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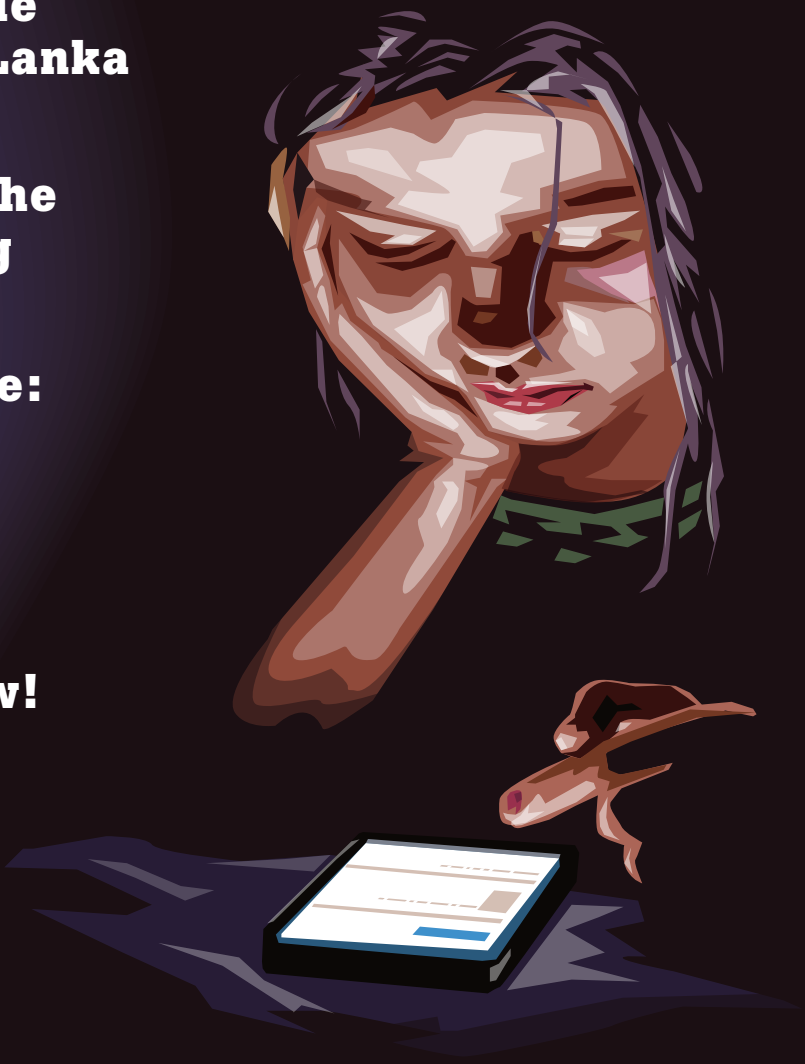

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SLMA President

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

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A message from the Editor-in-Chief

We highly value your views regarding the SLMA news magazine. Please feel free to let us know your views/comments via office@slma.lk or hasini.banneheke@gmail.com.

Priority: Economy first and lives second?

Economic stability is the backbone of a country. It makes a country strong and paves the way for a prosperous future. Economists say that Sri Lanka is doing pretty badly in terms of economy; perhaps we are the pits of the world. It is inevitable that loads of money are to be paid as instalments of interest for loans taken lavishly and irresponsibly by successive governments. Thus, the economy cannot be completely disregarded for sure. Yet for all that, this is not the time to take decisions regarding the current pandemic, based exclusively on economic or political grounds. This is certainly not the time to start building recreational facilities, attend to city beautifications or new developments, or even upgrading of existing infrastructure for that matter. The huge elephant in the room, the COVID-19 pandemic, cannot be ignored. Our main focus and priority should be to save as many lives as possible.

All the decisions pertaining to the country at this moment in time need to be based on scientific facts. This is also a time needing diversion of attention to the provision of more healthcare facilities to protect each and every possible life of the men, women and children of our beloved motherland. What is the value in achieving economic growth over the dead bodies of very many and amidst moans, sobs, grievances, losses, and bereavements? Can we relish such an accomplishment?

