Dr.Malinga Fernando Memorial Oration-2021

Human Resources in Health- Story of Sri Lanka

Good morning!
Honorable President, Members of the Council, Past presidents, Family members of the Late Dr.Malinga Fernando and Distinguished Guests,

Mr.President, I am honored and humbled by the opportunity bestowed on me to deliver this oration in memory of the late Dr.Malinga Fernando. I would like to congratulate the President, for making this year remarkable while thanking for inviting me for this year's oration. The subject of my oration this morning is "Human resources in Health- Story of Sri Lanka"

It is the tradition and my responsibility to brief the immense role of late Dr. Malinga Fernando. Doctor Sarrikkalige Deepal Malinga Fernando, known to Health Ministry officials as Dr. Malinga Fernando, was born in October 1929 to a very respectable and wealthy family from Panadura. He had his primary education at Sri Sumangala College, Panadura and later at Ananda College. Having opted for a career in medicine he passed out with honours in April 1954 from the University of Ceylon.

He served as DMO Weligama and Panadura where he showed early signs of his prowess as an able and efficient administrator. In 1966 he was appointed to the post of Superintendent, Colombo South Hospital and thereafter as Superintendent, Colombo Group of hospitals. In 1973 he was appointed to the very high and coveted post of Deputy Director of Health Services (Medical Services), now known as Deputy Director General of Medical Services, and held this post for eight years until he was appointed as Director General of Health Services in 1981 and the Secretary, Ministry of Health in 1985, which post he occupied until his retirement in April 1990. After his retirement from the Ministry of Health he was appointed as a Team Leader in W.H.O. Geneva to support countries with greatest need. He retired from WHO in April 1996.

His rapid rise as a medical administrator was due solely to his ability, sheer hard work, his political acumen, and tact. He had the God- given gift of knowing what was possible and what was not possible in all given situations. He was popular among political circles, his peers, and his subordinates.In Feb.1959 he married Dr (Miss) Chintha Perera, sister of Vajira - of the Chithrasena Vajira fame. Malinga and Chintha were blessed with two daughters, Neluka and Vindya. Neluka is today Professor in Microbiology at the Sri Jayawardena University whilst Vindya has acquired her father's and grandfather's talents as managers and manages very efficiently the many acres of agricultural property and hotels they own.

Although he had traveled extensively, all-over the world, participated and chaired meetings at the highest levels, he still remained a very humble, simple, and approachable person. Dr Malinga Fernando's appointment as the Director General of Health Services in 1981 and as Secretary to the Ministry of Health in 1985 until his retirement in 1990 were identified as the busiest era in his life. The first Secretary Health to be qualified in Medical Administration was Dr.Malinga Fernando in 1990 and I was fortunate to serve in the Ministry of Health as a junior medical officer during

this time. I still remember how we were prepared for the meetings chaired by him, with both respect and fear due to his technical competency and vibrant personality.

True to his thinking he left us in January 2008. Dr Malinga Fernando was a noble human being, a good son, a loving and dutiful family man and a great son of Sri Lanka. His contribution to health development not only in this country but also in the region would be unmatched and admired. May his sojourn in "sansara" be a tranquil, peaceful and short and may he attain the supreme bliss of Nirvana early.

From a young medical officer to the level of Additional Secretary of Medical Services in my carrier which spans over 32 years, I have learned to believe human resource as the most important component in our health system. Further, I am fortunate enough to be among the very few who had the opportunity to carve the human resources in health. Further I should mention the names of great teachers Dr Joe Fernandu, Dr.Reggei Perera and Dr.Lucian Jayasooriya who have been my mentors. This prestigious college of Medical Administration was created in 1992 and I was fortunate to be a past president. Further I am from the first batch of MD in Medical Administration.

Human resource in health is defined as "all people engaged in actions whose primary intent is to enhance health".

Human resources are the most precious component in delivery of health care. Throughout the world history, remarkable changes in health services has been strengthened by the performances of many health workers. Lord Buddha once had mentioned to Venarable Ananda thero that "he who serves the sick, is considered as serving me".

