Primary Care, Family Medicine and COVID-19 Pandemic in Sri Lanka

Trust is at the heart of healthcare—it takes time and care to build but can be lost in a moment. And those who lose the public’s trust should have to work hard to regain it. Trust is bolstered by good information. Estimates of excess deaths, rather than reported covid-19 deaths, give a better measure of the pandemic’s burden around the world (BMJ Editor – Fiona Godlee)

Healthcare indicators

Sri Lanka has enviable healthcare indicators such as life expectancy at birth, and maternal and infant mortality when compared to neighbouring countries. The British Medical Journal, a leading medical journal in the world in its 2004 cover issue had a headline

Is there hope for South Asia? - Yes, if we can replicate the models of Kerala and Sri Lanka

‘This is mainly due to the excellent ‘Primary Care Preventive’ services implemented and sustained over the past three to four decades by the Ministry of Health (MoH)’. Some of the services are immunisation of infants and children, antenatal care (care for pregnant mothers) and child welfare especially for those under five years.

Making timely and correct decisions regarding health is of utmost importance during a pandemic. For a low middle income country like Sri Lanka such decisions are crucial due to the high caliber of the expert pool we have that is comparable to developed countries and the limited funds we have in Sri Lanka now. The Ministry of Health is directly responsible for healthcare services of the country and the Director General of Health Services is the head of the institution that enacts and implements the decisions of the Ministry of Health. The Minister of Health is the main person who is responsible to parliament. In addition there are three other state ministers overseeing different aspects of health. During a pandemic, it is crucial that decision making is done in a manner with the best available evidence, with the collective technical / subject expertise that is available and with transparency that will ensure scrutiny by citizens. In short, we need evidence-based policies, directives, and guidelines for healthcare as never before to maintain the position we as a country had for such a long time since independence.

This article reflects observations and experiences of grassroot level doctors and specialists in curative primary care, trying to secure responses from the top hierarchy of healthcare officials to the proposed suggestions and solutions for the ongoing Covid-19 pandemic.
It is important to understand the levels of healthcare in Sri Lanka. The levels of healthcare can be best explained by giving an example. A 25-year-old labourer gets fever, body aches and headache. There are no symptoms such as cold, cough, sore throat. Most probably, on the first day he will take some paracetamol tablets with the traditional venivalgeta/koththamalli and hope that the fever gets better. This is called ‘Self-care’.

After a day or two the fever get worse, and he visits the nearby government hospital Out Patient Department (OPD). The OPD doctor examines him and prescribes medicines and advises to get a blood test done by the following day if the fever does not improve. At this point the patient has accessed the healthcare system of the country and the level of care he has accessed is known as ‘Primary Care’, more specifically, Curative Primary Care.

The next day the fever is still present and getting worse, he has vomited once, and the headache is increasing. He consults the OPD doctor with the blood tests. The OPD doctor examines him and decides to admit him to the hospital as he suspects Dengue Fever. Patient is admitted to a general medical ward and now he is in ‘Secondary Care’.

On the 6th day bleeding spots appear in the skin and the blood test indicates that the platelet count has reduced to 40,000. From the medical ward he is transferred to the Intensive Care Unit (ICU). At this point the patient is in the ‘Tertiary Care’ and is managed by consultants specialising in intensive care.
There are different specialists and non-specialists providing services at different levels of care especially when we consider curative services.

The MBBS (Bachelor of Medicine, Bachelor of Surgery) qualification is the basic degree to practice medicine in Sri Lanka registrable with the Sri Lanka Medical Council (SLMC). After the MBBS, doctors can obtain specialist training and board certification as a specialist through the Post Graduate Institute of Medicine (PGIM) which is the academic and legal authority for the process. Board certification is awarded after a MBBS qualified doctor completes a MD (Doctor of Medicine) five-year training programme which consists of three years in-service training and two years of further local and foreign training. Unless the PGIM confers a title of board certification in different fields of Medicine such as Internal Medicine, Surgery, Psychiatry, Paediatrics, Obstetrics and Gynaecology, Family Medicine or Cardiology, Neurology (tertiary care specialties) etc. no doctor can practice as a specialist in his or her field of expertise. However, some doctors do complete only a Diploma (e.g. Child Care, Family Medicine) and masters (Community Medicine) training programmes at the PGIM. They are not categorised as board certified specialists.

Primary care services in the country are divided into two broad categories; preventative primary care and curative primary care. As explained in the introduction the Sri Lankan healthcare system has the envious position in health indices because of the excellent preventative primary care services that have been developed, implemented, and maintained since independence. This is more laudable considering the amount we spend on healthcare, which is less than 3.2% of the total government budget under any government.