In the early part of COVID management, so many myths such as tonics, holy water pots, steam pots, unseen Gods and deities, supreme beings; seen and virtual, were involved in the 'management' or 'control'. Amidst all that ignorance, the situation was brought under control without much damage by strict movement restrictions. However, the virus kept on swarming in the world with new variants, and Sri Lanka has been hit really hard this time.

In a mathematical model created by Monash University and WHO Country Office in Sri Lanka, it has been predicted that if the current levels of mobility are allowed to continue, it will lead to a death toll of 20,000 by January 2022. As per their report, even imposing a 'not so strict' type of mobility restriction (Eg: similar to what was in place between 21st May to 21st June 2021) would prevent 11, 000 deaths by January 2022. Yes, these projections have been developed even with the assumption that 50% of the total population is vaccinated with both doses by 15th August 2021 and 80% by 1st January 2022. It was also evident that the COVID-19 morbidity curve and population mobility curves closely followed each other. They conclude by stating that "these findings emphasize the importance of maintaining strict mobility restrictions at least for a month (until August 31st) even under these extremely high vaccination rates, in order to control the epidemic and reduce the number of cases, deaths, and ICU occupancy."

Healthcare facilities are overwhelmed with an unprecedented influx of patients. One should not forget the fact that the healthcare workers are in almost a burnt-out status, not only with exponentially increasing cases but also due to the reduced number of staff at work due to many succumbing to COVID-19.

Vaccination is happening at its best possible speed. However, the misconception of assurance of safety after one jab and people being less careful in other preventive measures is alarming. Until one or more of their loved ones get COVID-19 or succumb to death, everyone might be inclined to feel complacent. Thus it is timely that a strict lockdown is imposed on a countrywide basis while trying to reach vaccination coverage, with both doses, to an acceptable percentage of the population.

We Sri Lankans are one family. Members of a family do not allow their loved ones to die, especially when it can be prevented. So let us protect our people by being responsible, being vigilant, adhering to healthcare advice and especially minimizing human movements. We need not wait for the government to do it for us; each of us can do it! After all, we cannot give a monetary value to a life.

It was Peter Ferdinand Drucker, an Austrian-American management consultant, educator, and author, whose writings contributed to the philosophical and practical foundations of the modern business corporation, who once said *"The ultimate resource in economic development is people. It is people, not capital or raw materials, that develop an economy ".*

Need we say more? We can rest our case on those immortal words.

11th August 2021

Editor-in-Chief
Professor Hasini Banneheke

President's Message

Dear Colleagues,

During this raging COVID 19 epidemic, let me commence this message by reminding all members of the SLMA, the need for vaccination against COVID 19 for you and your kith and kin. It has been extremely worrying to learn increasing reports of healthcare staff being affected while carrying out their clinical work. Similarly, I know many of our members who have been working relentlessly are now fatigued and exhausted.

It is well confirmed that all WHO approved vaccines provide significant protection against hospitalization, severe disease and death while its total protection against infection is much lower and tends to vary widely between types of vaccines. This information is encouraging to promote vaccination for an infection that spreads ever so fast like a wildfire, causing severe complications particularly among the old and people with comorbidities. As the President of the Sri Lanka Medical Association, let me request all who did not receive vaccination and for the ones who received a single dose, to very seriously consider completing the course of vaccination as a national obligation towards the health of the community.

As at present all hospitals in the Ministry of Health that provide services for the care of COVID-19 patients have exceeded their full capacity and are left with no vacant beds available for any new COVID-19 patients. The Oxygen dependent proportion of patients are also rising and as the local suppliers are potentially unable to supply the required need, the Ministry of Health has initiated procedures to import Oxygen. As hospitals continue to expand all available space for COVID 19 patients endlessly, the services available for other diseases are also being severely compromised. The spread of the infection among healthcare workers has led to their falling ill leading to a severe shortage of staff. All these have affected the care given to COVID and Non-COVID patients, which is likely to lead to an invariable breakdown of the entire healthcare system and increasing death rates. There is an urgent need for a rapid reduction in the number of cases of COVID 19, and this could only be achieved by severe mobility restrictions.

As of today (14.08.2021), the SLMA Expert Committee on COVID 19 has already requested the Government of Sri Lanka for a minimum of 2 weeks of lockdown while maintaining essential services and the vaccination programme uninterrupted. A lockdown will be useful to provide some breathing space for hospitals as well as to buy time until a good proportion of the community develop immunity following vaccination.