Development of Human resources in health is a continuous process. It's been closely related with human history. There is considerable evidence globally and in Sri Lanka that there were designated individual s and groups to look after the health of the community, even in the prehistoric period.Dr.Uragoda in his classic book named 'History of Medicine in Sri Lanka' in second chapter mentions prehistoric King Rawana was a physician and written several medical books. Mahawamsa and Chulawamsa describes several health care delivery systems, establishments, health personnel and even health managers of the health establishments. It says that the son of king Mahinda IV built a hospital in the 9th century.it is interesting to note that knowledge on Medicines was closely related to Buddhism which were promoted by our kings. In Medirigiriya hospital an inscription was available with rules and regulations on management of the hospital where the reputation of staff is mentioned as a concern. Accordingly, the human resource development was continued in all stages of Sri Lanka including prehistoric, during the time of kings, colonial period, post independent era and period following 13th Amendment to the constitution.

Human resource development during pre-colonial era was mainly on individual basis and the medical knowledge was transformed selectively. The training was limited and time consuming which resulted gaps in publishing the knowledge gained, which resulted in weaning off knowledge.

During Portuguese and Dutch period there were reasonable attempts to establish western allopathic medical stream yet most of the physicians or skilled workforce were from their community and limited number of care givers were Sri Lankans.

During British period medical service was established in more organized manner and initiatives were made to establish government health service. First medical school was started in Manipay, Jaffna in 1870 with local students. Colombo medical school was established in the successive year. Training of dispensers, sanitary officers, hospital assistants and vaccinators were initiated. Ceylon branch of British Medical Association was established in 1887.

Now, let us go back in time one hundred years, exactly to 1921, like today when the world was plagued with the last global pandemic – The Spanish Flue, which is said to have lasted from 1918 – 1922 taking the lives of some 50 – 100 million globally. Sri Lanka, then "Ceylon" had a predominant agriculture-based economy. The available medical statistics indicate that Infant mortality rate (IMR) was at 160/1000 live births, and the maternal mortality was as high as 1990 / 100 000 live births. Further, the life expectancy at birth for females was at 30 years and that for males was at 32 years. It indicates that the predominant medical need of the hour was for child and maternal health services. Even in 1930, there was one doctor for 15,400 population and one midwife for 405 live births.

Genesis of Public Health in Sri Lanka is related to the British Colonial Rulers bringing cheap labour from south India for the tea plantations and the introduction of Hook Worm Disease to Sri Lanka. By the early part of the 20th Century there were thousands infected with Hook Worm disease and more so there were thousands dying from Hook Worm disease in Sri Lanka. During the same time the Rockefeller Foundation was considering ways of entry into then Ceylon and the Colonial Rulers had handed them over this problem to sort out. The treatment of choice at the time for Hook Worm disease constituted of an Anti-helminthic drug (Chenopodium) being delivered to each and every one in the household under direct observation. This was the first instance of public health intervention in operation.

The Rockefeller foundation invested nearly half a million USD on the Hookworm eradication campaign under DOTS without investing on sanitary measures. The campaign failed after five years. But the external evaluation done by Rockefeller foundation resulted in the setting up of the first Health Unit at Kalutara: which has now emerged as the Medical Officer of Health Unit System covering the entire country with 356 MOH offices.The model was scaled up one additional unit per year so that by 1936 there had been 10 Health units. The impact of the Health Unit system was so immense that currently the entire country is served by 356 Medical Officer of Health units – guaranteeing UHC for the population. These are some of the pictorial evidence from the past of the services rendered by these Health Units.

Development of curative settings were seen in par with the development of the preventive sector. These images capture the National Hospital, Colombo, National Hospital, Kandy and Lady Ridgeway Hospital in 1940s. Sri Lanka had183 hospitals, 240 CDs,176 branch dispensaries and 453 visiting stations for the population of 7,060,000 in 1948.

So where are we now?

I would like to compare the some of the health care statistics of 1921 with what is available for Sri Lanka as latest information. The country has grown in population almost fourfold. The population has shifted towards the third stage of the demographic transition with increasing elderly population with increasing life expectancy. Sri Lanka has been able to address the then dominant health problems of Infant and Maternal deaths as well as many of the commonest communicable diseases.

With the shift in the demographic and epidemiological transition, the disease patterns and the burden of disease have shifted towards that is dominated from diseases of NCD and those associated with elderly and aging populations.

