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134th Anniversary International Medical Congress

"Professional Excellence towards Holistic Health Care"

27th – 30th July 2021

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SLMA President

Dr. Padma Gunaratne
MBBS, MD(SL), FRCP (Edin, Glasg, Lond), FCCP, Hon FRACP, FAAN, FWSO
President, Sri Lanka Medical Association

Heads without 'science or conscience', the COVID-19 Vaccine and priority-list fiasco

Can the vaccine for COVD-19 bring back normality to the world? is a question asked by many. At the beginning of the pandemic, a vaccine was thought to be the panacea for all ills of COVID-19. When the hope for a vaccine became a reality, everyone was getting ready to declare victory over the tiny yet smart virus, sooner than later. Unprecedented interest by dedicated scientists in fighting the worst pandemic in our lifetime eventually resulted in several vaccines being approved for emergency use. As of 18 February 2021, the World Health Organization (WHO) states that at least seven different vaccines across three platforms have been rolled out in several countries.

When the world was pinning their hopes on the vaccine, developing nations were confronted with the concerns of affordability and accessibility. An extraordinary and unique global collaboration, COVAX came as the lifeline to ensure that every country in the world had equitable access to safe and effective vaccines, as early as possible. If not for COVAX, lower income countries would have had to compete with the self-financing affluent countries directly dealing with vaccine manufacturers. The COVAX aims to have 2 billion vaccine doses available by the end of 2021 and this is said to be enough to protect high risk and vulnerable people and frontline healthcare workers globally.

In a situation where the vaccine is perhaps priceless but limited in a supply chain, preparedness to allot the received quota of vaccine to the neediest in a way that could accomplish the objectives of the vaccine is crucial. To help the authorities to prepare a plan suitable for each country, WHO has given guidance on selecting priority groups, to achieve the main objectives of the COVID-19 vaccine. They are to reduce deaths and disease burden, protect the continuing functioning of essential services, and protect those who bear significant additional risks. As per WHO roadmap, in countries having 'sporadic or clusters of cases' or 'community transmission', the priority should be given to healthcare workers and the elderly. WHO experts further explain that with time, when the availability of vaccine increases, the other categories such as groups with co-morbidities, socio-economically disadvantaged groups, school teachers, essential workers, etc., could be included in the priority list. Since 70% of COVID related deaths in Sri Lanka occurs in those over 60 years of age, vaccination of senior citizens after the frontline workers is totally justifiable.

While the rest of the world is busy looking for solutions to curtail the pandemic, and the Sri Lankan front line workers and scientists devoting all their time on an altruistic task, what do the 'headline grabbers' in Sri Lanka do? They are busy with promoting tonics/decoctions and spreading misinformation to the general public, arguing whether to cremate or bury the dead bodies, and promulgate daily shows/news briefs of scientific and epidemiological data that they are not even completely aware of.

The most recent episode has been the manipulation of the vaccination roadmap (or cutting in line?) without having adequate discussion with experts or going through advisory bodies/committees and without providing any scientific justification. The efforts taken by the vaccination task force and the Ministry of Health in executing the vaccination programme promptly and covering the frontline workers is very much appreciated.

However intrusion by 'heads' with no-science or conscience in their own heads has thrown the priority list for vaccination prepared by experts after much deliberation into the trash bin, for reasons 'they-only-know-of'. This same group who dawdle on certain ethnically sensitive issues (Eg: burial or cremation issue) had been proactive in manipulating the vaccination priority list. WHO guidelines providing application of the roadmap under various contingencies clearly states that the said roadmap should NOT be changed, except under specified circumstances.

Countries like Israel, USA and the United Kingdom have shown promising results and impact with the vaccination programme. Cases and hospital admissions are falling much more steeply among vaccinated elderly group than in the young unvaccinated group. The biggest falls in hospital admissions and deaths had been in the over-60s, who had been vaccinated first. Based on these figures, and guidelines followed by the rest of the world, Sri Lanka Medical Association strongly believes that this ad hoc decision needs to be rescinded immediately and that the country should revert back to the original plan of rolling out the vaccine prepared by experts.

One's inability to grasp science is not a valid argument for against it!

20th February 2021

Editor-in-Chief
Professor Hasini Banneheke,
Faculty of Medical Sciences,
University of Sri Jayewardenepura

President's Message

Vaccination with AstraZeneca vaccine against COVID-19 has already been commenced in Sri Lanka. Considering the imminent risks involved with contracting the infection by health care professionals, the SLMA is grateful that the Government of Sri Lanka has decided to roll out the national vaccination plan by giving the highest priority to healthcare professionals.

However, it is saddening that the death of the young medical professional, Dr Gihan Danthanarayana occurred prior to roll-out of vaccination programme.

As per preliminary data under review by Lancet, the AstraZeneca vaccination will provide 76% protection from 3 weeks until 3 months against symptomatic infection after the first dose and reduces transmission of the disease by 67%.

These are encouraging results as vaccination appears to be the only way out for the pandemic that has already accumulated over 100 million cases and 2.3 million fatalities, globally.

While the vaccination of all healthcare professionals working in the State sector is greatly appreciated, the need to equally prioritize the health care professionals of the private sector must be emphasized.

There are many private sector and retired doctors who deserve priority as majority of them are frontline medical professionals over 60 years of age.

Nevertheless, the decision taken by the Government to vaccinate all individuals above thirty years of age by March 2021 is highly commendable.

Despite the strong vaccination programme planned by the MoH, it is essential that health care professionals understand its limitations and continue to adhere to all recommended precautionary measures based on the risk level of exposure, to prevent contracting COVID 19.

Further, the absence of a complete protection with any available vaccine, uncertainties of the duration of effective immunity following vaccination, and the appearance of newer COVID strains that may be resistant to immunity induced by the vaccination are important challenges that would interfere the control of the outbreak.

Vigilance on newer research publications and frequent genetic sequencing to find any newer strains of the virus present in Sri Lanka are essential, in this regard.

Myths are a part and parcel of the life of people in Sri Lanka. Many have been brought up amidst myths as a part of their religion or culture.

Myths often influence decision making of many Sri Lankans. The extent to which myths influence the control of a public health issue of the magnitude of COVID-19 was notable during the second wave of the outbreak.

While large crowds gathered to obtain the "Dhammika Paniya", myths of the vaccination led many to refuse the vaccination in multiple health care settings.

In this context, as the President of the Sri Lanka Medical Association, I am proud that the SLMA was able to declare the position of the Association on many issues entirely based upon scientific facts.

COVID control has been relentless and exhausting to healthcare professionals. As such, a conference with social interactions has been much awaited by many medical professionals.

The 134th International Medical Congress of the Sri Lanka Medical Association would be held as a hybrid conference with many special features promoting in-person participation.

The organizers of the Anniversary International Medical Congress of the SLMA have taken a special interest and have developed one of the most attractive academic programmes.

In addition, the Doctors' Concert scheduled for the last day of the academic programme will be a memorable event to all participants.

Let me invite all medical professionals to keep 27th – 30th of July free to attend the SLMA Anniversary Scientific Congress.

Thank you

Dr. Padma Gunaratne
MBBS, MD(SL), FRCP (Edin, Glasg, Lond), FCCP, Hon FRACP, FAAN, FWSO
President, Sri Lanka Medical Association

Activities in January and February 2021 at a Glance

11th January 2021

SLMA's first Monthly Clinical Meeting for 2021, was held at the SLMA auditorium in collaboration with the Sri Lanka College of Haematologists.

There were 3 interesting clinical cases presented; Red cells in abundance, a dearth of thrombocytes & Killer clots in COVID-19.

Case presentations were done by Dr. Wasanthi Wickramamsinghe, Senior Registrar, Clinical Haematology, and the discussion on the cases was done by Dr. Lalindra Goonaratne, Consultant Haematologist, National Hospital Colombo.

Case presentations were followed by the MCQ quiz conducted by Dr. Indika Somaratne, Consultant Haematologist, GH Hambantota.

This was a hybrid event with more than 80 online participants. Thank you every one for your participation.

18th January 2021

A meeting was held with Dr. Razia Pendse – Country Representative WHO, to discuss about collaboration with SLMA for the year 2021. The discussion was on the lines of supporting the annual congress and other activities planned for the year 2021 – Road Traffic Prevention, Stroke Rehabilitation, etc.

27th January 2021

SLMA Webinar Series 1 on 'Bio-bubble in the New Normal: for an Active, Safe & Productive Engagement' was held with the online participation of more than 100 participants.

There were 3 speakers who spoke on;

What is a bio-bubble? Experience from the Industrial/ Apparel Sector by Dr. Inoka Suraweera, Consultant Community Physician, Director of Environment & Occupational

Health, Bio-bubble concept for cricket – Experience from the LPL by Vidya Jyothi Senior Professor Arjuna de Silva, Faculty of Medicine, University of Kelaniya and

Bio-bubble concept for International Tourism - Ms. Dhammika Wijesinghe, Director General, Sri Lanka Tourism Development Authority.

A very interactive session with Q&A followed all three presentations.

30th January 2021

The President, SLMA, Dr Padma Gunaratne was the Chief Guest at the opening of the 35th Annual Scientific Sessions of the SJGH Clinical Society. Prof S D Jayaratne, Chairman, SJGH and Dr Harsha Gunasekara, President SJGH Clinical Society were in attendance. President, SLMA delivered a speech on "Professional Excellence towards Holistic Healthcare" and encouraged hospitals to establish their own MDT to provide holistic care for patients. She assured the commitment of the SLMA in providing required training for junior doctors.

2nd February 2021



The second media seminar on 'Bio-bubble in the New Normal: for an Active, Safe & Productive Engagement' was held at the SLMA Auditorium organized by the SLMA Media Committee.

It was conducted in Sinhala Medium and the Tamil translations of the proceedings were done by Professor Ariyaranee Gnanadasan. The resource persons were Dr. Hemantha Herath – DDG PHS 1, Vidya Jyothi Senior Professor Arjuna de Silva, Faculty of Medicine, University of Kelaniya and Dr. Prasad Jayasuriya, Director, Tourism, Planning & Development. The session was chaired by Dr. Padma Gunaratne - President SLMA & Dr. Ruvaiz Haniffa – Chairperson, Media Committee. Media Personnel were present on site and some joined via zoom.

3rd February 2021

A meeting to discuss on the areas of Home Isolation of COVID-19 positive patients and mandatory PCR testing of all sudden deaths in hospitals and at home was held at the Ministry of Health with the Maj. General Dr. Sanjeewa Munasinghe - Secretary of Health, MoH and Dr. Sudath Samaraweera – Chief Epidemiologist. Dr. Padma Gunaratne, President – SLMA, Council members Drs. Sarath Gamini De Silva and Kalyani Guruge and Dr. Sameera Gunawardena attended the meeting.

6th February 2021

The SLMA doctors' vs. Architects cricket encounter was held at the MCG with the participation of doctors and architects. Dr. Padma Gunaratne – President SLMA was the chief guest. This year the Architects team beat the doctors' team by 5 wickets.

COVID-19 Vaccination for the Sri Lankan population

Dr. Deepa Gamage
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Epidemiology Unit,
Ministry of Health, Sri Lanka.