While all efforts needed to control the epidemic is being exerted, all other activities that should take place are being allowed and continued, but with public health measures of "New normal". While adhering to all recommended precautions, SLMA has just completed 6 virtual pre-congress workshops and presentations of all posters of the 134th Anniversary International Medical Congress. The congress will take place as a hybrid event. Let me invite all members of the SLMA to register for the 134th Anniversary International Medical Congress which will take place as a hybrid event from 21st – 24th September 2021.

With Best Wishes.

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

IMPORTANT NOTICE

Any member of the SLMA who considers himself/herself suitable to guide the SLMA in the year 2023 as President is kindly requested to contact the SLMA Office to obtain the application for President Elect 2022. The applications should reach the honorary secretary on or before 20th October 2021.

COVID-19 related Activities

19th & 31st July

Two meetings of the SLMA Expert Committee on COVID-19 were held to discuss on issues related to COVID-19 situation in the country and the recommendations SLMA should give to the Government.

21st July

A letter was sent to Dr. Asela Gunawadena, Director General of Health Services (DGHS) requesting to restrict gatherings, improving facilities at hospitals, implementing home-based care and vaccination of elderly persons and persons with comorbidities to bring down the rising number of COVID-19 related deaths.

24th July

A meeting was held with the DGHS to discuss issues related to COVID-19 with the participation of relevant Colleges. Professor Thamasi Makuloluwa, President College of Anaesthetists & Intervensiits, Dr. Harsha Sathischandra, President College of Internal Medicine, Dr. Anidu Pathirana, President Heart Association, Dr. Harendra Cooray, President of the Sri Lankan College for Emergency Medicine, Dr. Kanthi Nanayakkara, representing College of Microbiologists attended the meeting with Dr. Padma Gunaratne, President, SLMA & Dr. Sumithra Tissera, Secretary, SLMA.

27th & 28th July

An emergency meeting with the members of the SLMA Intercollegiate Committee (SMIC) was held on 27th July to discuss the COVID-19 situation in the country. Following this meeting a letter was again sent to DGHS highlighting the following points on 28th July 2021;

1. Immediate action to reduce the number of admissions by banning gatherings such as musical shows, religious gatherings, cinemas and weddings etc.
2. Strengthen the facilities for managing COVID-19 cases in HDUs and ICUs. Increase availability of oxygen delivery devices (NRBM, High Flow Nasal Oxygen, CPAP and BiPAP) and consumables (device accessories, circuits, tubing etc)
3. Update the Protocols and Guidelines on managing COVID-19 infection
4. Improve the availability of doctors for COVID-19 related work by rectifying their maldistribution and providing doctors with extra remuneration based only on services provided.

1st August

A letter was sent to HE President informing him of the crises created due to the increasing number of COVID-19 cases reported in the country and the insufficient coverage so far of persons through the vaccination programme.

3rd August

Dr. Padma Gunaratne – President SLMA attended the COVID-19 Technical Committee convened by the Ministry of Health (MoH).

6th, 20th July & 3rd August

Media briefings were held with the participation of Dr. Padma Gunartne – President SLMA, Dr. Rajiva de Silva – Consultant Virologist and Dr. Manilka Sumanthilake – Vice President SLMA on the current COVID-19 situation and its effects on persons with comorbidities and vaccination. Several press releases were published in print media. The President and council members appeared on TV discussions.

Other Activities in July

3rd July

The SLMA Saturday Talk on 'Problems of Puberty' was conducted by Professor Angela Arulpragasam Anthony, Dean & Senior lecturer in Paediatrics, Eastern University. It was attended by around 1000 students.

4th July

The SLMA Young Members Forum organized a webinar on 'Human Elephant Conflict' by Dr.Prithiviraj Fernando, Senior Scientist/ Conservationist, Centre for Conservation & Research. It was joined by around 100 persons online.

5th July

SLMA organized a webinar on 'COVID-19 Vaccines & Growing Threat of Variants of Concern'. The resource persons were Professor Annelis Wilder-Smith, Consultant to the Initiative of Vaccine Research, WHO, Geneva who spoke on 'COVID-19 Vaccines & Variants of Concern', Professor Ben Cowling, School of Public Health, University of Hong Kong on 'Antibody Response to Different Vaccines' and Dr. Vinod Kumar Bura, Epidemiologist, WHO, Country Office Nepal on 'COVID-19 Vaccine Implementation : Country Perspective'. A very interactive discussion followed the three lectures. Around 300 persons participated online.

