Development Strategy 2003 of the Ministry of National Planning highlights “trade unionism” as a factor hampering development in almost all sectors in Sri Lanka. External political influences the HR to maintain the trade union culture. Differences in social status between team members interferes with teamwork in the delivery of health care, as it interferes with free and frank communication.
 - 1.2. **Unsatisfactory system of promotions** : system of promotion and transfers especially amongst medical officers even at top consultant and administrative positions are very highly weighted towards seniority and very little weightage is given to academic competence and skills amongst the Ministry of Health personnel.
 - 1.3. **Unsatisfactory work environment and poor management of resources**
 - 1.4. Inefficient utilization of resources due to **conflicts between Ministry of Health, Universities, private sector and NGOs** and, sometimes, due to trade union pressure. The Ministry of Health consultants feel that the University Consultants should restrict themselves to training medical students, and not involve themselves in service or development of the finer specialities, and not willing to share human or physical resources for the public benefit. Eg. sharing of dialysis facilities at the National Hospital of Sri Lanka.
2. **Inadequate competency and numbers** of trained personnel – nurses, pharmacists and paramedical personnel and other support staff – irregular intake for training programmes, poor coordination and supervision, with inadequate numbers of teachers, poor incentives to trainers. This breeds inferiority complexes among some categories of HR, and promotes segregation and trade union culture.
 3. **Inadequate numbers** of trained personnel - results in some staff being overloaded with work, poor quality of care and deterioration of professional interactions.

(3) Migration of HRH as a priority problem - discussion

Of the above HRH problems identified, **migration of HR** appears to be the present priority problem. Two types of migration are seen, emigration to other countries and in-country migration towards major cities, especially Colombo. Both are problems in Sri Lanka.

Migration to other countries is most evident among doctors and dental surgeons (Table 2: Highest HR losses among specialist doctors emigrating from Sri Lanka [10]). This was highlighted by a paper on “Brain drain of specialist doctors from Sri Lanka” [10] that between 1997-2000, 28% of specialists who had qualified MD/MS had left the country. However, it is a growing problem among the other health care HR categories, as pointed out by officials in the Ministry of Health.

Migration to resourceful settings within the country too, is a problem among all HR categories. Annexure - Table 4 gives evidence of this for doctors, nurses, and pharmacists. The ratio of health care workers : population shows large discrepancies between the capital and the rest of the country.

Eg. Doctor : population ratio is 131.9:100,000 for Colombo and 35.3:100,000 for the rest of the country. The situation is similar for dental surgeons and pharmacists. (Figure 3: Trends in doctor : population ratio in Sri Lanka; Legend: In 2003, the doctor : population ratio was 131.9:100,000 for Colombo and 35.3:100,000 for the rest of the country. There is a persistent discrepancy between the number of doctors : 100,000 population in the capital Colombo and the rest of the country. This gap has been maintained despite increasing doctor : population ratio.)

The HR in the private sector too, are concentrated in Colombo and major cities, as utilization of private services are higher among the higher income groups concentrated in cities.

There are several reasons why HRH migrate. In-depth analysis reveals that priority problems 1.1 to 1.3 identified above are all directly or indirectly related and contribute to the increase in migration.

Some probable root causes / factors are identified below:

1. Inadequate financial remuneration
 - a. Poor financial remuneration, not in keeping with rise in cost of living and the income generated in other countries (Table 3: Comparison of monthly take home pays of Sri Lankan doctors, Sri Lankan bank employees in equivalent grades and of Australian doctors [10])
 - b. Inequities in salary scales and increases, leading to dissatisfaction among different categories of HRH
2. Inadequate facilities for clinical work as well as Continuing Professional Development (Education) leads to de-motivation. – Facilities for CPD are grossly inadequate in the peripheries. Most hospitals in the peripheries do not have a library or internet facilities. Equipment and facilities to carry out procedures are also lacking in peripheries and are concentrated in Colombo. This attracts highly motivated professionals to the capital and the main cities. Those who feel they have inadequate facilities tend to migrate abroad for CPD in their preferred field. HR serving in peripheries often lose the motivation to keep up-to-date with evidence based practice, with sub-optimal health outcomes.