- There are a few COVID-19 vaccines which have completed the Clinical Trial Stages and are now being used in some countries including the USA, the UK and Canada.
- Vaccine efficacy and safety are the most important factors to be considered in the Sri Lankan scenario during the process of vaccine introduction. Efficacy means, how many people can be protected by giving that particular vaccine through developing protective level immunity. Safety means, the vaccine should not give rise to another disease entity being a side-effect of giving the vaccine as these vaccines are given to normal people for protection from COVID-19.
- Another important factor to be considered is that how long the developed protective level immunity will last and provide adequate protection from COVID-19, after administering the recommended number of doses. So far, the vaccines which have come to the market give adequate protection for about a year after giving 2 doses.

- In order to give adequate protection from the given vaccine, it needs to be kept at a recommended temperature from the manufacturer until administering that particular dose of the vaccine to a person. Optimal conditions of storage are crucial for the maintenance of the potency of the vaccine. This means protection of the quality of the vaccine after development. If the potency of the vaccine is not maintained by storing at recommended temperature, expected level of protection from the vaccine will not be achieved and secured.
- Safety of the vaccine is a main consideration in vaccine introduction to Sri Lanka. National Medicinal Regulatory Authority (NMRA) takes all precautionary measures in giving registration for that particular vaccine in the country. In that endeavour, independent experts including the Epidemiology Unit of the Ministry of Health and the Vaccine Quality Unit at the Medical Research Institute (MRI), review all relevant details provided to the NMRA as dossiers, in which all details of the vaccine product information, problems encountered in using such vaccine/s, all side-effects and their impact are reviewed before registering the vaccine/s in the country.
- Different COVID-19 vaccines are required to be stored at different temperatures to maintain vaccine potency. The first vaccine which completed clinical trials and is now being used in USA - "Pfizer BioNtech" vaccine, is required to be stored at -70^{0}C. The other USA vaccine Moderna is required to be stored at -20^{0}C. There are other vaccines such as AstraZeneca vaccine and Sinovac vaccine which are in the process of being released to the market, which can be stored in a standard vaccine storing refrigerator at 2-8^{0}C.
- In our country, all National Immunization Programme vaccines are stored at 2-8^{0}C, in cold rooms and in specialized vaccine storing refrigerators called "Ice Lined Refrigerators" in which proper cold chain is maintained in order to protect the effectiveness of vaccines. Vaccine storing facili-

ties of 2-8^{0}C are available throughout the country.

- This vaccine storing cold room facilities are available at main vaccine stores in the Epidemiology Unit and in all other districts while Ice Lined Refrigerator facilities are available in all Medical Officers of Health (MOH) offices and in hospital vaccine clinics.
- At the moment, it has been identified that the vaccines already developed and available for use need 2 doses to be given to secure adequate protection.
- Cold chain storage facilities for maintaining vaccine potency, number of doses required to be given for adequate protection, vaccine safety concerns and vaccine acceptance by receivers are important factors that should be considered in Sri Lanka in implementation of vaccination to gain adequate coverage in the country.
- As with new vaccine development, the Global Alliance for Vaccine Initiative (GAVI) which is an institution supporting low and middle income countries for vaccines and vaccination, formed an innovative approach through a "COVAX facility", together with World Health Organization, UNICEF, World Bank, Asian Development Bank and with other financial partner organizations, aiming to support low and middle income countries receiving vaccines without any significant delay.
- Countries are offered the opportunity to receive vaccine stocks for vaccination of 20% population, through this COVAX facility. Countries are requested to submit an application, which Sri Lanka has already submitted on time in December 2020, expressing interest to receive vaccine stocks.
- Priority groups for vaccination and preferred priority vaccine product specifications have already been identified in this application. The priority groups identified for initial vaccination are elders, persons with comorbidities, frontline healthcare workers and other workers involved in COVID-19 control and prevention as well as economic and socially important categories.

- This is considered as the state's commitment to receive COVID-19 vaccine stocks at the earliest opportunity through COVAX facility while considering the sustainable receipt of vaccine stocks on an annual basis.
- However, Sri Lanka has a "National Immunization Policy" which is approved by the Cabinet of Ministers in 2015, where the process of new vaccine introduction is clearly identified.
- There is a Technical Expert Committee functioning in the country for recommendations for vaccines and vaccination called "National Advisory Committee on Communicable Diseases", in which experts get together to review existing evidence for decision making regarding new vaccine introduction.
- The Epidemiology Unit has already been identified as the main vaccine implementation, monitoring and evaluation agency on behalf of the Ministry of Health, through the National Immunization Policy of the country.
- The country has a strong professional academic organization for Medical Officers called "The Sri Lanka Medical Association (SLMA)", representing all member medical officers including different medical specialities. SLMA identifies necessary strategies to provide advocacy and suggest to the Ministry of Health regarding crucial issues as they rise including communicable disease control and prevention and vaccination. During this outbreak of COVID-19 too the SLMA has come forward to identify priority groups for vaccination. The identified and agreed priority groups by SLMA are on par with the priority groups identified by the Ministry of Health, in which elderly population, those who are with comorbidities, front line healthcare and other workers who are involved in COVID-19 control and prevention, important staff at ports of entries, and important special categories with high gatherings are identified as priority groups for the vaccination.
- Sri Lanka is ready for the deployment of an efficacious and safe vaccine against COVID-19 upon satisfying vaccine implementation feasibility to maintain potency of the vaccine and in line with proper vaccine regulatory approvals as recommended by the National Advisory Committee on Communicable Diseases of Sri Lanka.

(This is an extract of the content presented at the media briefing held in January 2021 at the SLMA.)

Dissociative disorders – where smoke is obvious but the fire obscure

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Introduction

Dissociative disorders are frequently encountered in medical practice and are at times referred to as psychogenic, conversion, non-organic or functional illness. It was more popularly (and pejoratively) referred to as hysteria in the not so recent past.

Patients with dissociative disorders usually present to emergency units, general practitioners and neurologists due to the acute and organic nature of their symptoms. Even though dissociative symptoms can occur as part of many other mental illnesses they are the primary symptom in dissociative disorders.

The table 1 gives a description of the symptomatology observed in each subtype of dissociation (1).

Common presentations in Sri Lanka are dissociative convulsions, which at times complicate the management of epilepsy and motor and sensory disorders which present with features like paralysis, paresis or sensory deficits. Dissociative disorders are seen more frequently in females in clinical settings. However community based studies have suggested that there is no gender difference (2).

Diagnosis

The ICD - 10 requires three criteria to be fulfilled to diagnose dissociative disorders

1. The clinical features as specified for the individual disorders categorized under dissociative disorders
2. No evidence of a physical disorder that might explain the symptoms
3. Evidence for psychological causation, in the form of clear association temporally with stressful events and problems or disturbed relationships (3)

It is also important to understand that the diagnosis is a positive one (rather than establishing the absence of an organic cause) with the symptoms not corresponding to the anatomical or phenomenological constructs of known illness and being temporally linked to a stressor.

However, in practice, this psychogenic cause may not be obvious especially during a single assessment. Most of the time the stressor, conflict or causative factor is denied by the patient.

This disorder must be clearly distinguished from malingering (deliberate manifestation of symptoms for financial or other gains) and factitious disorder (intentional production or feigning of symp-

Table 1: Symptomatology according to the type of dissociative disorder

Type of disorder	Symptomatology
Dissociative amnesia	Either partial or complete loss of memory for recent events that are usually of a traumatic or stressful nature
Dissociative fugue	There is an apparently purposeful wandering away from home or place of work during which self-care is maintained along with amnesia
Dissociative stupor	Stupor following trauma and absence of a physical or other psychiatric disorder that might explain it
Trance and possession disorders	Temporary loss of the sense of personal identity and complete awareness of the environment. Occasionally the individual acts as if possessed
Dissociative disorders of movement and sensation	Loss of (or) interference with movements or loss of sensations
Dissociative motor disorders	Loss of ability to move the whole or a part of a limb or limbs
Dissociative convulsions	Mimicry of epileptic seizures
Dissociative anaesthesia and sensory loss	Loss of sensation over the skin or loss of functioning of other special senses
Mixed and other dissociative (conversion) disorders	A combination of above or symptoms that do not fit into other categories (Ganser's syndrome, multiple personality disorder etc.)

toms or disabilities, for psychological reasons) which in some cases is difficult.

It is also accepted that the secondary gain from the symptoms (increased attention of family and the privileges of the sick role) leads to a propensity to maintain symptoms. Recognizing this is necessary for the management.

Aetiology

The ICD -10 describes these disorders as due to partial or complete loss of the normal integration between memories of the past, awareness of identity, immediate sensations, and control of corporal movements.

It is presumed that one's ability to exercise conscious and selective control over these functions is impaired to a degree that can vary from day to day or even from hour to hour. The term conversion (sometimes used synonymously) implies conversion of psychological distress to physical symptoms.

Attempts to understand the aetiology have led to evidence associating childhood trauma, disturbed childhood relationships, alexithymia (an inability to identify and describe one's emotions), poor coping abilities and certain personalities with dissociative symptoms.

Neurobiological studies using imaging have shown changes in brain areas involved in movement and emotions reiterating the neurobiological basis for the disorder (4)(5).

Treatment

The requirement from a clinical perspective is to diagnose and treat the patient appropriately as soon as possible so that they can return to their premorbid functioning. This is important as there is a direct relationship with the temporality of symptoms with prognosis.

Three main components in the management of these disorders exist.

a) Establishing a therapeutic relationship
b) Recognizing and addressing the causative issues
c) Preventing reinforcement of behaviour by removing secondary gains

The therapeutic relationship between the clinician(s) and the patient plays a pivotal role in the outcome. Respect and empathy for the patient's current difficulties which are not deliberately evoked therefore is an essential starting point.

Explaining the illness to the patient and carers is generally a challenge due to the apparent 'organic' nature of their symptoms, and the not so apparent psychological stressors. However, this must be done, as it is part of the therapeutic process.

Assisting the patient and family to recognise causative stressors and suggestion of practical measures to address them is the next step in care plan.

Avoidance of unintentional reinforcement of the illness behaviour by well-meaning and anxious family and at times by medical professionals is of paramount importance.

Patients with dissociative disease tend to be admitted to hospital due to the nature of the symptoms. However, once the diagnosis is established it is appropriate to manage them as outpatients level to prevent inadvertent reinforcement of the behaviour.

If risks such as abuse, self-harm/ suicide are present or interventions cannot be effectively implemented at home, a few days of hospitalisation may be indicated.

In most situations (especially in those that present acutely and for the first time) a combination of the above usually serves to resolve the symptoms.

It is important to understand that in most cases positive rapport and simple interventions do not necessarily have to come from a mental health professional. Most clinicians who have come across these patients find it difficult to refer them to psychiatric services.

Where there are repeated episodes of dissociation or long-standing symptoms, or in the presence of a co-morbid mental illness more intensive psychotherapeutic interventions will be needed in which case the involvement of psychiatric services will be necessary.