The MOH implements the Primary Care Preventative (PCP) services primarily through the Medical Officer of Health (MoH) including the public health inspector and public health nurse and midwife. The services provided under the preventative primary care services are broadly childhood immunisation, maternal and child welfare, sanitation, food safety and highly efficient preventative programmes like Tuberculosis, Malaria, Filariasis etc.

Primary Curative Care (PCC) services are provided by the public and private hospital OPDs, District Medical Officers (DMO), general practitioners/family doctors and Consultant Family Physicians. The unique characteristic of PCC or ambulatory care are that all services are provided outside hospital wards in outpatient departments and private doctor clinics. Primary care curative services provide services for common illnesses and disease such as fevers, respiratory tract infections, musculoskeletal problems and non-communicable diseases such as high blood pressure, diabetes, lipid disorders and asthma etc. There are ‘specialists’ or ‘consultants’ in PCC like secondary care. The main specialists in PCC are Consultant Family Physicians and Consultant Emergency Care Physicians.
Family Medicine

Family Medicine is a specialised discipline like Internal Medicine, Paediatrics and Cardiology. Family Medicine is also known as General Practice in some countries especially UK and Australia. In the increasingly fragmented world of healthcare, family physicians are dedicated to treating the whole person and stress the importance of the doctor-patient relationship.

Family Medicine can be defined as the medical specialty that provides continuing and comprehensive healthcare for the individual and family. It is a specialty of breadth that integrates the biological, clinical, and behavioural sciences. The scope of family practice encompasses all ages, both sexes, each organ system and disease entity. If one looks at the ranking of healthcare in the OECD (Organization of Economic Cooperation Development), the top countries are based on a healthcare system with strong primary care with family physicians/general practitioners (FP/GP). In such healthcare systems, people can access secondary or tertiary care in most instances only after a referral by a primary care physician, in most instances a family physician or a general practitioner. United Kingdom, Australia, The Netherlands, New Zealand, Denmark, Sweden etc are examples of the top ten healthcare systems in the world that are the most cost-effective and patient-centered. The United States of America which spends nearly 17% of the GDP on healthcare, has a healthcare system based on mainly tertiary care specialists and rank much lower. Even countries like Cuba, although not an economically developed country or included in OECD list, has a strong primary care-oriented healthcare system led by a large number of family doctors. Even China commenced training Family Physicians and establishing university departments of General Practice/Family Medicine a decade ago.

In Sri Lanka, Family Medicine is a Post Graduate Institute of Medicine (PGIM) recognized specialty with Board Certified Family Physicians numbering 47 according to the PGIM website that can be accessed by the public. There are more than 1500 doctors with a PGIM Diploma in Family Medicine. These doctors serve both in the public and private sector.
Ambulatory care / Outpatient services

According to the 2014 Annual Health Bulletin, which is the premier publication of the Ministry of Health, there were 55 million outpatient visits to public hospitals. With the estimated two-fold increase, it is estimated that there will be 100 million OPD visits by 2027 which will become an unmanageable burden with dwindling resources for primary care. In addition, the outpatient visits to the private sector hospital OPDs, general practitioners / family doctors are estimated at about the same numbers of 50 million. The 2019 average visits to public and private sector OPDs have reached more than 5 visits per person annually.

In 2017, Sri Lanka had about 24,000 doctors and about 18,000 were employed by the MoH. The large percentage (60%) of the MoH doctors work in primary care both in the curative (as DMO, MOIC) and preventive (MOH) sectors. There are only about 3000 (13%) doctors employed full time in the private sector including private general practitioners and 625 (3%) are in the university sector. One of the unique features of Sri Lankan healthcare system is that most family doctors/GPs in Sri Lanka are the Ministry of Health doctors working after hours in the private sector. This is also true for secondary and tertiary care specialists.

The latest community-based research about patient preferences in healthcare seeking shows that, in spite of the ‘free’ healthcare services offered to the Sri Lankan citizen, 55% of people in the Gampaha District consults a doctor paying a fee. Five years ago, this percentage was 45% as shown in the Annual Health Bulletin. It’s interesting to note that 55% of visits to primary care services are made paying a fee to doctors working in the private sector, as most of the private sector doctors are the same doctors who work as government doctors in the MoH during daytime hours. The increasing option for fee-for-service is reflected looking at the out-of-pocket expenses for healthcare in Sri Lanka. This has increased significantly during the past decade and the private sector has increased its market share of primary curative care. Since the COVID-19 pandemic this has even taken a turn more towards the private sector providing luxury intermediate care centers and for COVID-19 patients.