3. Inadequate facilities for personal wellbeing and social support, eg. housing, transport, family support and education of children
4. Unsatisfactory work environment
5. Poor Management:
 - a. The national health system of Sri Lanka lacks a corporate culture. The management system is rather rigid and restricted to pre-defined limits. The rigid system of hierarchy impedes rewards on merit rather than on period of service, results in poor human interactions and creativity that a *human capital* is potential of having. Job definitions, too, are very restricted, and for some categories, are prepared by trade unions and not the employer. The “workforce” is “forced to work” in conditions they are not happy with. In an environment where one goes to work constantly anticipating the end of the day to get out of a hostile environment, there is no room for creativity and development. Productivity falls, and the human capital tends to shift elsewhere to a better environment.
 - b. Most staff members in administrative positions have not been formerly trained in management. It was only in 2001 that the Postgraduate Institute of Medicine began a training programme in Medical Administration. Of the medical schools, only one provides a basic introduction to management in the undergraduate curriculum. The nursing course provides this to some extent, but leaves room for improvement.
 - c. Contributing to this may be poor returns for efforts, eg. difficulty in executing tasks and achieving progress due to poor co-operation of other team members, poor HR management or sometimes inadequacy of physical resources. Due to this lack of facilities and poor management of resources, HR in peripheries tend to transfer patients who could be managed there to higher level hospitals, contributing to the overcrowding and work overload in secondary and tertiary care hospitals.
 - d. An appropriate system referral is not in place. Although a referral system exists, it is not implemented. The public generally bypasses the referral system and directly seek treatment from higher levels of health care, eg. secondary or tertiary level hospitals or seek consultants in private sector. This leads to overburdening of tertiary hospitals and under-utilization of primary care services.
 - e. Lack of guidelines, algorithms and protocols and uniformity of care.
 - f. Inadequate clinical audit and research and evidence-based practice and unavailability of data for planning. – In Sri Lanka, basic data collection is done for epidemiological purposes. Basic data on HR such as numbers of various categories of HR is collected and maintained by hospitals and sent through the Provincial Director of Health Services to The Medical Statistics Unit of the Ministry of Health. However, a recent attempt to change the system has reduced the returns, as seen by the lack of complete data for the years 2004 – 2005. No data on HR needs, work satisfaction or patient satisfaction is available. It is clearly an area where research is necessary.
6. Poor utilization of available HR, eg. trained neurosurgeon working as general surgeon, not absorbing graduate pharmacists into key positions, delay in internship for medical graduates. This contributes to the “brain drain” of

professionals, as they migrate abroad in search of employment when it is unavailable or delayed in their home country.

7. Social discrimination – eg. Sri Lankan personnel with foreign qualifications face embarrassment by co-workers with local qualifications. Discrimination on social status tends to promote segregation of different categories of HR and interferes with effective communication and leads to general dissatisfaction at work, reducing productivity. Discrimination on grounds of race or gender is occasional. There is a need for an equal opportunities policy based on anti-discrimination laws.

The above factors directly and indirectly, through complex interactions, promote migration of HRH from resource-poor to resourceful settings. The distribution of health care HR show gross inequities with unduly large differences in concentration between Colombo and the rest of the country, which has been maintained through the past ten years. A higher concentration of HRH is required in Colombo, as the center of administration, the hub of coordination and conducting of education and training for all categories of HR, and the final common pathway for referrals. However, as more facilities are being decentralized and made available to tertiary hospitals in other Provinces, it is necessary to decentralize relevant categories of HR to peripheries in proportion to facilities available and services that could be provided in these centers, and most importantly, the needs of the community.

(4) Priority actions required for Sri Lanka - Developing a work plan

In order to overcome problems due to **Migration of HRH** from resource-poor to resourceful settings both immediate, medium term and long-term actions must be taken. This requires a clear situation analysis, paying attention to all HR needs from training to morale, continuous investments of time and leadership, and the involvement of health care workers and community in planning and managing their own futures.

1. The need to **improve remuneration** is evident. A larger proportion of the budget (only 1.7% of GNP in 2004 [6,10]) should be allocated for health by the government. A larger proportion of the health budget too (4% in 2002 [5]), needs to be allocated for HR development. Pay policies as well as non-pay incentives should be strengthened. Salary reforms must be made simultaneously for all HR categories, so that inequities resulting in salary anomalies that lead to trade union action are settled and conflicts minimized. Although salaries should be increased to be on par with other professionals of similar grades, it is understood that salaries cannot be increased to parallel that of doctors in developed countries. Therefore, other methods of remuneration need to be used to motivate HRH as an incentive to serve in areas where their services are required.