REFERENCES

1. Subramanyam A, Somaiya M, Shankar S, Nasirabadi M, Shah H, Paul I, Ghildiyal R. Psychological Interventions for Dissociative disorders. Indian J Psychiatry. 2020;62:S280–S289.
2. Spitzer C, Freyberger HJ. Gender differences in dissociative disorders. Bundesgesundheitsblatt - Gesundheitsforsch - Gesundheitsschutz. 2008;
3. Organization WH. The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines. WorldHealthOrganization [Internet]. 1992;1–267. Available from: http://apps.who.int/iris/handle/10665/37958%5Cnhttp://scholar.google.com/ scholar?hl= en&btnG=Search&q =intitle:The+ICD 0+Classification +of+Mental+and+ Behavioural+Disorders#1
4. Baizabal-Carvallo JF, Hallett M, Jankovic J. Pathogenesis and pathophysiology of functional (psychogenic) movement disorders. Neurobiology of Disease. 2019.
5. Perez DL, Dworetzky BA, Dickerson BC, Leung L, Cohn R, Baslet G, et al. An integrative neurocircuit perspective on psychogenic nonepileptic seizures and functional movement disorders: Neural functional unawareness. Clinical EEG and Neuroscience. 2015.

COVID-19 AND THE MISPLACED FEAR OF DEATH!

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Sri Lanka recently surpassed an official tally of 280 deaths from COVID-19 whilst the global death toll exceeded 2 million. This figure places COVID-19 in the top six leading causes of global mortality and slightly above the annual toll of road traffic fatalities.

Although this is much less than the Spanish Flu which is believed to have killed at least 20 million in the space of two years, none of the recent viral epidemics apart from two Influenza A epidemics in the mid 1950s and 1960s have recorded such staggering number of deaths.

SARS n-CoV2 has therefore gained notoriety as a virus with a potentially high level of fatality far exceeding its predecessor in 2003, which recorded only 700 deaths worldwide. Yet, despite these seemingly obvious statistics, there is growing scepticism in scientific and non-scientific fora whether these numbers provide a veritable representation of the lethality of this newly discovered virus.

Non-uniformity in defining COVID-19 deaths

The conundrum begins with the manner in which a COVID-19 death is defined. The WHO definition of a COVID-19 death reads as follows;

"COVID-19 death is defined for surveillance purposes as a death resulting from a clinically compatible illness in a probable or confirmed COVID-19 case, unless there is a clear alternative cause of death that cannot be related to COVID-19 disease (e.g. trauma). There should be no period of complete recovery between the illness and death"

This definition however, was put out much later in the course of the pandemic and countries affected by the disease in the early months of 2020 had already adopted their own definitions and strategies for reporting COVID-19 deaths. The UK (Public Health England) for example, used - "A death in a person with a laboratory-confirmed positive COVID-19 and died within 60 days of the first specimen date.." to define a COVID-19 death.

Though the time frame was later reduced to 28 days, this definition still includes all deaths that have a positive laboratory test for COVID-19, regardless of the clinical state of the person during death or the cause and manner in which the death occurred. It is no surprise therefore, that UK currently has the greatest number of deaths per 100,000 population.

Similarly, Belgium which reported the highest tally of deaths during the initial stages of the epidemic, expanded the WHO definition to include unconfirmed COVID-19 deaths that occurred in residential care institutions for the elderly.

This broader inclusion strategy was used due to observations that a large proportion of COVID-19

deaths occurred within aged-care facilities in other countries and the authorities were concerned that the limitations in testing facilities would greatly under-report the mortality burden of the pandemic. As a result, there was a significant amount of criticism levelled at the Belgian health authorities that the over-reporting of deaths created a negative image of the country.

Singapore on the other hand stuck rigidly to the above-mentioned WHO definition of death and did not include any deaths that did not have a clinically detectable respiratory pathology. This is possibly the main reason why they continue to have one of the lowest fatality rates in the world, with only 29 deaths reported out of almost 60000 cases.

Attributing mortality to COVID-19 in deaths with multiple comorbidities

Another matter of concern is the controversial issue of attributing COVID-19 as the cause of death based solely on the PCR positivity report. As a virus classified in the family of Severe Acute Respiratory Syndrome (SARS), this novel SARS CoV-2 virus should classically affect the respiratory system.

However, in this instance, the diagnosis is based on the detection of the SARS CoV-2 viral nucleic material through PCR testing and even if such individuals are totally asymptomatic, they are still considered as confirmed cases and managed accordingly.

> “COVID-19 death is defined for surveillance purposes as a death resulting from a clinically compatible illness in a probable or confirmed COVID-19 case, unless there is a clear alternative cause of death that cannot be related to COVID-19 disease (e.g. trauma). There should be no period of complete recovery between the illness and death”

Similarly, deaths that occur with a positive PCR test for SARS CoV-2 virus are counted as COVID-19 deaths even though they do not have any clinical or radiological signs of recent infection, pneumonia or respiratory distress. This is perhaps the first global pandemic where a laboratory report alone governs the case detection and surveillance.

In the previous influenza epidemics and even the previous SARS epidemics, the case definition included the presence of clinically detectable respiratory illness, fever and/or radiological evidence of lung involvement.

In the WHO guideline for surveillance of the SARS-1 epidemic, it is specifically mentioned that clinically well contacts who test positive through community screening methods are NOT reported as cases.

Global health authorities have taken a contrasting approach in this current pandemic, where despite the deceased having multiple severe comorbidities such as heart disease, strokes, cancers, kidney disease or dementia, the death is usually linked to COVID-19, most often as a contributory cause based solely on the PCR positivity, and not necessarily due to any clinical or autopsy signs of infection.

Numerous hypotheses of non-respiratory mechanisms including abnormal intravascular clotting, cardiac injury, acute renal damage and even autonomic disruption, have been proposed, to explain these deaths but are yet to be substantiated.

Almost all published studies on mortality trends report a much higher incidence of COVID-19 related deaths in the elderly population, where the prevalence of comorbidities is also high.

As per the WHO guidance document on the certification of COVID-19 deaths, the decision on whether a death is due to COVID-19 or not lies in the hands of the physician writing the cause of death certificate.

Thus in situations where death has occurred through non-respiratory mechanisms, such as acute myocardial infarctions or cerebrovascular events, there is likely to be a high degree of personal bias when including COVID-19 as the cause of death.

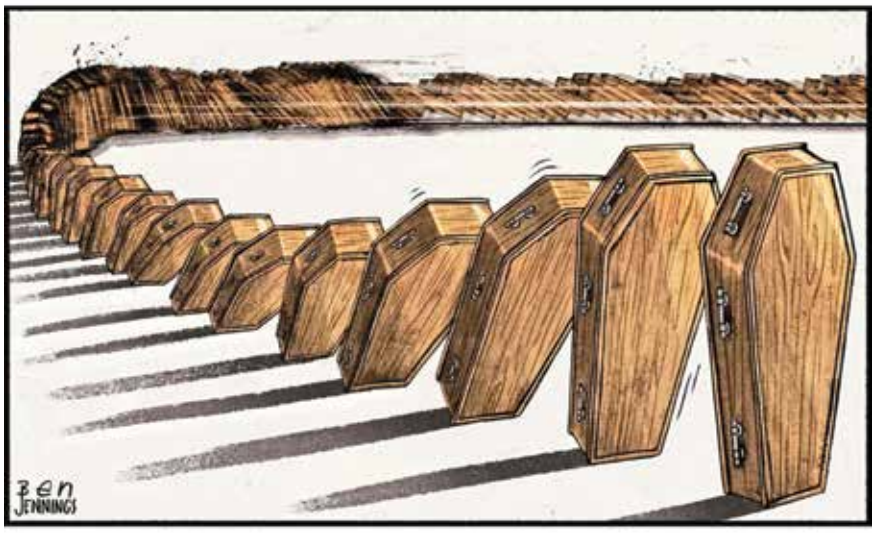
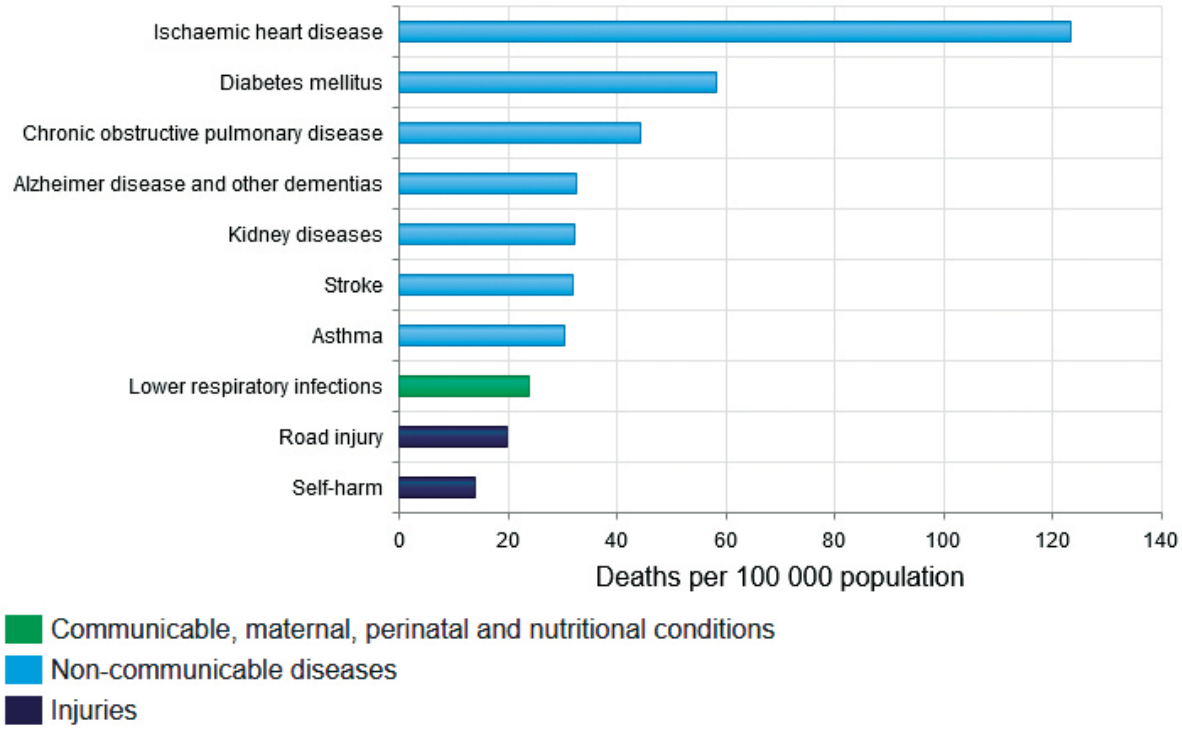


Illustration: *Ben Jennings/The Guardian*

Top 10 causes of deaths in Sri Lanka-2019



Ref: https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/ghe-leading-causes-of-death

When facing a novel and evolving pandemic situation, there is understandably a higher inclination towards being over-inclusive in disease reporting. Canada openly admitted that their initial death tolls included all those who had laboratory confirmed COVID-19 but not necessarily those who died from it.

However, with different countries adopting different strategies in attributing mortality to COVID-19, making sense of these mortality figures has become a complicated exercise.

The difficulty is further compounded by countries also adopting different screening strategies, testing protocols and even laboratory standards in determining a positive result.