The primary curative care services have been hugely neglected in Sri Lanka compared to the primary care preventive services. There are only statistics about the number of patients attending OPDs as given in the AHB for the past few decades. No morbidity (disease) patterns are available compared to inward diseases patterns although more than 50 million visits are made annually. Furthermore, there are no medical records for continuity of care to follow up patients who attend the same institutions such as teaching or general hospitals in Sri Lanka. There is no methodical referral pathway from primary care to secondary and tertiary care especially between public and private healthcare services. As everybody knows any citizen can ‘channel’ a specialist directly paying a fee at the vast number of private healthcare institutions.
The Primary Healthcare System Strengthening Project, a five-year plan from 2019-2024 was commenced by the MoH with funding from the World Bank (USS 200 million) and the Asian Development Bank (100 million) to revamp the infrastructure and services especially to increase the quality of primary care curative services. One of the basic grassroots concepts was creating of Primary Medical Care Units (PMCU) in relation to ‘grama niladari units’ that demarcates a primary care doctor similar to a family doctor for every 5-10,000 population in Sri Lanka. This is somewhat similar to the highly successful primary care preventive services that were organised under the MOH for the past several decades. (LINK)

Covid-19 disease

Covid-19 is a viral disease like Influenza. It is not similar to a common respiratory disease produced by bacteria such as lobar pneumonia or even whooping cough. The vast number of viral illnesses does not have any specific medications like antibacterial medications - antibiotics. Although some antiviral medications are given to selected patients with diseases such as Influenza, its mainly thought to decrease the duration of the disease.

For COVID-19 infections, there are no evidence-based medications such as antivirals, or even other newer biologics up to this point in time that is recommended by authorities like the World Health Organization (WHO), Centers for Diseases Control and Prevention (CDC) and the National Institute of Clinical Excellence (NICE). There are no preventative
medications or medications that can be given to asymptomatic or mildly symptomatic patients.

In our Sinhala folk terms, Covid-19 is a ‘God’s illness’ (Deviyange Ledak). Village folk exactly knows exactly what to do when they contract such an illness. They will be inside their homes for 10 days and hang a branch from a tree at the entrance to indicate to outsiders that there is an infection in the house. Sri Lankans knew for maybe more than 100 years that there was no medicine either Allopathic or Ayurvedic for this type of illnesses. Moreover, the MoH did not recommend that all patients suffering from Measles, Mumps, Influenzas should be admitted to a hospital. This was so even before immunisation was started many decades ago.

Individual immunity against COVID can be hugely increased by vaccinations approved by the WHO by two properly spaced doses recommended by the manufacturer. These doses and the interval cannot be changed according to the individual or committee decisions that are taken by individuals or committees acting to please the government authorities.

Even at this point some leading authorities leading the vaccination drive try to provide false information stating that one dose of a leading vaccine can provide immunity up to 45 weeks. Due to the despicable behavior of regional politicians of the ruling party a large number of people aged 60 years that got the first dose of the Covid vaccine from a specific manufacturer are still awaiting their second dose nearly five months after the first dose.

We cannot blame only the politicians as the vast number of doctors who were in charge of the vaccine implementation campaign was silent or colluded with the politicians while the inappropriate confidantes of the politicians were vaccinated irrespective of the inclusion criteria given by the Ministry of Health. One must applaud the two Medical Officers of Health that set an example implementing the vaccine policy in two regional towns. I only wish we had about few dozens more such doctors and today the vaccination programme may have taken a different pathway.

Clinical Guidelines

Guidelines can be broadly divided into two categories: evidence-based and eminence-based. Several Colleges/Societies/Organizations in Sri Lanka issue clinical guidelines. Evidence-based guidelines are formulated by teams of clinicians, librarians, public health/statistics experts and administrators working together. If the topic is about a heart condition obviously Cardiologists take a leading role. Similarly, if the topic is outpatient care or ambulatory care this should be led by specialists in primary care curative disciplines such as Family Medicine, Emergency Medicine and Community Medicine. An evidence-based clinical guideline especially issued by a source such as a state authority or a specialist college has to have features such as the experts’ panel names and designations, the references used and declaration of conflict of interest.