Some alternative (non-pay) incentives are discussed below.

- **Improving facilities for CPD** in peripheries, eg. libraries, CD libraries, IT facilities eg. 2 computers, with access to internet, promoting institutional Clinical Societies, regular newsletters from professional bodies, etc. - Developing “finer specialities” in resource poor settings has been found to motivate HR in the peripheries towards CPD and improving the quality of health care. Developing and providing regular on-the-job training, workshops, and special training initiatives for relevant disciplines, eg. an SHO training

programme, which the PGIM can be requested to conduct in addition to its regular diploma and degree programmes with the objective of upgrading skills.

- Additional **personal benefits** for HR serving in remote areas would serve as incentives. Eg. improving housing, allowance for transport, benefits with regard to education for children – providing an open choice of schools, as for personnel of the Armed Forces, etc. [9] would provide some of the priority needs of health care HR. Insurance, such as professional indemnity cover, too would be a useful benefit. It is important to ensure that HR appreciate the benefits they receive by communicate these to them clearly.
- **Improving working environment** – Improving **physical facilities** requires good management, inventories and regular needs assessments to work out requirements and ensure that the necessary equipment and drugs are available when required without waste of resources.
- **Improving human relations in the working environment** – A corporate culture has to be developed. Communication between employer and HR personnel, and among HR as well, should be improved. Job descriptions should be provided regularly by the employer at the time of employment, and revisions communicated to the employee.

Better supervision, support and morale-building would improve productivity. Evidence-based guidelines, management algorithms and protocols should be displayed in service stations and used appropriately.

There is a need for an equal opportunities policy based on anti-discrimination laws. Safety guidelines (eg. universal precautions) must be enforced and security of HR personnel, especially in conflict zones must be ensured.

Regular HR needs assessments must be carried out and steps taken to meet provide these needs. It is hoped that involving all categories of HR personnel in the process of achieving the “common goal” of a happy work environment would promote friendly co-operation rather than rivalry and “trade unionism”. Improving human relations requires leadership, commitment and a worker-friendly management system, sensitive to the needs of HR. The occasional “company outing” or festive activities for the New Year, etc. should also be encouraged as regular events for the health care team to get to know and understand each other and participate in leisure activities together away from work.

- **Rewards schemes for productivity and responsiveness** – eg. best hospital / primary care unit in the province award – with a bonus for workers, best doctor / nurse / health care worker of the year (according to category), to motivate HR. This would promote corporate culture.
- **Scheme of mandatory service coupled with benefits** - Service contracts could be made defining 1-2 years of mandatory service in remote areas, more likely at the beginning of the service period. This becomes harder to implement later in the career when education of children becomes a priority. This should be coupled with the above-mentioned benefits to motivate HR.

2. **Improving evidence based management** - promoting regular collection and flow of data eg. antibiotic patterns, drug utilization, regular clinical audits and patient satisfaction, etc. Such records should be maintained at institutional level routinely. These must be made mandatory, where submission of reports is a must, and perhaps may be linked to a rewards scheme. Arrangements could also be made for publication of results in a journal as an incentive to health care workers. A research culture should be developed. Use of evidence-based guidelines and protocols would emphasize the need for research.

3. **Improving the management of the health system** - Developing and using an **information system for HRH** would help improve the utilization of available resources. The information gathering exercise to put this paper together involved a huge amount of personal contact and time. HRH activity needs a strong database available at the fingertip of every Director and above in the Ministry of Health and important associated sectors such as Ministry of Planning, Universities, etc. **Research on HRH** should be part of the health systems research activities to be carried out by the ET&R Unit (which is currently struggling with education and training, and conducts very little research), and made available to the Planning Unit of the Ministry of Health. Regular HR needs assessments must be carried out and steps taken to meet provide these needs. A networked system should be developed to share information regarding resources between institutions of the Ministry of Health quickly and efficiently. This requires collaboration with other organizations, eg. NGOs, for funding and with research organizations such as Universities for technical assistance. Developing and **implementing** a practical **system of referral** both between different levels of services within the Ministry of Health and also between other collaborative sectors involved in health care provision is also a need for better utilization of resources.