Though statistics play a vital role in the surveillance and monitoring of a disease, this lack of uniformity and disjointed approach of generating statistics has created doubt and ambiguity in the minds of people and has paved the way for misconceptions, myths, misconceptions and even conspiracy theories in relation to the COVID-19 global pandemic.

> With all the media and public attention focused on this COVID-19 pandemic, many other burning health issues like dengue, leptospirosis, diabetes, heart disease and road traffic trauma have evaded our grasp and continue to cause more fatalities than the SARS nCOV-2 virus. Already, the psychological distress on the young and adolescent community who have almost no risk from this viral illness, are showing alarming manifestations

Amongst the global restrictions, lockdowns and disruption of activities, the scientific input towards this disease has also been slow and strained.

While some argue that there is a clear excess mortality since the emergence of this pandemic, there are counter arguments that show significant disruptions in health services and reluctance to seek treatment as causes for the rise in mortality.

Unlike other viruses like dengue or Japanese encephalitis, there is no unequivocal evidence to suggest that SARS n-Cov2 has the potential to kill a healthy human being.

It is perhaps only capable of creating sufficient illness to push a vulnerable person beyond a critical point. Therefore, there is a timely need for a clearer dialogue on how deaths in COVID-19 need to be defined and reported.

Many cluster studies and community screenings have shown that upto 80% of those detected to have the virus on a PCR test do not show any signs or symptoms

of an infection.

Among those who do, majority recover completely with no complications. Yet the social dynamics of media reporting, governmental responses, health administration, public health interventions and rigid law enforcement have created a morbid fear among people that this is a 'deadly' virus that could enter their households and kill off their loved ones!

Reassessing the current strategies and considering the long-term consequences

It has been exactly one year since the first COVID-19 patient was identified in Sri Lanka. Despite the high spread of cases within the community since last November, there are very few cases that show severe respiratory illness requiring intensive care.

Among the deaths recorded in Sri Lanka, very few showed a respiratory pathology preceding death which means that the majority were deaths with COVID-19 rather than from COVID-19. This strongly suggests that either the infectivity of this virus is low or that the Sri Lankan population in general have a higher level of immunity and innate protection against this virus.

Either way, a serious re-evaluation is now needed regarding the aggressive approaches adopted by the health and law enforcement authorities such as mandatory hospitalisation, mandatory cremation, routine post-mortem screening of deaths, travel restrictions, prolonged closure of schools and militarised lockdowns of areas.

Tourism, agriculture, health, education and finance have all suffered tremendous blows from these restrictive control measures and has socially and economically left our country in a more calamitous state than before.

With all the media and public attention focused on this COVID-19 pandemic, many other burning health issues like dengue, leptospirosis, diabetes, heart disease and road traffic trauma have evaded our grasp and continue to cause more fatalities than the SARS nCOV-2 virus. Already, the psychological distress on the young and adolescent community who have almost no risk from this viral illness, are showing alarming manifestations.

Thus, the time is ripe for policy makers and administrators to assess the long term consequences of these actions without being misguided or disillusioned by the mere numbers.

While it is understandable that there are several uncertainties and unknowns in this novel disease, human resilience and adaptability has always been one of mankind's greatest strengths and therefore, it is imperative that we do not let undue fears of death affect our health care policy decisions and compromise the health of future generations.

REFERENCES

1. John Hopkins University of medicine. Coronavirus resource center. https://coronavirus.jhu.edu/data/mortality (Accessed 16th January 2021)
2. Bustos Sierra, N., Bossuyt, N., Braeye, T. et al. All-cause mortality supports the COVID-19 mortality in Belgium and comparison with major fatal events of the last century. Arch Public Health 78, 117 (2020). https://doi.org/10.1186/s13690-020-00496-x
3. Reuters. Why is Singapore's COVID-19 death rate the world's lowest. https://www.reuters.com/article/health-coronavirus-singapore-explainer/why-is-singapores-covid-19-death-rate-the-worlds-lowest-idUSKBN2680TF (Accessed 15th January 2021)
4. WHO. Case definitions for surveillance of Severe Acute Respiratory Syndrome https://www.who.int/csr/sars/casedefinition/en/ (Accessed 15th January 2021)
5. Polak SB, Van Gool IC, Cohen D, Jan H, van Paassen J. A systematic review of pathological findings in COVID-19: a pathophysiological timeline and possible mechanisms of disease progression. Modern Pathology. 2020 Nov;33(11):2128-38.
6. Dani M, Dirksen A, Taraborrelli P, Torocastro M, Panagopoulos D, Sutton R, Lim PB. Autonomic dysfunction in 'long COVID': rationale, physiology and management strategies. Clin Med (Lond). 2020 Nov 26:clinmed.2020-0896. doi: 10.7861/clinmed.2020-0896. Epub ahead of print. PMID: 33243837.
7. Yanez, N.D., Weiss, N.S., Romand, JA. et al. COVID-19 mortality risk for older men and women. BMC Public Health 20, 1742 (2020). https://doi.org/10.1186/s12889-020-09826-8
8. WHO. International guidelines for certification and classification (coding) of covid-19as cause of death. https://www.who.int/classifications/icd/Guidelines_Cause_of_Death_COVID-19.pdf (Accessed 16th January 2021)
9. Kontis V, Bennett JE, Rashid T, Parks RM, Pearson-Stuttard J, Guillot M, Asaria P, Zhou B, Battaglini M, Corsetti G, McKee M. Magnitude, demographics and dynamics of the effect of the first wave of the COVID-19 pandemic on all-cause mortality in 21 industrialized countries. Nature medicine. 2020 Oct 14:1-0.
10. Franchini S, Spessot M, Landoni G, Piani C, Cappelletti C, Mariani F, Mauri S, Taglietti MV, Fortunato M, Furlan F, Guglielmi B. Stranger months: how SARS-CoV-2, fear of contagion, and lockdown measures impacted attendance and clinical activity during February and March 2020 at an urban Emergency Department in Milan. Disaster medicine and public health preparedness. 2020 Jul 27:1-0.
11. Loades ME, Chatburn E, Higson-Sweeney N, Reynolds S, Shafran R, Brigden A, Linney C, McManus MN, Borwick C, Crawley E. Rapid Systematic Review: The Impact of Social Isolation and Loneliness on the Mental Health of Children and Adolescents in the Context of COVID-19. J Am Acad Child Adolesc Psychiatry. 2020 Nov;59(11):1218-1239.e31

Native Medicine and its Relevance Today

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(Article appeared in The Island on 21.12.2020)

Much discussion and controversies have arisen today as the world is trying to find a remedy for the Covid 19 pandemic ravaging mankind. As allopathic (Western) medicine has found no acceptable cure for the illness so far, vaccines are being introduced at a rapid pace seeming to be effective in preventing the disease. Due to the desperate situation, time taken for developing such vaccines and their use in human beings has been shortened to a fraction of what we have known hitherto.

Thus long term harmful effects, though we are reassured to be minimal, are yet to be seen. With new more transmissible strains of the virus already appearing in the UK, how effective the vaccines would be in the long term is anybody's guess.

To fill the gap in the availability of scientifically verified treatment, many Ayurvedic or native medicines (also called traditional or alternative medicines) have come to the fore.

Almost every week a person with questionable credentials comes up with a decoction claiming to be based on an ancient formula brought down the generations secretly in ola manuscripts. They are appealing to the patriotic sentiments of the people expecting them to accept these out of respect for tradition.

Sudarshani paanaya, Dhammika paniya are among the foremost. The claims of their origins from divine sources or being brought down from the Himalayas have added to the mystique.

As a more recent example we remember how the leaves and the latex of Papaya were promoted for treating dengue fever, later found to be of no use.

In my childhood I have swallowed gallons of Kottamalli with or without ginger and katuwelbatu as a remedy for fevers, common colds and the likes.

Venivelgeta was added to prevent tetanus after an injury. During school holidays we were given aralu to "cleanse" the bowels to survive the next school term! Epsom salt (savinda lunu} was added to make the induced diarrhea more profuse and hence to make the treatment more effective.

Later on I spared my own children from the agony of going through that treatment. We have heard about various treatments given to prevent rabies after a dog bite, the success proven if the victim did not get the fatal illness after eating pork. Similarly deaths after snake bite were supposed to be prevented by various forms of native treatment.

There is a scientific explanation for many of these so called successes. With a very few exceptions most viral infections are self limiting.

A "drug' given during the illness, whether allopathic or traditional, makes the patient feel comfortable, but the duration of the illness itself is not generally shortened nor complications made less likely. As for tetanus, vast majority of wounds will not anyway lead to the serious infection.

Most snake bites are harmless (non poisonous snakes) needing no treatment as are dog bites. These are a few examples where no one can claim success for their medication as the patients would have recovered anyway without any intervention.

Only a small pròportion of patients develop complications needing active treatment. The real risk is if people overlook well proven vaccines for prevention of rabies, tetanus and other illnesses or antitoxins for snake bites by resorting to vagaries of traditional medicine.

Almost all the medications used by native physicians are of natural origin. Roots, yams, barks and leaves are the sources. Unfortunately with the advance of scientific method little or no attempt has been made to isolate the active chemical compounds in them. Hence in decoctions like kasayas, multiple plant derivatives have to be boiled together in a cumbersome procedure producing a bitter unpalatable drink.

Fortunately some preparations like paspanguwa, peyawa and samahan are available in easy to use packeted forms, which we still take for symptomatic relief. Locally applied medicinal oils seem to relieve pain. Likewise some Western medicines are of plant origin where the active ingredient has been isolated and produced in a palatable tablet form. Some original plant compounds are now manufactured in the laboratory to increase the volume of production.

It has been identified many years ago that some commonly available plants have blood sugar lowering properties. They are recommended by some for use by the diabetic patients.

However one is not aware of any attempts to isolate the active compounds and make them commercially available. It is the duty of governments, and the ministry in

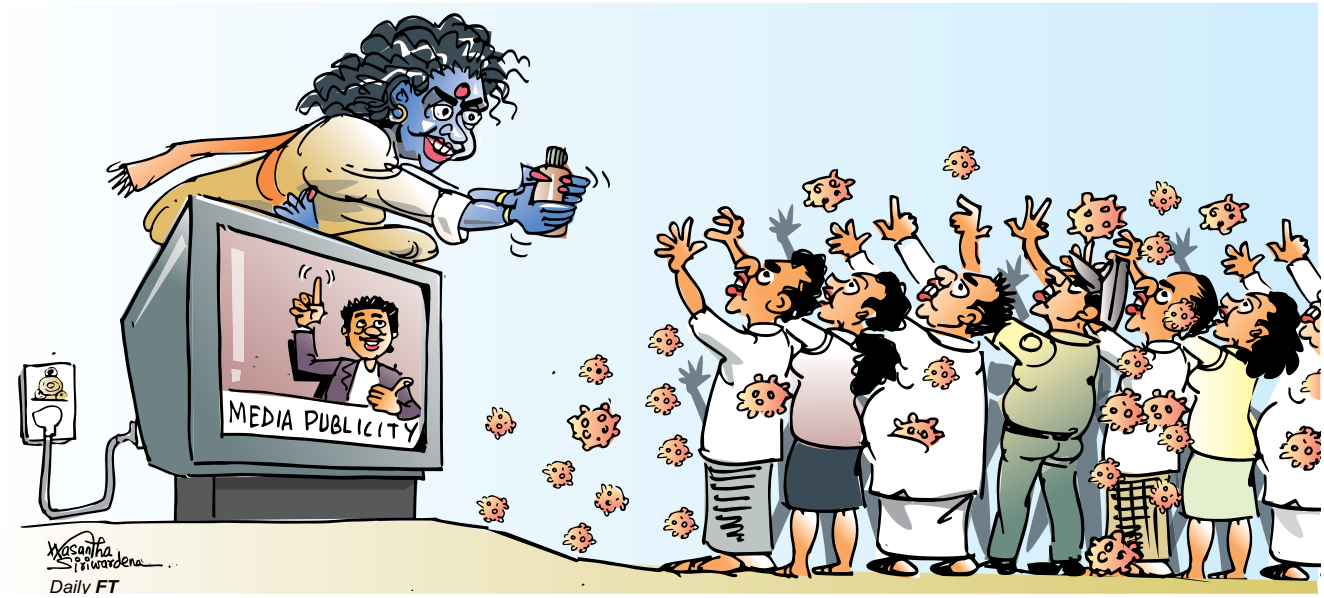

Illustration: *Wasantha Siriwardena/Daily FT*

charge of traditional medicine, to facilitate and encourage research into finding active ingredients in traditional medicine.