The first official Ministry of Health clinical guideline for COVID-19 issued in early 2020 was the ‘Provisional Clinical Practice Guidelines on COVID-19 suspected and confirmed patients’ Reference https://www.epid.gov.lk/web/images/pdf/Circulars/Corona_virus/covid-19_cpg_version_5.pdf. This was a collaborative guideline by the MoH with College of
Physicians, Sri Lanka. This can be categorized as typical evidence-based clinical guideline as it fulfils most of the basic characteristics. One key omission seems to be the reference list. This guideline was mainly focused on the inward management of Covid-19 patients. However, the frontline primary care doctors in hospital OPDs and private practices did not have detailed guidance from this guideline.

This prompted a group of doctors to design and present a primary care guideline to the MoH titled “COVID-19 (new Coronavirus) Outbreak in Sri Lanka Interim - Guidelines for Sri Lankan Primary Care Physicians” (https://www.hpb.health.gov.lk/media/pdf/interim-guidelines-primary-care.pdf)

Primary Care Physicians of Sri Lanka (https://www.primarycarephysiciansl.org/) consist of doctors and consultants in: (a) Family Medicine from the Ministry of Health and Universities, (b) Community Medicine/Epidemiologists (c) specialists in Emergency Medicine, Virology, Geriatrics etc. Our main aim was to present a detailed evidence-based guideline for Covid-19 to primary care doctors. As explained in Box 1, these doctors see the patient first when they come to seek treatment from the public or private hospital OPDs or private doctors’ clinics. Primary care doctors in Sri Lanka both in the private and public sectors are the estimated to be close to 20,000. The vast majority of these doctors have only the basic MBBS qualification. About 1500 have a Diploma in Family Medicine which is a Post Graduate Institute of Medicine (PGIM) qualification. About 50 have the PGIM MD in Family Medicine and they function as Board Certified Consultants. These are the specialists in primary care curative services.

Key policy decisions regarding COVID-19

One of the key strategic decisions that was taken from the first wave to the current third wave that has been ‘non-negotiable’, even as the Covid pandemic progressed is the decision to admit all PCR positive patients to hospital/ICC. The policy has been implemented from the onset when 11 patients were the total number recorded during the first wave; There were days when more than 3000 became positive a day. All need an admission to a hospital or intermediary care centre set up with the concurrence of the Ministry of Health.

This key policy decision has been a highly eminence-based authoritative decision taken by dominating unit of the MoH, the Epidemiology Unit. There is no other country, economically
developed or developing in the world that has made a similar decision according to my knowledge. There is no evidence from published research whatsoever for supporting this decision that as a measure to prevent severe consequences of community spread. Even when the second wave gave a warning that there will be a huge problem of finding beds for all PCR positive patients, the Ministry kept on doing this even without reviewing any evidence or listening to expert opinion. It needs to be emphasized at this point that although the policy was implemented as to coming from the Ministry of Health, it was the decision of a selective few that influenced the government’s opinion. When it came to the second wave, this decision was challenged, and the result was the introduction of hastily arranged intermediate care centers.

**Community spread of Covid-19**

The argument from this minority group who demanded that all PCR positive patients be admitted to hospital was that even at the stage of rapidly increasing patient numbers during the second wave ‘Community Spread of COVID-19’ had not occurred in Sri Lanka. It was only limited to clusters (Pokuru). From the famous 1st Brandix pokura, the pokuru increased to Peliyadoga fish market, Kandakadu and in 2021 it became the New Year/Awrudu pokura. It was an extremely arrogant and non-evidence-based argument that these small group of experts were making and that is one of the main reasons why this pandemic has spread in Sri Lanka to the extent we see now. They maintained that there was no community spread and they insisted on admission of positive patients to prevent community spread even though the numbers were increasing from all parts of the country.

As we were running out of beds and even the intermediate care centers were getting filled up, what the Ministry did was to discharge most of the patients warded for Non-Communicable Diseases (NCD) related problems. This was again done according to the circulars issued by non-practicing administrators who needed ‘BEDS’ for mainly asymptomatic patients with PCR positive test results.

The non-Covid patients in hospital for non-communicable diseases such as heart disease, diabetes, lung diseases etc were discharged to make way for the almost 90% asymptomatic patients with a PCR positive test.