4. **Building healthy partnerships with human resources** of all sectors involved in health development to obtain maximum benefit from institutions such as Universities, NGOs, private sector, Department of Social Services, Police, etc. as well as the community (eg. volunteer societies and individuals) in implementing education and training, curative and health promotional activities.

Eg. Integrated Service development with the Universities [4]

Recommendations which would:

- a. Promote positive relationships
- b. Correct negative relationships

We should emphasize the concept of inculcating the philosophy of friendly PARTNERSHIPS of all sectors involved in the development of HRH. This includes Universities, NGOs and private sector. The vital role of the Government Medical Officers Association and Faculty of Medicine Teachers' Association together is emphasized in this context.

A Memorandum of Understanding (MOU) between the Ministry of Higher Education University and Ministry of Health as recommended through a Cabinet decision will provide the necessary foundation for such a partnership. A concurrent mechanism to iron out early conflict resolution should be incorporated in the MOU.

This should include formal recognition and exchanging basic job contracts signed by Deans/Vice Chancellors of Faculties of Medicine and associated Teaching Hospital Directors and DGHS for individual doctors/others from all levels in both sectors for Service, Teaching, Research and Sharing of

Resources (human and physical) and Information sharing for National Development. A spirit of coordinated and integrated work ethos is to be fostered away from the unhealthy competition as prevails now. This is an important step in removing obstacles to good HRH development

The trade unions on both sides should be brought together by both Ministers and this should be worked out. This is achievable as it works well in U.K. It needs commitment.

5. **Brain gain networks** [9] - Making use of HR who have migrated abroad – “brain gain” - eg. partnerships for collaborative research, resource material for CPD, eg. membership to websites at concessionary rates, as resource persons for CPD programmes, and workshops, contribution to CPD of HR within the country by securing overseas training placements, use of medical specialists on short-term training during return visits, etc. Promoting alumni associations of the training institutions, eg. medical faculties, PGIM, etc. would provide a base for such brain gain networks. Networking would thus provide HRH within the country an additional incentive to develop.
6. **Capacity building** – Capacity building on management, especially people management and related “soft skills” is a must for all administrative staff, and would be useful for all HR. Training of HR needs careful consideration and planning according to the country’s needs. Training of front-line doctors, medical specialists and dental surgeons must be accompanied by a concomitant production of required numbers of appropriately trained ancillary health professionals, such as nurses, physiotherapists, occupational therapists, radiographers, medical lab technicians and pharmacists if high quality health care is to be optimally delivered. Training of nurses, pharmacists and paramedical staff direly needs to be improved. Curriculum reforms are needed, appraisal systems need to be prepared for organized supervision of clinical work.

DDG Education, Training & Research (ETR) was created out of the recommendations in the National Health Policy 1992 in order to address this shortcoming cited in 6 above. However, dedicated staff to organize and train the large numbers of categories of workers is essential if we are to ensure regular annual intakes as a routine matter, and avoid the need for politically motivated unplanned intakes irregularly. Promotion schemes and incentives for trainers, too, should be improved in order to retain them. Trainers may be mobilized from the Universities, but they too, are under-staffed and overworked. Accordingly, provision should be made for furthering the professional advancement and career prospects of ancillary health professionals.

In order to sustain and develop the human resources for health in Sri Lanka, our national development should go hand-in-hand with health sector development. Finally, our government should take cognizance of the need to motivate and sustain human resources for health, for the benefits of good health care delivery to reach the population.

Conclusion

Migration of human capital to resourceful settings is a priority problem in human resources for health in Sri Lanka. Several factors have contributed to dissatisfaction and human resources, especially those with higher skills and qualifications, migrating towards more resourceful settings, both overseas and within the country. Some examples include inadequate salaries, inadequate facilities to provide health care services and for continuing professional development, inadequate personal benefits, eg. poor prospects for children's education, unsatisfactory work environment, poor general management of human resources, prevalence of a trade union culture, poor collaboration with other organizations such as universities, NGOs in utilizing resources for health development and health care delivery. The system also suffers from the lack of a referral system, lack of guidelines and protocols, poor supervision and poor research ethos with resistance to change. The above factors directly and indirectly, through complex interactions promote migration of human resources for health.