It is important currently to review what had been important during these periods of time as per public interest. This table is adopted of the work of Benton et.al in regulation to nursing regulations in the US. But it has relevance to the Sri Lankan situation as well. During the 19th Century to the mid-20th century, the main emphasis was on increasing numbers with very strict and deliberate measures to safeguard the profession. But in doing so the health care professionals were sort of handpicked and more emphasis was placed on the service standards and professional qualifications. Further, there were concerns over access, choice, and entry barriers. What Benton et.al describes is that over the years the emphasis has now shifted more towards effectiveness, efficiency, cost considerations and reduction in entry restrictions. This has a close similarity with the Sri Lankan situation as compared to the overall health system and service delivery including the private sector.

This is the current Health care delivery system now in Sri Lanka. We have a blend of public and private service providers offering a mix of western and traditional and complimentary services to the population.

I would like to present to you the state health care delivery system of Sri Lanka. There are 643 hospitals with around 86,600 hospitals beds offering 4.0 beds per 1000 population. We cater 58 million outdoor patients and 7 million inpatients annually through these 643 hospitals. These include 2 National hospitals, 11 Teaching hospitals, 6 specialized teaching hospitals, 12 special hospitals,2 Provincial General Hospitals and 19 DGH's and 82 Base Hospitals offering secondary care and the rest offering primary care to the public.These provide more than 90% of the total inward care services and around 50% of the OPD services.

Ministry of Health is the second largest civilian ministry in Sri Lanka with over 200 staff categories represented with 104 trade unions. This includes 147,000 employees as of 30th November,2021 in all line ministry and provincial ministry health institutions. Ministry of Health is headed by the Secretary, Health who is supported by several Additional Secretaries including two technically qualified medical Administrators, Director General of Health Services, Deputy Director Generals and directors in both ministries and health institutions. Yet delivery of health care is linked with other human resources including Political authorities, supportive personnel, investors, other professional related to medicine and health, international organizations, and media.

Sri Lanka is a lower middle-income country with a gross domestic product per capita of 3862 US Dollars as of 2020 with a marked district disparity. Ministry of Health spent 254 billion rupees in 2020 for healthcare. It is of paramount importance that Cost of health staff is around 53% of health budget. Total expenditure on training by Ministry of Health is 53 billion in 2020.

Number of health care worker have increased over time. It is noteworthy that Sri Lanka had invested heavily in HRH and over the years we have established systems and processes to develop, recruit, deploy and retain the HRH necessary for our country some being unique to Sri Lanka. For example, the system of postgraduate system as seen in Sri Lanka is said to be very much unique.

At the moment Ministry of Health, Sri Lanka deploys all the trained staff including the University graduates. Aggregated density of 44.5 physicians, nurses and midwives per 10,000 population has been identified by WHO as the workforce threshold required for 25% achievement of a composite SDG index which consist of 12 tracer indicators for Universal Health Coverage. This WHO threshold suggests that Sri Lanka requires a total of at least 102,000 physicians, nurses, and midwives.

However, It is estimated, that countries with fewer than 23 physicians, nurses and midwives per 10,000 population generally fail to achieve adequate coverage rates for selected primary health-care interventions where Sri Lanka had a value of 31.8 in 2020.

‘So, what constitutes health work force?’

In Sri Lankan context human resources include clinical staff such as Consultants, doctors, nurses, professionals supplementary to medicine, paramedics, and supportive staff, as well as management and support staff – those who do not deliver health services directly but are essential for the performance of health systems, such as health care managers from Sri Lanka Medical Administrative Grade, Officers from Sri Lanka Administrative Service, Officers from Sri Lanka accountancy Service, Sri Lanka Engineering Service, Administrative officers, office staff and supportive staff .

The latest figures available at HR unit of Ministry of Health as of June,2021 the Line Ministry and Provincial Councils employed 22,097 doctors, 44,174 nurses (Including nursing students); 8687 midwives (3). These figures suggest that Sri Lanka has an aggregate density of only 34.4 physicians, nurses and midwives per 10,000 population in 2021.Yet the true rates are probably higher than this as this includes only Ministry of Health employees.