7th July

Third Pre Congress Session on 'Promoting Clinical Research' was held with the online attendance of more than 150 persons. Professor Janaka de Silva spoke on 'How to get started in research', Professor Sarath Lekamwasam, on 'How to select the correct research method', Professor Amita Manathunga on 'Introduction to Basic Bio- Statistics Principles', Professor Pujitha Wickramasinghe on 'Writing a Proposal: Introduction to Basic Components of a research proposal', Professor Chandani Wanigathunga on 'Obtaining Ethics Approval: How to avoid delays', Professor Anuja Premawardena on 'Errors in Research & a guide to avoid them' and Dr. BJC Perera on 'Research leading to a publication: What do editors want?'.

8th July

The SLMA COVID **සහන** initiative of the Sri Lanka Medical Association (SLMA) distributed medical equipment worth Rs 6 million at the SLMA Auditorium among 54 hospitals across 19 districts. SLMA COVID **සහන** fund, launched in May 2021, led by Dr Padma Gunaratne, President, Sri Lanka Medical Association, made an appeal to the public for their support to raise funds to assist government hospitals in providing care for COVID-19 patients. The public response was remarkable and many philanthropists in Sri Lanka contributed immensely towards the SLMA COVID SAHANA. Donations received from the corporate sector were incredible. There were many expatriates, individually and as associations, amongst the donors to the fund. The items that were distributed are listed below;

No.	Item	No.
1	High Flow Oxygen Delivery Nasal Cannula	45
2.	Non rebreathing Oxygen mask With Reservoir bag	570
3	Bacterial/Viral Filters	1010
4	Adjustable Venturi Device	230
5	Infusion Pumps	32
6	Pulse Oximeter - Fingertip type	218
7	Blood Pressure Apparatus – Digital	100 (+ 10 bonus)

9th July

A joint webinar was organized by the SLMA & the Sri Lanka College of Oncologists (SLCO) on 'Cancer care in COVID-19 Pandemic'. The webinar resource persons were Dr. N Jayakumaran, President SLCO & Consultant Clinical Oncologist on 'Challenges of Cancer Care in Sri Lanka during the COVID-19 Pandemic', Dr. Vimukthi Peiris, Consultant Clinical Oncologist on 'COVID-19 in Cancer Patients: Lessons Learnt from the World' and Professor Suranjith Seneviratne, Professor of Allergy & Immunology on 'COVID-19 Vaccines for Cancer Patients'.

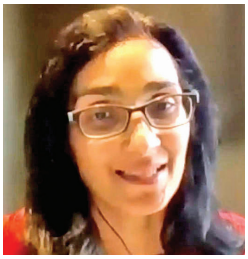
10th July

The Sri Lanka Medical Association (SLMA) along with the SLMA Women's Health Committee released a press statement 'Urging maximum punishment against all involved in the Abuse of a 15-year old girl' and to enforce the law against all those who were involved in the rape and exploitation of a 15-year old girl via websites, irrespective of their rank or position.

10th July

The SLMA Saturday Talk on 'Acute Upper Abdominal Pain' was conducted by Professor KB Galketiya, Professor in Surgery, University of Peradeniya. This was attended by around 900 students.

13th July



SLMA in collaboration with the Sri Lanka College of Paediatricians organized a webinar on 'Vaccination of Children against COVID-19'. Dr. Surantha Perera, Consultant Paedeatrician spoke on 'Vaccinating Children against COVID-19 in Sri Lanka: Is it a reality', Professor Kapila Perera, Secretary to Ministry of Education on 'Safe learning environment for school children during COVID-19 Pandemic' and Dr. Anne Lindstrand, Unit Head, Department of Immunization, Vaccines & Biological, WHO, Geneva on 'WHO perspective on vaccinating children against COVID-19'. A very interactive discussion followed the three lectures. Around 150 persons participated online.

17th July

The SLMA Saturday Talk on 'An older woman with difficulty in walking' was conducted by Dr. Chandana Kanakaratne, Consultant Physician. It was attended by around 850 students.