The situation is even worse when non communicable diseases (NCD) are considered. Illnesses like heart disease, high blood pressure, diabetes or arthritis are cases in point.

We are still unraveling the exact causation of these illnesses. In such diseases apart from giving immediate symptomatic relief, prevention of well known debilitating or life threatening long term complications is mandatory. The allopathic drugs have been tested and tried over a long period of time in scientific analysis and well controlled clinical trials to prove that they are effective in treating the illnesses as well as having minimal side effects.

Many chemicals, molecules and compounds which started off in the laboratory with this process had to be abandoned due to such undesirable effects or lack of effectiveness.

Whether any traditional medicine has been subjected to such intensive study is not known. It should be stressed that no "trial and error" method is acceptable when dealing with human life.

There are many anecdotal stories of malignant disease being cured by native medicine. In al-

> Politicians seem to take refuge in the ignorance of the people when their action or inaction disappoint the public who are looking up to them to control the current pandemic. It is deplorable how they mislead the people by openly ingesting such decoctions.

most all these instances people have resorted to alternative medicine when allopathic treatment has failed to prevent the progress of the disease.

In these instances after some period of apparent improvement, the disease inexorably gets worse. Even without any treatment, many chronic illnesses are known to subside spontaneously. Alterations in the immunity of the individual may be a factor.

Whether any form of treatment can claim credit for such "cures" is questionable. It hàs become the vogue to undertake extreme dietary changes and other forms of lifestyle modification to alter the course of chronic diseases including malignancies.

Treatment of fractures is another area where people have faith in native medicine. What is important is to restore the proper alignment of the broken bone ends and stabilize it with a splint for a few weeks till it heals on its own.

When this important initial step is mismanaged by trying to reset bones blindlý without the help of x rays, one ends up often with shortened or deformed limbs seriously affecting function. No oral medication or local application, allopathic or otherwise, is known to expedite the healing process.

People had total faith in native medicine and occult rituals in the olden days as there was no alternative remedy available. Stories about the times of King Ravana and the physician king Buddhadasa are legendary and would have played an important role at that time.

But when more established scientifically proven allopathic medicine is available for many illnesses, quoting ancient unverified stories will not help. No one will think of going back to travel by a horse drawn cart because the fuel powered cars cause environmental pollution!

Ever since the industrial revolution and specially in the latter part of the last century, there has been a drastic change in the lifestyle of people. Increasing urbanization, lack of physical activity, dietary changes with increased consump-

tion of processed food with the use of fertilizers, general increase of stress and air pollution has led to a dramatic change in the pattern of diseases. Non communicable diseases like heart disease, high blood pressure, diabetes and chronic respiratory diseases are much more prevalent now.

Native medicine would have been effective in managing diseases affecting people living with nature before these changes took place. It is unlikely that such medicines still being prepared according to age old formulae are good enough to manage modern epidemics of non communicable diseases. Without being updated with research there is a strong possibility of native medicine becoming increasingly irrelevant.

The merits of native medicine are further diminished by their "adulteration" with allopathic drugs alleged to be practiced by native physicians. It is widely suspected that syrups, gulis etc actually contain allopathic drugs powdered and reconstituted. Many Ayurveda and related study courses now include some teaching in allopathic medicine and pharmacology.

Some traditional physicians prescribe antibiotics and painkillers to gullible public who are naïve enough to believe that they are trained in both systems of medicine! It is well known that a large number of native physicians take allopathic medicine for their own illnesses like hypertension and diabetes. How some such physicians publicly advise against the use of drugs for diabetes like insulin and metformin is deplorable.

Over the years these drugs have been proven without doubt to control the disease and prevent long term complications. The rationale of many native physicians advising patients to continue with the allopathic medication while taking the newly prescribed Ayurvedic drugs is questionable.

Politicians seem to take refuge in the ignorance of the people when their action or inaction disappoint the public who are looking up to them to control the current pandemic. It is deplorable how they mislead the people by openly ingesting such decoctions. Obviously they will not be held accountable if unforeseen toxic effects occur in those who swallow it misguided by the politicians.

It is futile to attempt a comparison of the allopathic and traditional systems as they are based on totally different concepts and principles. The formulation of drugs in the two systems is also quite different. As such strict rules that govern the clinical trials dealing with allopathic medicines may not be applicable to native medications.

Those responsible have put the cart before the horse, by asking the experts to decide on the issue after they have already appeared to openly recommend the decoction to the people. The short term substantial financial benefits to those who peddle unproven medications is an incentive to continue hoodwinking the gullible public. The risk of such falsely reassured people ignoring effective public health guidance is worrying.

The printed and electronic media play a big role in promoting unproven medicines, both allopathic and native, spreading harmful misinformation. While showing scenes where alcohol is consumed or there is tobacco smoking, the television screens show a legend to say that these habits are harmful to health.

Likewise it should be mandatory that when questionable medication is shown or advertised, a legend to say that the claims made are unproven could rectify the issue to some extent. Ideally electronic media and other news organizations should have their own advisors on health matters who can clarify issues before giving publicity or telecasting. This is specially so at a time when health programs are said to be very popular among viewers.

This article is written in good faith to overcome the epidemic of misinformation which is as harmful as the pandemic itself. Coming from a physician trained in allopathic medicine who has much faith in the symptomatic relief provided by the traditional system of medicine, it is not the intention to discredit the native forms of treatment or their practitioners. Over thousands of years native medicines along with occult rituals were the only forms of treatment available to help the people survive illness.

More properly conducted research and clinical trials is the urgent need to make the system relevant for today's needs. It is futile to attempt a comparison of the allopathic and traditional systems as they are based on totally different concepts and principles. The formulation of drugs in the two systems is also quite different. As such strict rules that govern the clinical trials dealing with allopathic medicines may not be applicable to native medications.

The idea that Western medicine is "foreign" and hence one should be patriotic enough to use home grown products is to reject the advances of science. Being ignorant enough to get stuck in history and tradition would ensure that the nation will continue to stagnate without progress. The issues are logically discussed to make sure that people are well informed to see things as they are.

Parasites: A curious enigma

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The word 'parasite' may stir up different meanings in one's head from an award-winning South Korean movie to a type of living organism while some may even think of maverick politicians. Yet for all that, the parasite that I refer to in this article is "an organism that lives in or on an organism of another species (its host) and benefits by deriving nutrients at the other's expense".

For a long time, parasitology has been a part of the medical course.

Medical curriculum has changed over time from traditional to integrated/system based/ hybrid in Sri Lanka (with some problem-based/enquiry-based applications to some extent).

Along with this shift and other changes in disease epidemiology, content of parasitology has greatly diminished.

As a result, parasitic diseases are mostly in the 'neglected tropical diseases' basket now. For other specialists or even almost all medical professionals, the word parasitology is reminiscent of worms mostly.

For a few of the others, it may remind them of malaria or filariasis. Of parasitic diseases learnt during medical student days, which ones are in existence at present is mostly known only to the parasitologists.

Thus, this article is written to keep people abreast of the status of the parasitic infections in existence in Sri Lanka.

Protozoan infections

Do we have malaria in Sri Lanka?

Yes & no!

We do have imported cases of malaria (fluctuating from 26 to 57 during the past 5 years according to The Anti-Malaria Campaign statistics). Fortunately, we do not have indigenous cases since October 2012. Sri Lanka received the WHO certification for malaria elimination in 2016. However, there was an introduced case in 2018.

Similar status was seen in 1963, when Sri Lanka was on the brink of elimination with only 17 patients (11 foreigners, 6 -Sri Lankans). Unfortunately, few years later a massive countrywide epidemic with over 500,000 malaria cases occurred in 1969. Being vigilant, not being complacent and continuing control and monitoring efforts are pivotal in the maintaining malaria-free status.

Another important fact to remember is that the zoonotic form of malaria (Plasmodium knowlesi from macaques) is very much prevalent in South-East Asian countries. An army officer who returned from Malaysia in October 2016 was later diagnosed as the first imported case of P. knowlesi (5th malaria species infecting humans) in Sri Lanka (1).

So, can we be complacent that we should suspect malaria only in foreigners?

Accoridng to the Anti-Malaria Campaign data, majority of imported malaria cases had been in Sri Lankans returning from overseas. For example, in 2018, of 48 imported malaria cases (44-males and 4-females), there had been 34 Sri Lankans with only 14 foreigners. Thus, it is essential to consider the possibility of malaria even in a local person returning from overseas travel. Not only African countries (Uganda, Mozambic etc) and India but South and Central America, Middle East, Haiti, Hispaniola, South Pacific countries have malaria. The complete list of malaria prevalent countries and prophylaxis medications prior to travel to those countries are available at the anti-malaria campaign.

Leishmaniasis is a group B notifiable disease in Sri Lanka

According to the Epidemiology Unit sources, each year approximately 1000 to 1300 cases of leishmaniasis are notified from the entire country. There had been 1608 cases in 2017 and 1315 cases within the first 6 months in 2018, as reported to the Epidemiology Unit. Highest number of cases has been reported from Hambantota district, followed by Anuradhapura, Matara and Polonnaruwa as per reports in 2016. Middle age group (30-39 highest, followed by 40-49 age group) had the highest case load and male dominance has been observed probably due to the risk of exposure to sandfly bites.

What is the status of other protozoan infections?

Amoebiasis

Since 1985, amoebic liver abscess has been a public health problem in Northern Sri Lanka. Rest of the country has not reported cases. During July 2012 to July 2015, 346 amoebic liver abscesses have been clinically diagnosed at Jaffna Teaching Hospital with confirmation of results using antibody and antigen test and PCR and sequencing results. Parasitological tests (microscopy and culture) done on pus and faeces had been negative (2). This may be one of the reasons for not detecting cases from elsewhere.