Human resource development in health sector is determined by the contribution of several units of Ministry of Health.Management Development and Planning Unit of the Ministry of Health is involved in developing Job descriptions, cadre creations and cadre expansions with reference to the human resource in health.Human Resource Coordination Management Unit is engaged in scientific analysis of cadre projections, recruitments of professional categories other than medical doctors and dental surgeons and maintenance of health workforce account.The ET&R unit is the focal point in policy formulation, providing technical guidance related to training and also coordinating basic training programmes for all staff categories except for basic degree programmes for Medical Officers and Dental Surgeons. National Institute of Health Sciences, Medical Research

Institute, 18 Nurses Training Schools, 16 Allied Health Training Schools with 18 training Programmes and 8 Regional Training Centers are under the technical supervision of the ET&R Unit. The Unit is responsible for capacity building of the health workforce through post basic, induction and in-service training programmes.

Different DDGs and Directorates handle the appointments, transfers, promotions, appraisals and salary increments and retirement of different health staff categories. Specially provincial and regional directorates, and national units such as Family health burau, Health promotion burau and Epidemiology unit are engaged in training human resource for specific vertical programmes.

Health workers in Sri Lanka are mainly educated and trained through domestic public education programmes conducted either by the state funded universities or the Ministry of Health. As per, governor Sir West Ridgeway 'health staff of Ceylon was entirely Ceylonese' in 1903 which is still the same as there are only around 10 doctors and 40 nurses who are not Sri Lankans in our health service.

Domestic education of medical professionals is completely funded through University Grants Commission and the Ministry of Education which have oversight of the 11 out of twelve state funded medical schools. The 12th medical school being part of the Kotelawala Defense University (KDU), is under the Ministry of Defense. The number of foreign medical graduates completing the ERPM exam has doubled in recent years resulting 15% of new entrants to the medical workforce to be Sri Lankans trained abroad.Dental surgeons are trained at Dental faculty, University of Peradeniya and a new faculty is about to be commenced in Sri Jayawardhanapura.

The training of nurses for employment in the Ministry of Health is conducted in 18 Nursing Training Schools run by the Ministry of Health. A diploma is offered to the recruited students after completing the three-year training programme. So far all the trainees were automatically absorbed to government service. Six of the state funded universities offer BSc Nursing degree programme through which 300 nursing graduates are produced annually.

Other professions supplementary to medicine and Paramedical staff are recruited and trained by Ministry of Health for whom a higher diploma and diploma is awarded. Similarly selected state funded universities offer BSc Pharmacy, Medical Laboratory Sciences, Radiography, Physiotherapy and Speech and Hearing Sciences.

Process of recruitment were made efficient through digitalization. Since 2018 online recruitments were done with the support of Department of Computer Science of University of Moratuwa which was initiated by the Human Resource Coordination Management Unit taking health HR to a new level.Trainings were provided through 18 training schools with the help of competent trainers for the professionals supplementary to medicine and Paramedical staff. All the trainees receive monthly allowance.

During my carrier as Provincial Director of Health Services I had decided to takeover Regional Training Centers directly under the administration preview of PDHS and reestablished a provincial training center.

During my tenure as DDG ET&R, I had to design, redesign, update, review, revisit training programmes. In this process some new teaching methods and techniques which were not practiced previously in educational programmes of the Ministry of Health were introduced. Teachers and tutors were exposed to some advanced techniques & methods used in countries such as Singapore, Korea and Malaysia and persuaded to apply in our programmes. Further, initiatives were made to implement CPDs and transformative education.

It is estimated that each year the Ministry of Health recruits about 1300-1400 medical officers and 75 dental surgeons,275 medical specialists,3000 nurses and 1000 psm and paramedical staff to the system. Since this works out to an average of about 4500 more physicians, nurses, and midwives a year then it is possible that the gap may be met in approximately 5-6 years.

Ministry of Health, Sri Lanka has deployed over 2100 specialists representing 56 specialties. Annually around 300 specialists are board certified. Usually, a medical officer is over 35 years when he or she get board certification. For this reason, deployment issues observed in rural settings due to childcare and schooling issues. Average Attrition rate of 12% is observed among specialists.

Over 180 medical doctors leave the system immediately following the internship for migration, private sector or for defense In 2010, around 5700 Sri Lanka born medical professionals worked in OECD countries which is equivalent to 25% of the current medical workforce in Sri Lanka. Migration of trained professionals represents substantial loss of investment. Further, it is becoming a challenge whether Ministry of Health can recruit all the medical graduates who pass out in future.