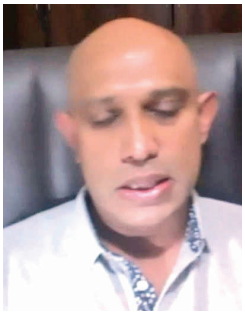
20th July

The clinical meeting for the month of July was held in collaboration with the College of Dermatology on 'HIV & Skin' The resource persons were Dr. Swarna Dissanayake, Consultnat Dermatologist, Teaching Hospital Kandy & Dr. Shshika Chandraratne, Senior Registrar in Dermatology, Teaching Hospital Kandy. MCQ presentations were done by Dr. Lalinda Karunarthne & Dr. Chiranjaya Ekanayake, Registrars in Dermatology, Teaching Hospital Kandy.

22nd July

The SLMA Expert Committee on Rehabilitation organized a webinar on 'Rehabilitation Approach to 3D deformity of the Spine: Conservative Management of Adolescent Idiopathic Scoliosis' by Dr. Nayomi Senarathna, Acting Consultant in Rehabilitation Medicine, Rheumatology & Rehabilitation Hospital, Ragama. A lively discussion followed the lecture which was attended by more than 100 participants.

24th July

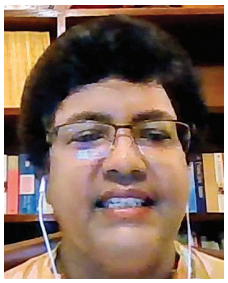


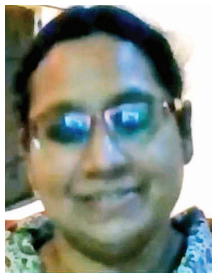
The SLMA Saturday Talk on 'Endometriosis' was conducted by Dr. Dhammike Silva Senior Lecturer in Gynaecology & obstetrics, Faculty of medical Sciences, University of Sri Jayawardenapura. It was attended by around 1000 students.

28th July

A regional meeting was held virtually with the collaboration of the Uva Clinical Society. In the first session Dr. Chathuri Suraweera, Senior Lecturer in Psychiatry, Faculty of Medicine, University of Colombo spoke on 'Prescribing Psychotropics in the clinical setting: an update for non-psychiatrists', Dr. Dilruk Senadheera, Resident Obstetrician and Gynaecologist, De Soyza Maternity Hospital on 'Oral Contraceptives in Perimenopause' and Dr. Shehan Silva, Senior Lecturer in Medicine, Faculty of Medical Sciences, University of Sri Jayewardenepura on 'Antimicrobial Resistance: Pearls for Clinicians'. In the second session Dr. Rasanga Gunawardana, Consultant Orthopaedic Surgeon on 'Mass Casualty Management: Are we ready?', Dr. Anuradha Wijewardana, Consultant Urologist on 'Haematuria: How do we evaluate?' and Dr. Buddhika Dassanayaka, Consultant OMF Surgeon on 'Oral Cancer: Can we take it easy?'.

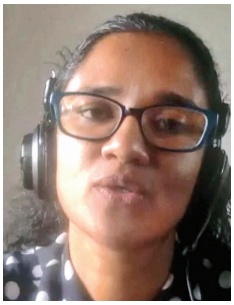
28th July





The SLMA Expert Committee on Women's Health organized a webinar on 'Facets of Gender: Journey towards Development'. Dr. Janaki Vidanapathirana, Director National Cancer Control Programme on 'Reaching Equal Health: Gender Perspective', Professor P Anuruddhi S Edirisinghe, Department of Forensic Medicine, Faculty of Medicine, Ragama on 'Sexual & Gender Based Violence: A Health Issue', Dr. Deepika Attygalle, Senior Health Specialist, World Bank on 'Looking at Economics through a Gender Lens' and Dr. Sepali Kottegaoda, Director Programmes. Women & Media Collective on 'Gender & Unpaid Work'. Dr. Nadeeka Chandraratne, Senior Lecturer, Department of Community Medicine, University of Colombo shared a gender fact sheet. Around 150 persons participated online.