Diarrhoea causing protozoans

There are studies on Giardiasis being reported; 0.2% from Kandy to 26% from Badulla (3)(4). The most recent available data for cryptosporidiosis in Sri Lanka reports a prevalence of 5.7% among children in Kandy and 33% among

adults in 2015. Cryptosporidiosis (>1 month) being a disease in CDC's AIDS-Indicator conditions/WHO AIDS defining illnesses list, vigilance is important specially among immunocompromised categories, including transplant recipients to prevent cryptosporidiosis. Parasitological diagnosis is not difficult but lack of effective medication for treating immunocompromised patients is a concern. Even nitazoxanide which is useful in treating immuno-competent patients is not available in Sri Lanka.

Trichomoniasis

As per data from all STD Clinics in Sri Lanka, there had been 63 cases of trichomoniasis with 57 females and 06 males in 2018. There is research evidence that trichomoniasis may increase the risk of low birth weight by 1.3-fold and also increase the risk of pre-term birth, pre-mature rupture of membranes and pelvic inflammatory disease (by 4.7-fold) and HIV acquisition (by 2.7-fold).

Toxoplasmosis

Seroprevalence of Toxoplasmosis in Asian countries is classified into 3 groups; high (>40%), intermediate (10-40%), and low (<10%) and Sri Lanka is placed in the intermediate group. Seroprevalence among pregnant women had varied from 12.3% (Gampaha) to 29.9% (Peradeniya) as per literature. The possibility of causing congenital toxoplasmosis is the major concern. The rate of transmission of infection to the foetus increases with gestational age: 14%, 29% and 59% in the three trimesters respectively). However, the degree of severe foetal damage is greatest if the maternal infection is transmitted in early pregnancy where organogenesis takes place (41%, 8% and 0% in T1,T2 and T3) (5). About 75-85% newborn babies may not have symptoms at birth but can have long term sequelae (6). Toxoplasmosis among immunocompromised cancer patients in Sri Lanka had been 11.1% and 29.7% as reported by two research groups. Cerebral toxoplasmosis is more common among the immunocompromised group.

Helminth infections

Have we eliminated filariasis from Sri Lanka?

WHO certificated Sri Lanka in June 2016 as having successfully eliminated lymphatic filariasis as a public health problem. This means it is not a troublemaker-at-large anymore. However, it still prevails at a lower level. Total number of lymphoedema cases managed at Anti Filariasis Campaign and Regional Anti-Filariasis Units had been varying from 9522 in 2000 to 8383 in 2018. There had been 1346 first visits in 2008 and over a decade it has come down to 705 in 2018. Even brugian filariasis, which was once eliminated, has reappeared since 2006. There had been 13 cases in 2013, all in less than 5-yr-olds indicating that they have acquired the infection afresh and most likely from local sources. In 2014, brugian filariasis cases among adults had been detected from non-endemic regions too. Data since then confirms re-emergence of brugian filariasis in the country.

Heard about zoonotic filariasis (dirofilariasis)?

Subcutaneous and ocular dirofilariasis caused by Dirofilaria repens is one of the most frequently detected parasitic zoonoses in SriLanka. A global review of cases from 1995 to 2000 has reported that Sri Lanka has the second largest collection of D. repens cases in the world. Dirofilariasis com-monly manifested as a painless, non-itchy solitary nodule and less frequently as a migratory swelling. In the recent most case dealt with by the author, the skin lump had moved from the axilla to the hand.

Majority of lesions are seen on the upper half of the body, with face being the commonest site followed by eyes and lymphatic glands. In the lower half of the body, scrotum is a favoured site which is unique to Sri Lankan cases. The aggregation of lesions on the upper half of the body is possibly due to the risk of exposure to mosquito bites whereas the reason for favouring scrotal tissue is not known. In a scenario where 30-60% of the dog population in Sri Lanka are infected with this parasite and the abundant presence of the mosquito vector (Armigeres species), recognising them correctly and referring them for lumpectomy is important. Since humans are aberrant hosts for dog filarial parasites, they do not produce microfilaria in blood thus giving Diethyl Carabamazine (DEC) does not achieve much.

What about intestinal worms?

According to an island wide survey done in 2017, the prevalence of worm infections is below 1%. It has identified Colombo and Nuwara Eliya as high-risk districts. Prevalence of soil transmitted helminthiasis was as follows: urban slums 2.7%, plantation sector 9% with hookworms in 1.18%. As such since 2018, routine deworming of pregnant mothers and children in grade 6 and above was stopped.

As per circular (01-58/2018), routine re-worming should only be given to children between 18 months to 10 years olds living in high-risk districts until the year 2022, with a mebendazole single dose given at 18 months, 2,3,4 and 5 years. Decisions beyond 2022, will be taken after re-assessing the situation.

In immunocompromised patients, strongyloidiasis can flare up leading to a hyperinfection syndrome and disseminated strongyloidiasis. Impaired host immunity leads to accelerated autoinfection and an overwhelming number of migrating larvae. In disseminated strongyloidiasis the larvae can go

beyond the GI tract and the lungs to invade numerous organs. Left untreated, the mortality rates of the hyperinfection syndrome and disseminated strongyloidiasis can reach up to 90%.

Cutaneous larva migrans (creeping eruption)

Cutaneous larva migrans (CLM) results from penetration of the skin by animal hookworm larvae. Larval tracks due to animal hookworm has been reported among 97% of Devotees of the Nallur Temple in Jaffna, Sri Lanka (7). The typical clinical manifestation is an itchy, erythematous, linear or serpiginous, dermatitis tract in most instances, in the feet, buttocks and thighs.

Something about parasitologists

There are Board Certified parasitology specialists (MD degree holders) serving as Consultants at the Medical Research Institute (MRI) and as senior lecturers/professors at all the medical faculties for you to contact and clarify any doubts, and for diagnostic, laboratory or management assistance of cases.

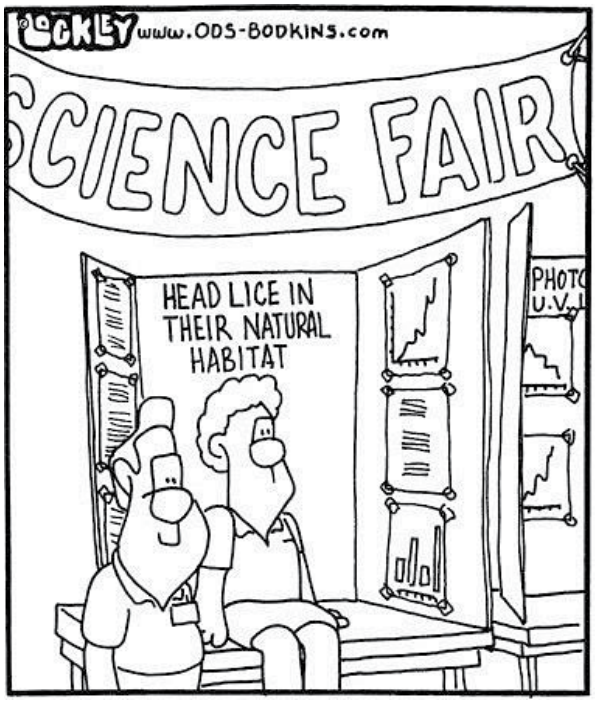
Postgraduate Institute of Medicine programme is such that all the candidates sit for a common qualifying examination and go through the microbiology, parasitology, mycology, virology laboratory training during diploma period and sit for a common examination.

From that point onwards the trainees are given the opportunity to take their subspecialty choices to pursue microbiology, virology, parasitology, mycology, immunology etc.

In addition to this specialist category, there are some scientists and medical graduates with research degrees (M.Phils and Ph.Ds) engaged in excellent quality research while contributing to teaching and diagnostic services at faculties, contributing immensely to new knowledge in the field.

All in all, parasites are keeping the parasitologists alive, just like a symbiotic host-parasitic relationship. Thus, we, the parasitologists still survive, as do the parasites that we deal with !!!!

CARTOON



A message from the Editor

We would also like to invite the membership to contribute to the SLMA newsletter by sending articles, Letters to the editor, picture quizzes, poems, funny stories, puzzles, *cartoons etc to office@slma.lk.*

Thank you !

REFERENCES

1. Dewanee Ranaweera A, Danansuriya MN, Pahalagedera K, de A W Gunasekera WMKT, Dharmawardena P, Mak KW, et al. Diagnostic challenges and case management of the first imported case of Plasmodium knowlesi in Sri Lanka. Malar J. 2017 Mar;16(1):126.
2. Kannathasan S, Murugananthan A, Kumanan T, Iddawala D, de Silva NR, Rajeshkannan N, et al. Amoebic liver abscess in northern Sri Lanka: first report of immunological and molecular confirmation of aetiology. Parasit Vectors [Internet]. 2017 Jan 7;10(1):14. Available from: https://pubmed.ncbi.nlm.nih.gov/28061872
3. Galgamuwa LS, Iddawela D, Dharmaratne SD. Intestinal protozoa infections, associated risk factors and clinical features among children in a low-income tea plantation community in Sri Lanka. Int J Community Med Public Heal Vol 3, No 9 Sept 2016 [Internet]. 2016; Available from: https://www.ijcmph.com/index.php/ijcmph/article/view/189
4. Bandaranayaka, K. O., Rajapakse, R. P. V. J., & Rajakaruna RS. Potentially zoonotic gastrointestinal parasites of dogs in Lunugala Tea estate community in Central Sri Lanka. Ceylon J Sci. 2019;48(1):43–50.
5. Singh H, Kapoor P, Sharma P, Maurya R, Mittal T, Bhagat D. Treatment of a severe tooth size-arch length discrepancy using rapid maxillary expansion and mandibular incisor extraction: An unconventional combination approach. Indian J Med Microbiol [Internet]. 2003 Jan 1;21(2):69–76. Available from: https://www.ijmm.org/article.asp?issn=0255-0857
6. Sever JL, Ellenberg JH, Ley AC, Madden DL, Fuccillo DA, Tzan NR, et al. Toxoplasmosis: maternal and pediatric findings in 23,000 pregnancies. Pediatrics. 1988 Aug;82(2):181–92.
7. Kannathasan S, Murugananthan A, Rajeshkannan N, de Silva NR. Cutaneous Larva Migrans among Devotees of the Nallur Temple in Jaffna, Sri Lanka. PLoS One [Internet]. 2012 Jan 25;7(1):e30516. Available from: https://doi.org/10.1371/journal.pone.0030516

Fig. 1 Microplastics and Nanoplastics

The problem of Microplastics: Are we under threat?

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The term plastic is a generic name given for most of the synthetic and semi-synthetic organic polymers which are capable of exhibit plasticity. From our childhood, we have heard of how plastic pollutes the environment. According to the estimated amounts by the year 2017, approximately 6300 million tons of plastic waste had been generated throughout the world. From this huge amount, nearly 20% was recycled or incinerated. In contrast, the remaining 80% was either used in landfills or released without control to natural environments(Geyer et al., 2017).

Microplastics(MPs) and Nanoplastics (NPs) refer to the fraction of plastic that is released into the environment, either properly or otherwise, through various environmental or human processes. These MPs particles range from 1 micrometer (10-6m) to 5 millimeters (Figure 01) and those that are smaller than that (< 1 µm scale) are called Nanoplastics.

How are microplastic/ nanoplastic materials added to the environment?