Nursing officers are the largest professional category recruited to the Ministry of Health both as university graduates and Diploma holders. In view of strengthening the nursing services further I believe this Nursing act need some amendments. It was observed most of the students who could obtain a university degree has followed the nursing diploma due to the monthly allowance and job security. It is a question whether that much of nursing graduates will join the service when they don't receive this allowance.

Foreign migration opportunities are less for nursing and other PSM categories due to presence of a diploma and inadequacy in English language. Yet opportunities for Asians have markedly raised following Brexit and COVID so there is a growing trend in Job market for which Ministry of Health is planning to sign MOUs. Since 2018 as Additional Secretary of Medical Services I have facilitated cultural, religious, social, geographic patterns of recruitment. Further certain recommendations were made for retainment of workforce, retainment in needy areas and equitable distributions. Further I was able to serve in the Board of Management of PGIM as a member; CMCC as acting chairman; Medical Educational Committee of UGC as a member. Further I am proud to be a member of College of Medical Educationalist and several subcommittees in Ministry of Education, Higher Education, Vocational training, Foreign Ministry, Health Committee of WHO & SEARO. Further due to our engagements in strengthening Human resources in Health Dr.Dileep de Silva and myself won an international award in two consecutive years by Asia Pacific Alliance of Human Resources of Health.

There is an increasing need to develop skills and capacity of human resources in health. Even though, in-service trainings are conducted regularly for most of the staff categories opportunity for

continuous professional development is not adequate. Several health categories losing its attractiveness for the job such as PHMs and PHIs. Problems in recruiting these categories has resulted service gaps. (e.g., PHM)Sri Lanka lacks the required numbers & full range of services necessary to cater effective care.

There is a high demand for some job categories. Yet the capacity to produce the needed human resource in some jobs is limited. Training of HR not standardized across different settings and most categories are not recognized beyond Sri Lanka. As per the Sri Lanka Bureau of Foreign Employment, national policy is to actively encourage the migration of skilled manpower to augment the amount of remittance sent back to Sri Lanka. Further migration of trained staff is observed as a new trend which may affect the workforce equilibrium of Sri Lanka.

Maldistribution of Human Resources and issues in rural retention is observed despite the adopted strategies which has resulted significant brain drain. Necessary skill mixes to deliver the full range of care not seen at the Primary Care setting and even in some secondary care settings.

Rising demand in private sector for human resource is seen which is difficult to be catered through the current training system. Health professionals are trained by Ministry of Education and Ministry of Health. Role of Private sector education institutes in strengthening training is not clearly identified. Many private sector staff are inadequately trained and training programs not accredited by the respective Councils.

Performance evaluation methods adopted within the system is not adequate and grievance handling mechanisms are not adequately established hence trade union pressure is high within the health system.Given that medical officers are permitted to work in dual practice after working hours, many opt to work full time in the public sector and do after hours care in the private sector to increase their base income. During recent years the dual practice has been extended to several other categories as well. There is a complex private public partnership where significant number of government doctors engaged in dual practice, concerns are raised regarding the quality of education in private institutions and qualifications of nurses (assistant nurses) trained by private sector are not recognized by public sector. Further, data on health workforce in the private health sector and regulatory oversight of private health sector is limited.

As compared with the regions of Americas and Europe, the Region of Southeast Asia has so much to improve and even within the region, Sri Lanka has not demonstrated much improvement over the last decade. Further the HRH production capacity of the countries within the SEAR region is less compared to that of OECD countries. This slide is on the regional comparison of accreditation mechanism available in the countries. Indonesia and Thailand have well-established accreditation systems, while other Member States are taking steps towards implementing this.

Considering CPD mechanism, most countries now have national standards for continuous professional development (CPD).

Under this scenario, I would like to draw your attention to the HRH requirement that were estimated by the World Bank for realising the SDG 3 targets globally. It indicated that by 2030, the world would be needing some 18 million health care workers more to achieve and sustain the

SDG 3 agenda. Even in this backdrop, it is noteworthy to consider these pressing HRH needs in the high-income countries: It is estimated that there is shortage of around 100,000 health staff in countries such as European Union, Japan and England, with the potential to rise to 350,000 by 2030. The impact of which will be massive migration of skilled HR from countries of our region and even from Sri Lanka.