Recommended actions to solve the human resource problems in Sri Lanka include the following immediate, medium and long-term plans:

- improving remuneration, both financial, education and professional development (CPD), personal benefits, incentives coupled with mandatory service in remote areas and rewards schemes
- improving work environment, facilities and human relations and promoting a corporate culture
- improving the management system, developing evidence-based methods and research for HR and health system development, organizing data collection and flow with appropriate networking,
- developing and implementing a practical referral system
- building partnerships and networking with all sectors involved in training HR and health care delivery, including Universities, NGOs, private sector and other government bodies such as Social Services, Police, etc.
- capacity building of HR, improving basic education and training, CPD and "soft skills" such as effective communication and people management

It is hoped that developing attractive working environments and incentives schemes including CPD would help to retain HR within the country, improve the equity of distribution and promote their professional development, thereby helping to deliver better health care to the people in both goodness (quality) and fairness (equity of access).

Competing Interests

None

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Annexure – Tables 1-3

Table 1: Public investment: 2005 – 2007 Activity Plan 2005 - Health sector

Central	Rs. (Million)	Provincial	Rs. (Million)
Rehabilitation of Hospitals	1,003	Sirimavo Bandaranayake Childrens' Hospital at Peradeniya	1,148
Implementation Plan of Action for Children	120	Development of Jaffna Teaching Hospital	100
Triplosa Programme	585	Bio Medical Engineering Unit Equipment	1,500
Health Sector HR Development Program	25	MLT Unit at Colombo South Hospital	40
Health Sector Development Project	925	Drug Stores at IDH	69
Rehabilitation of Operating Theatres and ICUs	1,110	Development of Kandy, Badulla and Kalmunai (North) Hospitals	75
National STD/AIDS Control Program	635	Nephrology Unit at Maligawatte	75
Global Fund to Fight Against TB Malaria	260	New Building and Water Tanks at NTS Galle	30
Mother and Nutrition Programme	205		
Computerization of Drug Distribution System	50		
Water Supply and Sewage System for Hospitals	30		
Development of Blood Bank Project	532		
Neuro Trauma Unit at NHSL	800		

Table 2: Highest HR losses among specialist doctors emigrating from Sri Lanka [10]

Speciality	Number of specialist doctors emigrating	
	1993 - 1996	1997 – 2000
Psychiatry	33%	56%
Dental surgery	33%	50%
Anaesthesiology	26%	37%
Ophthalmology	25%	-
Medicine	-	28%
Microbiology	-	29%
Paediatrics	-	28%
Surgery	-	34%
Obstetrics & Gynaecology	-	20%