**The provision of private hospitality care for COVID-19**

Onset of the second wave saw a huge increase in PCR positive patient numbers. With hospital beds overloaded with asymptomatic patients occupying beds (with only vitamin C given as a medicine in most hospitals) and the hastily created Intermediate Centers fast filling up, the private sector started their ‘luxury COVID-19’ services. For a fee for a day, that ranged from Rs.1000 (for ambulatory services) to 20-30,000 (for inpatient care), PCR positive patients could stay at a hotel of their choice. The cost for a full 10-14 days ranged from Rs 15,000 to more than Rs 300,000 to 400,000. However, if the patients needed medical services other than the package specified there were extra payments. If patients could not afford such paid services, they were put to any ICC in Sri Lanka irrespective of their place of residence; even families were separated and put into different locations. It was one of the
most despicable privatization of healthcare services that I have seen in my lifetime. I am not against private healthcare; I do private practice after working hours and support private healthcare as the government cannot provide for all citizens, the haves and have-nots with ‘free’ healthcare. However, during a crisis situation, dragging patients who could not afford to pay to ‘quarantine centers’ for a disease that does not have any known medicine has no scientific evidence basis and is despicable. This become worse when those who could afford get the luxury of a star class hotel with family together without any hassle and the best hospitality that one could afford at the time.

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**Home care / Pre-hospital care**

In 2020 November, when the second wave of COVID-19 was at its peak, the Primary Care Physicians Group designed and presented an ‘evidence-based guideline’ for home management of Covid-19 patients. The answer was that the time has not come for home management as “community spread” had not yet occurred in Sri Lanka. With the onset of the third wave, the fully revised homecare guideline was again presented to the Ministry in late February 2021. Although the majority of members of the Covid Technical Committee supported homecare by this time, again it was pushed back by the top authorities stating that it’s against the policy.

The same kind of ‘privatization’ happened to even home care. While the Family Medicine consultants were trying to get the Home Management Guidelines submitted by our group approved from the MoH, a leading telecommunication service put an advertisement offering ‘Home Care’ starting from a package of Rs 6000 a day. The ministry first gave their own consultants permission to do a pilot study in one area (Kaluthara) and now have expanded this to a larger area. However, this is without even providing facilities to check the temperature, blood pressure or one of the most important measurements that we have – the level of oxygen in the blood (Pulse Oximetry). The small gadget that can be inserted to a finger can measure this in a few seconds and cost about Rs 3000 – 5000. These are not available because of lack of funds. Grass root level providers such as public health inspectors, public health midwives and Medical officers of Health are not provided with these instruments and are overburdened with COVID-19 related duties. Several alternative options such as employing passed out doctors awaiting internship or doing their ERPM exam, medical students etc were suggested to implement a more efficient, safe and patient-friendly home care system for patients who cannot afford to pay fees to private providers, which has up to the time of writing not been given the green-light from the higher authorities.
My own opinion is that this so-called policy was taken by a very few people in the MoH while others kept silent not wanting to voice their independent, evidence-based, scientific opinion. The main reason for this is, what will happen to their positions and status. There are recent examples in the Ministry, starting from the previous Director General of Health Services, several Deputy Directors General of Health Services who quit their post or were transferred, the long-time head of the Epidemiology Unit and even some of the ministers who are directly related to healthcare have almost been silenced.

**Current situation**

At the time of writing this article on Friday the 23rd of July, 2021, according to the Health Promotion Bureau of the MoH, there were 291,000 confirmed cases, 265,000 recovered cases, 22,600 active cases and an average of 1,700 daily new cases, and over 4000 deaths.

The extremely disturbing statistic is the daily number of reported deaths averaging over 40 people. The number of PCR tests done reported by the EPID unit has decreased from an average between 25 - 30,000 a day during the first week of May 2021 to 15,000 during the fourth week of June 2021 and in July maybe to 10,000 or less for a day. An expert epidemiologist is not needed to understand that when you do less PCR tests you will report a lesser number of patients. The deeply concerning factor is the climbing number of COVID-19 deaths reported. According predicted trends this is the beginning of the death toll increasing and worse is predicted in September-October 2021, even if the current vaccine campaign is successful as planned. We sincerely hope this is done properly as indicated by the WHO and the MOH and not according to the regional politicians wishes.

The Ministry of Health that made Sri Lanka an enviable country achieving high health indices comparable to more economically developed countries now function under a cloud of uncertainty and authoritative dominance from higher sources. Most staff even at the highest levels are spokespersons for the government hierarchy. It is a situation for all doctors and other healthcare workers to be concerned whether they are administrators or clinicians in public or private sectors. We would all like to have the previous dynamic and forward-looking organizations that steered the Sri Lankan healthcare services to enviable positions implementing evidence-based policies that suit our country and people.

*Kumara Mendis*

*Friday the 23rd of July, 2021,*