29th & 30th July



The SLMA Expert Committee on Rehabilitation organized an online conference on Medical Rehabilitation. The Panel of resource persons and topics of discussion for the two days;

Session 1 - 'Assessment of cognitive capacity and psycho-social rehabilitation of older adults'

Dr. Pushpa Ranasingha, Consultant Psychiatrist, Dr. Madhushani Dias, Senior Registrar in Old Age Psychiatry, Dr. Iresh Perera, Senior Registrar in Old Age Psychiatry, Mrs. Manodya Ranasinghe, Community Psychiatry Nurse, Psycho-geriatric unit and Mrs. Nadeesha Priyangani, Occupational Therapist, Psycho-geriatric Unit, NIMH, Angoda.

Session 2 - Rehabilitation for musculoskeletal disorders

Dr Gunendrika Kasthuriratne, Consultant in Rheumatology and Rehabilitation, Dr Chamara Jayathunge, Senior Registrar in Medical Rehabilitation, Ms Chathuri Pamunuwa, Physiotherapist and Mrs Nimali Aluthwatte, Occupational Therapist, NHSL.

Session 3 - Management of psychological issues: a case-based approach

Dr Medhani Hewagama, Resident Psychiatrist, NHSL, Dr Chathurie Suraweera, Consultant Psychiatrist and Dr Anula Rathnayake, Senior Lecturer in Social work, Faculty of Medicine, Colombo.

Session 4 - Community based rehabilitation; constraints in improving CBR in Sri Lanka

Dr Samitha Samanmalie, Medical Officer, Ragama Rehabilitation Hospital, Mr Chandana Ranaweera Arachchi, Director, Department of Social Services and Prof Chandani Liyanage, Department of Sociology, University of Colombo .

Session 5 - Rehabilitation of patients with Parkinson 's disease

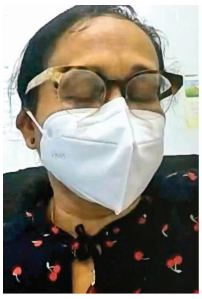
Dr Darshana Sirisena, Consultant Neurologist, NHSL, Dr Nadeesha Kalyani, Lecturer in Physiotherapy, Dept of Allied Health Sciences, Faculty of Medicine, Colombo and Mr Nandana

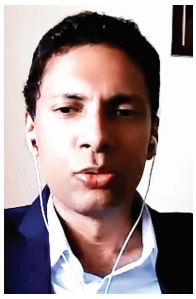
Welage, Senior Tutor in Occupational Therapy, School of Physiotherapy and Occupational Therapy.

Session 6 - Teamwork in Cerebral Palsy

Dr Jayathri Jagoda, Consultant in Rheumatology and Rehabilitation, Mrs. Malka Jayathilaka, Senior Speech and Language Therapist, Mr. Nuwan C. Rodrigo, Physiotherapist, Mrs. Sumudu Nisansala, Occupational Therapist, Mrs. Portia Shereen Tissera, Prosthetist and Orthotist, LRH and Mrs. T.H. Rasika Samanmalee, Lecturer in Social Work, Department of Psychiatry, Faculty of Medicine, University of Colombo.

30th July





The Expert Committee on NCD organized a webinar on 'Dyslipidaemia'. Dr. Thushara Matthias, Consultant Physician & Senior Lecturer Colombo South Teaching Hospital spoke on 'Dyslipidaemia in 2021' and Professor Sudheera Kalupahana, Professor in Human Nutriciain, University of Peradeniya 'Dietary Fats: The Good, the Bad & the Ugly'.

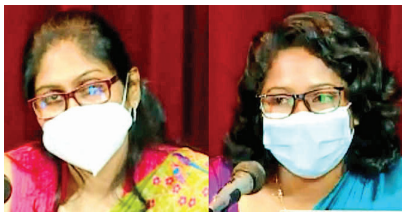
31st July

The SLMA Saturday Talk on 'Case Based Discussion on Bipolar Affective Disorder'" was conducted by Professor Raveen Hanwella, Chair Professor of Psychiatry, Faculty of Medicine, University of Colombo. It was attended by around 1200 students.

3rd August

Emergency Council meeting was called to discuss the applicability and the action of SLMA in relation to the decision of the Government to legalize the Kotelawala National Defence University (KNDU) Act in the parliament. SLMA sent a letter to HE President requesting to postpone the 3rd reading of the Bill which was scheduled for the 6th August to enable a dialogue with wider forum of stakeholders in our country interested in education, including medical education.