Considering the Global and Regional HRH developments over the recent years, namely: WHA resolution on HRH and implementation of outcomes of UN High-Level Commission in 2017 and 2nd progress review of Decade of Strengthening HRH in 2018 are some key highlights. Sri Lanka has been a regional leader and trend setter in the field of HRH. In line with the regional and global agenda, we too have had many recent onset developments in the area of HRH such as: Development of distant education and CPD platform for MoH, Standardization of Training Centers under the MoH and Taking up accreditation of Medical Education and drafting of the HRH strategic Master Plan for 2021 – 2030. Primary objective of this is to make ready Sri Lanka to be the regional hub or center of excellence in HR Development for the next 20 – 30 years, that will not only provide the necessary high-quality HR to the country but also be a much sought after by the high-income countries as per state vision of making Sri Lanka a Hub for Knowledge.

Challenges and way forward:

Development of Strategic plan on health human resources is commenced and development of Health Workforce Account is initiated. Sri Lanka need to develop a HRH policy, SOP/SORs for needed areas in HR and job descriptions for the lacked jobs. Further Clinical hierarchy and responsibilities to be emphasized. Despite the changes system should ensure the job roles are matched to education qualifications.We will need to have a better coordinated long term health workforce policy that will: Promote identifying staffing needs based on the workloads of different institutions, out and in migration flows and service gaps analysis in HR planning and improve the health workforce information system including private sector.

Whether we will be able to recruit all trained staff? is another concern which emphasize the need of revisiting our recruitment policy of health workforce. Matching the academically oriented graduates to the identified gaps in professional service provision is a difficult task. Strengthening the capacity of HR to match the trained staff for the changing environment is a key concern. Transformative education is needed to be implemented while adjusting for disease dynamics. This can be facilitated by accreditation mechanism for all educational institutions which train Human Resources for Health.

The recently concluded Health Labour Market Analysis (WHO and MoH 2018), indicated of significant out migration of Sri Lankan Medical Professionals to the High-Income countries. Further there is also a considerable number of other skilled categories having out migration and some categories migrating out for sub optimal professions, such as nursing migrating as health care assistants / private care providers as they are not able to migrate out as nurses due to language and qualifications. This warrants for the develop a multi-sectoral common policy on health workforce migration with the Ministry of Health, Ministry of Education and Ministry of Foreign Employment, based on the principles of the WHO Global Code of Practice.

Improving oversight in the private sector and coordination between the public and private sectors through regulation and data monitoring systems is another are of concern

So what are the essential skills to be developed among health workers to strengthen the human resource in health? I believe each worker should have Conceptual skills which enable the health personal to see the health as a delivery system and health delivery as a concept. Health workers should be able to understand why health is necessary to have health care services, its conceptual framework, vision and mission, roles of health care workers and staff categories, expectations of health system from him/her and the expectations of people. Further they should have Human skills including skills related to leadership and communication. Presence of interpersonal skills including problem solving and managerial skills is essential. They should have technical skills including skills required to perform the job role. Finally they should have soft skills including language skills, social skills and computer skills.

Finally, these are the policy questions to fonder by you all as medical administrators.

1. Does Sri Lanka need to expand the size of its current health workforce?
2. What role should the private sector play in human resources for health?
3. How can health worker migration be better coordinated?
4. Does Sri Lanka need a new health workforce policy?
5. To further improve already matured health system, are we able to allocate at least 5% of GDP from present 3.4% of GDP?

In conclusion I would like to remember my parents and My family who have been the great pillars of support.I would like to acknowledge Prof Lalini Rajapaksa for sharing the Maternal Mortality, HRH database from 1900 and Dr Padmal de Silva, for country and regional perspective of WHO.I acknowledge Prof.Indika Karunathilake, Faculty of Medicine, University of Colombo, Dr.Sarath Samarage, Senior Research Fellow, IHP, Dr. Dileep de Silva, Head, Human Resource Coordination Management Unit, MoH, Dr.Sudath Samaraweera, Director, National Dengue Control Programme, Dr.Iranga Yaddehige, Human Resource Coordination Management Unit, MoH and the staff of office of Staff of Office of Additional Secretary Medical services for their contribution to make this event successful.

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Ministry of Health

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