Fig.2 Primary microplastics in Face Soaps (tiny dark red particles)

Fig.3 Primary microplastics in toothpaste (tiny dark blue particles)

There are several ways in which these MPs/NPs / nanoplastics can be added to the environment. For the study purpose, the MPs/NPs are divided into two parts. These are primary MPs/NPs and secondary MPs/NPs.

Primary microplastics

Primary MPs are plastics that are manufactured in sizes less than 5mm and released to the market.

For example, small plastic beads used in textiles, tiny plastic beads found in face washes/toothpaste/shower gels, belong to this category(Figure 02 & 03). Without our knowledge, these tiny plastic particles flow through waterways and eventually enter the sea. A recent study have shown that in one wash alone, up to 100,000 MPs/NPs, molecules are released into the environment(Napper et al., 2015).

Secondary microplastics

This category includes plastics

Fig. 4 How Secondary microplastics are produced

that are released to the environment after being used once (plastic drink bottles, straws) or several times (plastic pans). These plastics get continuously broken down into very small pieces [eg:- biodegradation (the action of living organisms – crushing), photodegradation (light radiation from sunlight), thermo-oxidative degradation (slow oxidative breakdown at moderate temperature), thermal

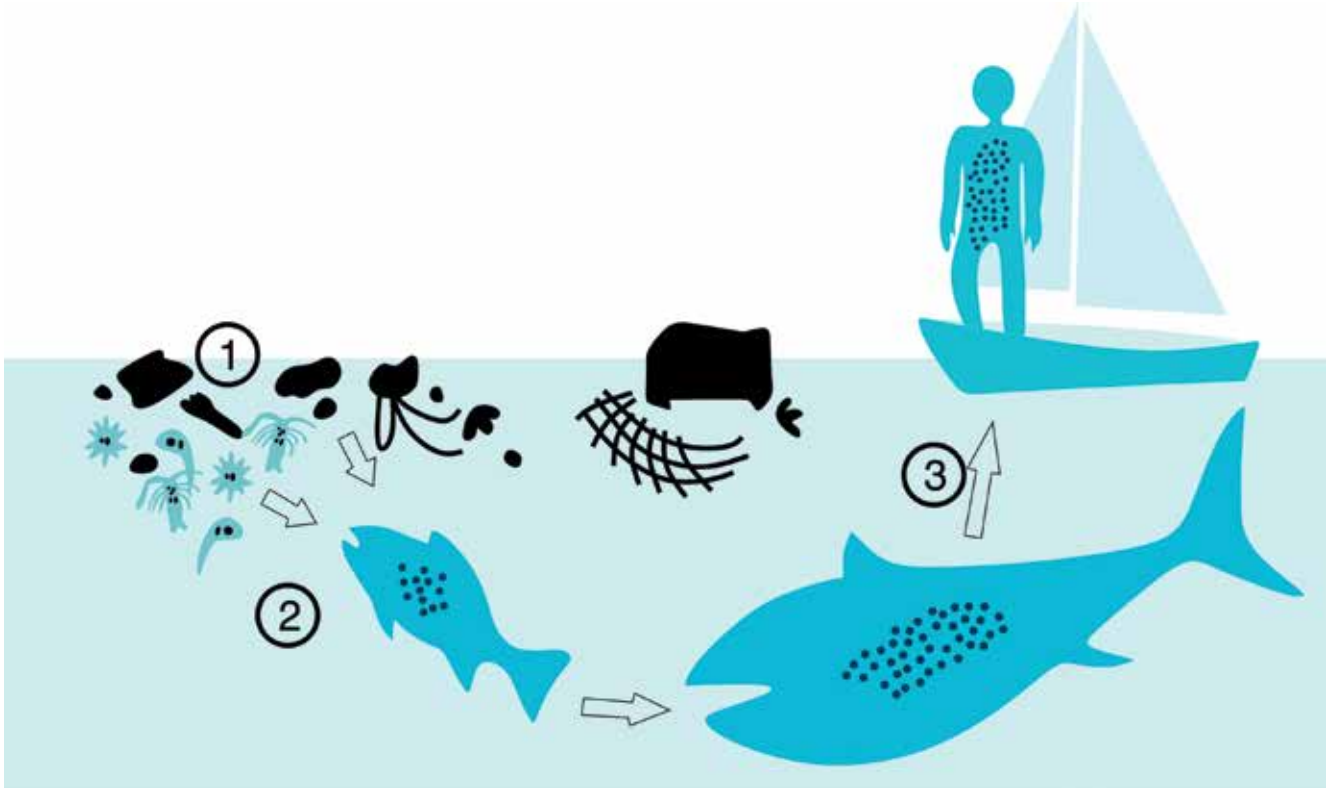

Fig. 6 Microplastic / Nanoplastic

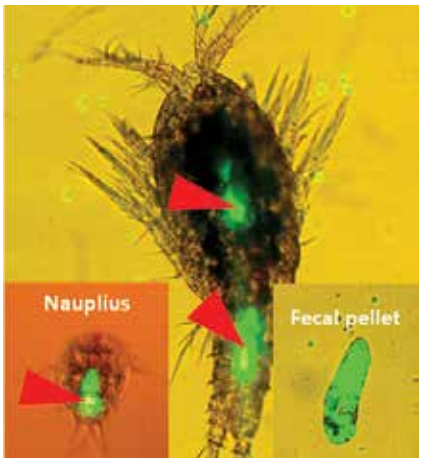

Fig. 5 Microplastic / Nanoplastic Fragments ingested by Microscopic Animals (a) and (b) Pieces of Plastic excreted as Feces (Luminous Green) (Lee et al., 2013)

degradation (high temperature – burning of plastics)](Figure 04)

Furthermore, the nylon clothing also releases these secondary micro-plastics as fibers into the environment. Research from around the world has shown that most of these are released into the environment from fabrics made from acrylic fibers (Almroth et al., 2018). Thus, considering the evidence on releasing and its risks to the environment, the Marine Debris Program of the US National Oceanographic and Atmospheric Administration (NOAA), included plastics litter as an emerging global pollutant. Small pieces of floating plastics in the ocean surface were firstly reported in the scientific literature in the early 1970s. But the new term "MPs/NPs " was introduced around the year 2004(Kershaw, 2015).

How Microplastics / Nanoplastics enters the human body

These microplastics enter humans in many pathways. One pathway is via the marine environment. The microplastic that joins the environment gets washed away by rivers and streams and eventually ends up in the ocean. When it enters the marine environment these MPs/NPs are ingested by the animals. Ingestion of plastics can be direct or indirect. Direct ingestion occurs when animals eat them accidentally. In contrast, indirect ingestion is related to the trophic transfer being the result of the consumption of contaminated food. The microscopic animals see these small MPs/NPs as their food. These tiny Zooplankton are the basic steps of a food chain. When these Zooplankton are eaten by bigger fish and as it ascends in the food chain these MPs/NPs will gradually undergo bioaccumulation. As humans being the end stage of the food chain, tend to consume these fish/ mussels belong to various stages of the food chains. Therefore humans are at risk of end-stage bioaccumulation

The figure 05 shows a simple food chain. No 1 shows marine living beings that are rarely visible

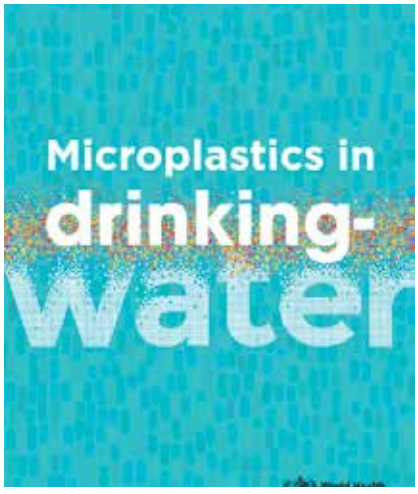

Fig.7 WHO Report on MPs/NPs in Drinking Water Published In 2019

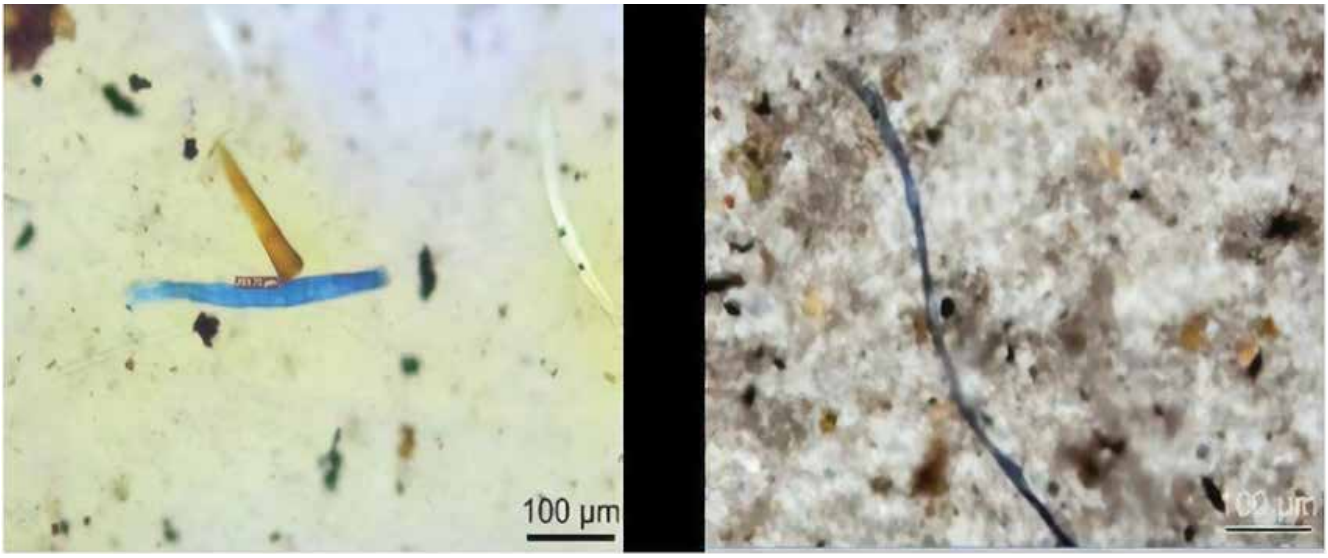

Fig. 8 Fragments of polymer particles present in the air in the city of São Paulo (Amato-Lourenço et al., 2020)

or microscopic(figure 06). Then a large group of creatures belongs to group No. 1 being eaten by a larger single fish, represented by No. 2. Then a large number of fish belonging to group No. 2 are eaten by a larger single fish, represented by No 3. In the end, a human consumes all three types (1, 2, and 3) in his various diets. In this way, these MPs/NPs / nanoplastics accumulate on a large scale as they move up the food chain and at the end of the food chain (in the human body).

In addition to the marine sources, the research on MPs/NPs / nanoplastics has been shown that it can be found in table salt, drinking water bottles, and tap water.