5th August



Fourth Pre Congress Session on 'Manipulation, Persuasion and Multinationals: Is there a thing called free will?, was held with the online attendance of more than 130 persons. Dr. Mahesh Rajasuriya, Dr. Udara Amarasinghe spoke on Free Will, Multi-nationals & Media, Dr. Palitha Abeykoon, Dr. Lathika Athauda on 'Media and Industries of Alcohol, tobacco & cannabis' and Professor Diyanath Samarasinghe, Dr. Manuja Perera on 'Actions to counteract the industry and win back our freewill'.

6th August

SLMA organized a webinar on 'COVID-19: Urgent Interventions for the Crises' with the participation of around 300 persons online. The resource persons for the seminar were Dr. Ananda Wijewickrama, Consultant Physician, IDH, Dr. Upul Dissanayaka, Consultant Physician, NHSL & Dr. Mahendra Ekanayaka, Consultant Physician, BH Homagama & DH Wethara.

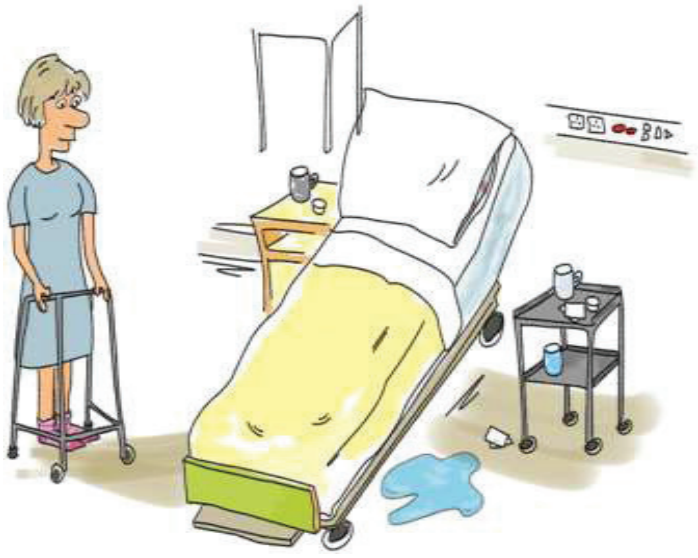
Just for a laugh

"A defence counsel attacked the evidence of a doctor, seeking to trip the witness up. But calm and collected, the doctor nonchalantly gave straight answers to the lawyer's questions.

Finally the lawyer sneered, "Alright, doctor, you may leave the witness-box. You are a very clever man."

To which the doctor coolly replied, "I wish I could say the same about you sir, but unfortunately I have taken an oath here to speak the truth!"

Adverse events occur not due to bad people, but due to bad systems



Timely and accurate reporting leads to;

- Generation of "**alerts**"
- Dissemination of "**lessons learnt**"
- Improvement of patient and Health worker **safety**

To Err is Human; Reporting is safe, NO blame, NO fault finding

Report adverse events to the quality management unit in your institution.

For more details contact;
Directorate of Healthcare Quality and Safety
Premises of Castle Street Hospital for Women,
Castle Street,
Colombo 8 – Sri Lanka
Tel : 0112678598
Fax : 0112698602

The history of Denial of Child Abuse & Evolution of Child Protection

Vidyajothi Professor Harendra De Silva
Emeritus Professor of Paediatrics (Col)
Founder Chairman NCPA
Senior Ashoka Fellow (Washington DC)

Child abuse is often denied in the Indian subcontinent, "Sopaka" was a boy abandoned in a cemetery to be eaten by wolves by the jealous stepfather. The Story of Mattakundali whose miserly father severely neglected him and deprived him of nutrition and medical care was highlighted 2500+ years ago in India in Buddhist scriptures. Both stories were probably the oldest documentation of abuse and neglect. Although not in Sri Lanka, it still resonates today in the predominantly Buddhist Sri Lankan society. King Voharaka Tissa (209-231) declared a law forbidding any bodily harm by way of punishment. King Vijayabahu II (1186-1187) is also credited for his compassion while King Vijayabahu III (1220-1232) is commended for having extended his compassion to children.