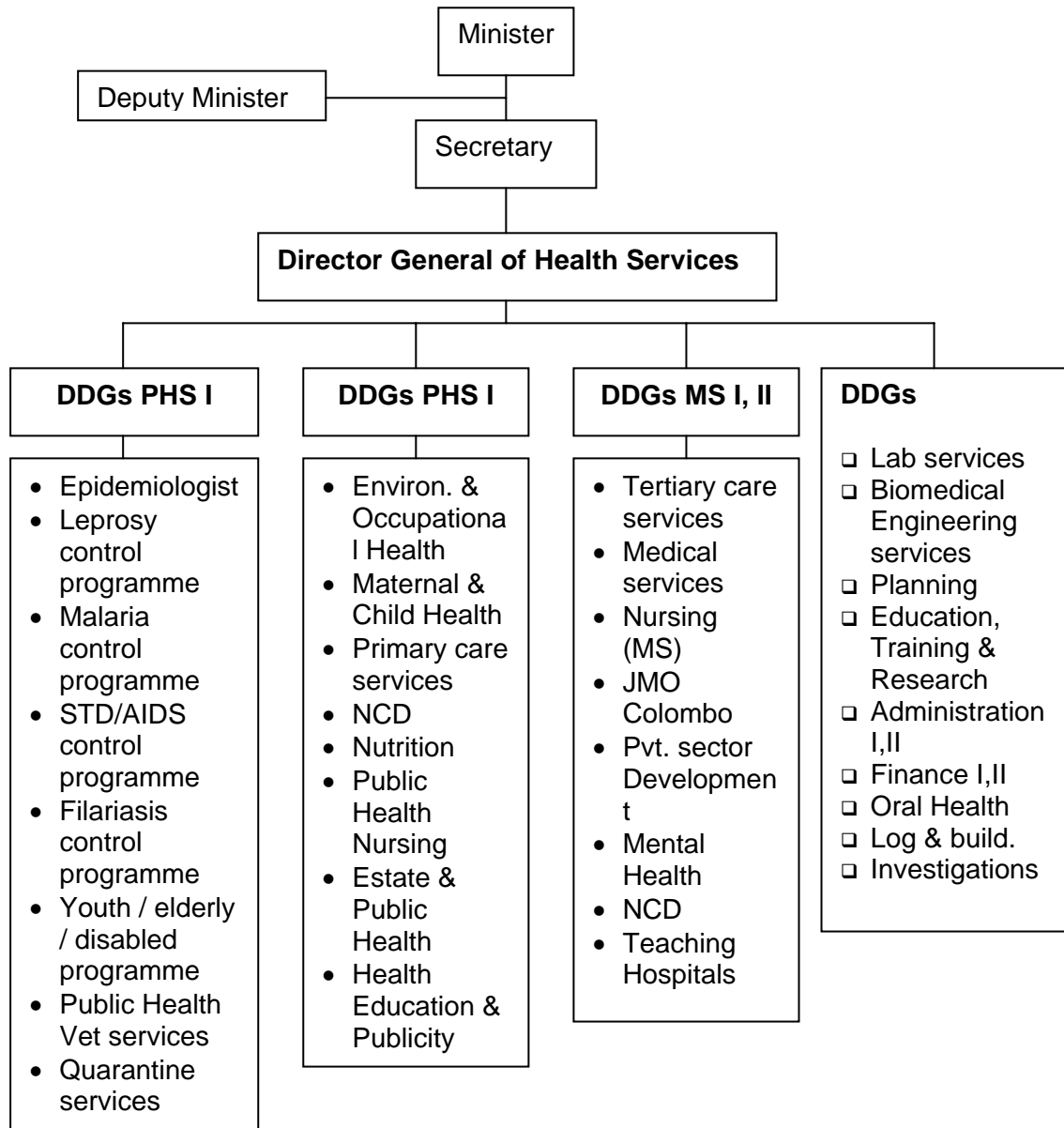
Table 3: Comparison of monthly take home pays of Sri Lankan doctors, Sri Lankan bank employees in equivalent grades and of Australian doctors [10]

Sri Lankan Doctors (LKR)	Sri Lankan Bank Employees (LKR)	Australian Doctors	
		(Australian Dollars)	(LKR equivalent)
Specialists Rs. 45,000	General Manager Rs. 125,000 + allow	Specialists AUD 20,000	Specialists Rs. 1,500,000
Grade I MO Rs. 35,000	Senior Manager Rs. 45,000 + allow	Registrar AUD 8,000	Registrar Rs. 600,000
Grade II MO		Grade I AUD 7,000	Grade I Rs. 525,000
Preliminary Grade Rs. 20,000	Junior Executive Rs. 30,000		
Interns Rs. 14,000		Interns AUD 4,000	Interns Rs. 300,000

Pictures for COUNTRY PAPER

Migration of Human Resources for Health within and out of Sri Lanka – Report and Analysis