In the United States, research conducted using the world's leading international drinking water bottle brands has revealed that more than 93% of the 259 water bottles used in the research contained MPs/NPs (Mason et al., 2018). It is estimated that the average concentration of microplastic molecules per liter of water (MP-P/L) is about 325 MPP/L in these water bottles. Further studies have found that the concentration of molecules larger than 100 microns (>100µm) was about 10.4 MPP/L and the concentration of molecules between 6.5-100µm were 315 MPP/L. Another special finding was that the microplastic concentration of water in glass bottles was less than the microplastic concentration of water in plastic bottles(-Mason et al., 2018). In 2019, the World Health Organization (WHO) issued a 125-page report (ISBN: 978-92-4-151619-8) confirming the contamination of drinking water by MPs/NPs and its severity. The report can be downloaded from the following website.(Figure 07)

(http://www.who.int/water_sanitation_health/publications/microplstics-in-drinking-water/en/)

These MPs/NPs are also present in the air, so they enter our body through inhalations(Figure 08).

Therefore scientists at the University of Newcastle estimate that an average adult could consume about 5 g of plastic (approximate equivalent to a credit/debit card) (Figure -09)weekly from a variety of commonly eaten foods, beverages, and air.

Fig. 9 5 Grams of Plastic per Week into the Body

Why is it so dangerous?

The adverse effects of MPs/NPs on the human body can be divided into two main categories. They are the complications caused by the physical properties of the plastics and by its' chemical constituents. The physical properties of MPs/NPs are defined in terms of size, shape, and concentration.

When considering the chemical constituents, chemical constituents can be divided into two main parts. One is the chemicals used as raw materials used in manufac-

turing to obtain different physical properties of the plastic product. And the other part is chemicals absorb and adsorb to the MPs/NPs from the environment.

In the plastic manufacturing process, it is blended with various chemicals to have color, transparency, different levels of strength, thermo-tolerance, heat resistance, malleability, and to keep the finished product intact/non-oxidizing. These chemicals include carcinogens and heavy metals(Cadmium and Mercury)(Banaee et al., 2019).

As mentioned earlier, microplastics with different molecular sizes enter our body in different ways (through food, drinking water, beverages, and by inhalation through breathing air). These plastic molecules have various types of chemical constituents in various concentrations (as a cocktail). These MPs/NPs (especially the nanoplastic particles) are having the ability to cross through the intestinal epithelium. Thereafter it enters the blood circulation and deposits at terminal organs throughout the body. There are plenty of studies that studied the effect of MPs/NPs in mammalian models (mostly using the mouse). In mice, ingested MPs/NPs could be found in the gut, liver, and kidney(Deng et al., 2017).

Pathological changes to the gut include a reduction in mucus secretion, gut barrier dysfunction, intestinal inflammation and gut microbiota dysbiosis(Lu et al., 2018).

Liver pathologies include inflammation and lipid accumulation or lipid profile changes, as well as changes in the markers of lipid metabolism(Lu et al., 2018)

There is a lack of toxicity data for humans in vivo at the moment. In a study conducted using the Caco-2 (human epithelial colorectal adenocarcinoma) cell line a disruption of mitochondrial membrane potential and inhibition of plasma membrane ATP-binding cassette(ABC) transporter activity has been observed(Wu et al., 2019). Another study conducted using A549 (Human alveolar type II epithelium) cell line, a decreased viability and induced cell cycle arrest, upregulation of transcripts for NF-μB and some pro-inflammatory cytokines, alteration of the cell cycle, and apoptosis-regulation related protein expressions have been observed(Xu et al., 2019). Most importantly the changes of the gut microbiota dysbiosis have shown a directly related to gastrointestinal cancers(Francescone et al., 2014). However, we still know very little about how MPs/NPs from the environment. , Clearly, much more research, in terms of both cellular and tissue level pathological mechanisms, as well as on the long-term effects of tissue/organ accumulation, is needed.

How can we minimize the effect for the future generation?

It is by 6 "R"s

- Reducing plastic usage
- Reusing and minimizing new purchases
- Recycling
- Rejecting if it is not necessary
- Rethink twice before buying or using
- Replace the plastic with innovations

REFERENCES

1. ALMROTH, B. M. C., ÅSTRÖM, L., ROSLUND, S., PETERSSON, H., JOHANSSON, M. & PERSSON, N.-K. 2018. Quantifying shedding of synthetic fibers from textiles; a source of microplastics released into the environment. Environmental Science and pollution research, 25, 1191-1199.
2. BANAEE, M., SOLTANIAN, S., SUREDA, A., GHOLAMHOSSEINI, A., HAGHI, B. N., AKHLAGHI, M. & DERIKVANDY, A. 2019. Evaluation of single and combined effects of cadmium and micro-plastic particles on biochemical and immunological parameters of common carp (Cyprinus carpio). Chemosphere, 236, 124335.
3. DENG, Y., ZHANG, Y., LEMOS, B. & REN, H. 2017. Tissue accumulation of microplastics in mice and biomarker responses suggest widespread health risks of exposure. Scientific reports, 7, 1-10.
4. FRANCESCONE, R., HOU, V. & GRIVENNIKOV, S. I. 2014. Microbiome, inflammation and cancer. Cancer journal (Sudbury, Mass.), 20, 181.
5. GEYER, R., JAMBECK, J. R. & LAW, K. L. 2017. Production, use, and fate of all plastics ever made. Science advances, 3, e1700782.
6. KERSHAW, P. 2015. Sources, fate and effects of microplastics in the marine environment: a global assessment. International Maritime Organization.
7. LU, L., WAN, Z., LUO, T., FU, Z. & JIN, Y. 2018. Polystyrene microplastics induce gut microbiota dysbiosis and hepatic lipid metabolism disorder in mice. Science of the Total Environment, 631, 449-458.
8. MASON, S. A., WELCH, V. G. & NERATKO, J. 2018. Synthetic polymer contamination in bottled water. Frontiers in chemistry, 6, 407.
9. NAPPER, I. E., BAKIR, A., ROWLAND, S. J. & THOMPSON, R. C. 2015. Characterisation, quantity and sorptive properties of microplastics extracted from cosmetics. Marine pollution bulletin, 99, 178-185.
10. WU, B., WU, X., LIU, S., WANG, Z. & CHEN, L. 2019. Size-dependent effects of polystyrene microplastics on cytotoxicity and efflux pump inhibition in human Caco-2 cells. Chemosphere, 221, 333-341.
11. XU, M., HALIMU, G., ZHANG, Q., SONG, Y., FU, X., LI, Y., LI, Y. & ZHANG, H. 2019. Internalization and toxicity: A preliminary study of effects of nanoplastic particles on human lung epithelial cell. Science of The Total Environment, 694, 133794.

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Life at the SLMA:
A turning point of my life

Dr.Sasangi Alwis's cherished moments with the SLMA family...

I completed my MBBS in 2017 and had just started my career as a junior doctor when I joined the SLMA.

I started working there during my pre-intern period as project coordinator. After working and studying mostly in a clinical set-up during the final year, this was a welcome change for me. I was with SLMA for nearly a year and that period was a turning point of my life.

The SLMA Run & Walk is one of the most highlighted events in the SLMA calendar which attracts medical doctors as well as a vast non-medical crowd.

I had attended this event many times as a medical student but organizing the event with the SLMA team was a novel experience. It gave me the opportunity to work with stakeholders from different entities.

It was a fun filled event as well as an effective public awareness campaign for health education.

The main focus of the SLMA events calendar is the Annual Academic Sessions.

It an international event held in grand scale and gathers resource persons and participants from throughout the world.

Taking part in organizing this event has given me so much experience. It was a golden opportunity to work under giants in medical profession and to learn from them.

The sessions cover many branches in medicine, and therefore I got a broad outlook on many aspects of medicine. Also this is a great platform for researchers to present their papers and get published.

Apart from the annual sessions SLMA organizes numerous academic programs throughout the year. Among these are the Foundation Sessions, monthly clinical meetings and many workshops.

I attended many of these and gained CPD points which will aid my career as a doctor.

The SLMA is well known for its social events. The Doctors' Concert was and still is one of my fondest memories.

It was an enthralling event where medical students, junior doctors and our loving teachers along with their families performed on the same stage and enjoyed to the fullest.

The SLMA dinner dance is another such event that I look forward to every year. It is a pleasure to dance throughout the night to the beat of oldies, forgetting the busy lifestyles at least once a year.

For me, the SLMA was not just 'work'; it was like a second family. I absolutely enjoyed the time there, while gaining so much for my professional and personal development.

I invite all of the young doctors who are entering the medical profession to join the SLMA early in your career.

I am certain that you will never regret this as the SLMA is a place where you will learn something new everyday and aid you to become a better professional in every aspect.

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Invitation for Novices to join Sri Lanka Doctors' Cricket Team in anticipation for an exciting season

Written by Dr. Sulakshi Thelikorala
(an enthusiast and supporter of the SLMA doctors' cricket team)

Sri Lanka Doctors' Cricket Team (SLDCT) is a dynamic sports group comprising of individuals playing at competitive level amongst professional services teams in Sri Lanka. It commenced in 2007 with the inaugural Lawyers vs. Doctors Cricket Match and has grown since then in stature. Doctors working in various parts of the country in varied specialties have come together to form this team. They keep adding momentum and energy to be competitive amongst professional services in Sri Lanka.

Our team will commence the season for the year 2021 in March and is in search of new players. The highlight cricketing events in this year's calendar will be the Annual Law Medical Cricket Encounter, Annual Architects' vs Doctors' Cricket Encounter and the Professional Cricket League Championship. The Professional Cricket League Championship will kick off in March 2021 as a T20 tournament with the participation of cricket teams representing lawyers, architects, engineers, pilots, town planners and us doctors. This year too, the doctors will play to retain their championship title secured over the last two years. The SLDCT is looking forward to conclude 2021 by securing both the Law Medical and Doctors vs Architects trophies as well.

In preparation for the upcoming events, the SLDCT has commenced regular practice matches where all will be on turf wickets with white balls. Practices will be held on Wednesdays and Sundays in Colombo from 5 p.m. to 7 p.m. We warmly welcome all who wish to join us irrespective of their level of competency in cricket. Thoughts are present in rallying up a team for masters over the age of 40. Those interested are welcome to contact the following.

Dr. Kalinga 0703918281
Dr. Pubudu 0713367333
Dr. Thilina 0773817660
Dr. Kasun 0718082183

Sri Lanka Doctor's Cricket Team is grateful for the support extended to us over the years by the Sri Lanka Medical Association (SLMA), all the past Presidents and Secretaries, and Council Members including the current president Dr. Padma Gunaratne and the Hony. Secretary Dr. Sumithra Thisera. We also extend our sincere thanks to Professor Indika Karunathilake for being a pillar of support, right from the time of the inauguration of Doctor's Cricket to date.

Random musings by Dr BJC Perera

A TREASURER IS A TREASURE .....,

It is not all that uncommon, even in official documents, to see a Treasurer being referred to as a Treasure. Of course, many of us know that in most cases, a Treasurer is indeed a remarkable Treasure. Others would Treasure the work done by the Treasurer as much as the person who is the Treasurer would Treasure his or her singular ability to add to the Treasure of the involved institution.

However, when the Treasurer has to present a report on the establishment's Treasure, it cannot be from the Treasure but from the Treasurer.

Any kind of Treasure could give us many a Treasure of pleasure, but a report on the Treasure has to be given by the Treasurer and never by the accumulated Treasure.

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