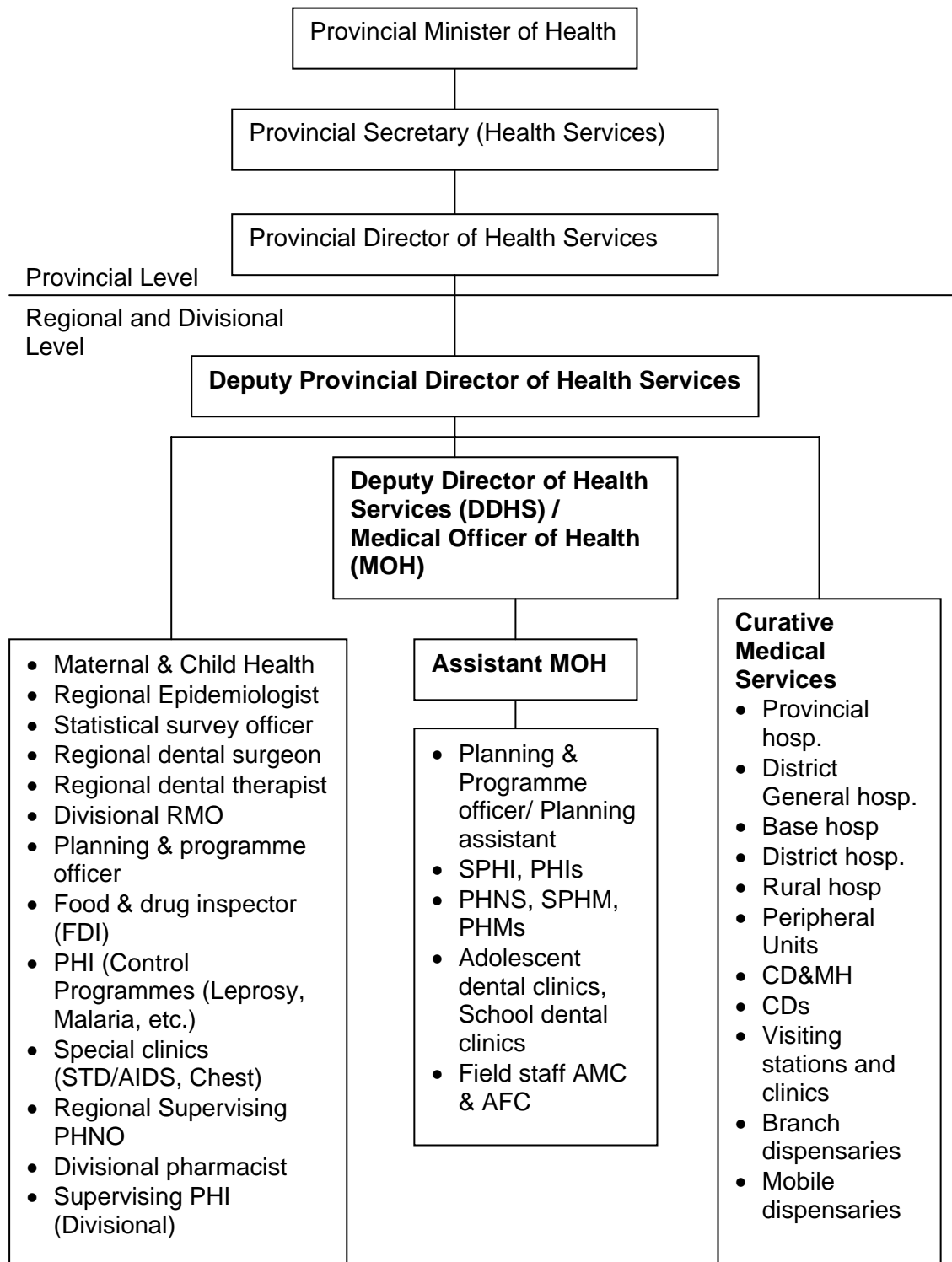
Figure 1a: Organization chart for health services under Department of Health Services



Abbreviations:

- DDG : Deputy Director General
- PHS : Public Health Services
- MS : Medical services
- TCS : Tertiary care services
- NCD : Non-communicable Diseases
- JMO : Judicial Medical Officer
- PHN : Public Health Nursing

Figure 1b: Organization chart for health services under Provincial Health Ministries



Abbreviations:

PHS: Public Health Services
 PHN: Public Health Nursing
 PHNS: Public Health Nursing Sister

SPHM: Supervising Public Health Midwife
 PHM: Public Health Midwife
 SPHI: Supervising Public Health Inspector
 PHI: Public Health Inspector

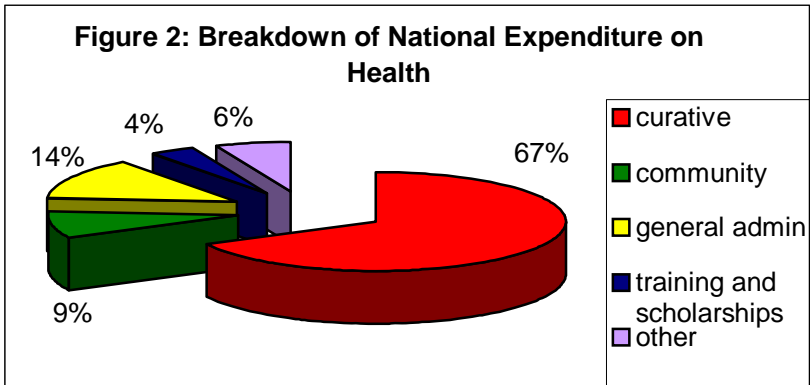


Figure 3: Trends in doctor : population ratio in Sri Lanka