Physical Harm and Abuse

Like all countries, Sri Lanka went through a phase of denial, and justification of abuse, and ironically 'sorrow' of corporal punishment was highlighted in an eighteenth-century verse titled "Ganadevi hella". This norm still has relevance today, as it is still not unusual for parents and teachers to feel they have a right to impose corporal punishment (CP) on children. Moreover, the Education Ordinance of 1939 of Ceylon is still in effect and permits caning a child, even though Sri Lanka is a signatory to the Convention of the Rights of the Child and the introduction of an Education Ministry circular, initiated by the National Child Protection Authority was introduced in 2001 (No. 2001/11 and No. 2005/17). Since it has not been approved by Parliament it has no legal bearing. The UN CRC review Committee has continuously frowned on the lack of the commitment of the government to legally ban CP through legislation. Although many responsible persons in society profess that CP does not harm the child, it is only one end of a spectrum of physical cruelty to children which invariably causes pain and emotional harm to the child, it justifies violence when the child becomes an adult. Physical injuries would depend on how angry the adult was, how hard he/she beat the child and what weapons were used that would result in physical injury to classify it as Physical Abuse or even death. Do we tolerate this twilight zone of obscurity in this spectrum of physical harm with documented harm to a child?

The first case of Physical Abuse in Sri Lanka was reported in 1988 (Chandrasiri, N., Lamabadusuriya, S., & de Silva, D.G.H. (1988). Non-accidental injuries to children in Sri Lanka. Medicine, Science, and the Law, 28, 123–126)

Sexual Abuse

An early example of child sexual abuse was documented in the case of a tailor named Jayawardene, who was sentenced to death by hanging in 1949 for murdering a fourteen-year-old schoolboy who was initially sexually abused but later refused to succumb. Unfortunately, such conduct was considered "homosexuality", since, during the 1940s, "pedophilia" and "child abuse" were not recognized terms legally and the child was often considered a criminal participant rather than a victim. (A. C. Alles 1962. The Kadugannawa postal bomb murder case. Infamous Criminal Cases of Sri Lanka (pp. 89-116). Colombo: Mervyn Mendis, the Colombo Apothecaries Co.)

Although the use of young schoolboys by teachers, hostel masters, cadet, Sports Masters and older boys were (and still are) prevalent. Sexual abuse of boys was "justified" by phrases like "boys don't get pregnant" or "ships don't leave tracks on water"! Carl Muller, a Sri Lankan author provides an ambivalent attitude within Sri Lankan culture towards sexual abuse of boys in the 1930s and 40's. (Muller, C. (1993). Jam fruit tree. New Delhi, India: Penguin Books. Muller, C. (1994). Colombo. New Delhi, India: Penguin Books. Muller, C. (1995). Once upon a tender time. New Delhi, India: Penguin Books)

In a large-scale anonymous study of more than 800 adolescents in Galle, the author and co-workers described that more than 20% of males and about 10% of girls were sexually abused during childhood. (de Silva, D.G.Harendra (1996, March). Child abuse: How big is the problem? Plenary lecture, Sri Lanka Medical Association (SLMA) Annual Sessions, Co-

lombo) This revelation as well as tourist paedophilia stimulated the government to set up a Presidential Task Force on Child Protection towards the end of the same year (1996) of which the author was the Chairman. The Task Force culminated in the recommendation to set up the National Child Protection Authority. (Act No.50 of 1998)

Although commercial sexual exploitation of boys (often referred to as "boy prostitutes") was known to the STD Control Programme in 1965, it catered to only a few local paedophiles (Arulanantham, T. (1992, July). In a Symposium on Child Prostitution (paper), at the Conference on Sexually Transmitted Diseases and AIDS, organized by the Department of Child Care Services, and PEACE, Mt. Lavinia, Sri Lanka.). However, the 1970s and 1980s brought an explosion in tourism, and foreigners came in increasing numbers to the tourist paradise with numbers of paedophile rings promoting tourism. (Gmünder, B. (Ed.). (1995–1996). The International Gay Guide (24th ed.) Verlag: Spartacus Magazine.

https://en.wikipedia.org/wiki/Spartacus_International_Gay_Guide)

Aggressive active detection of foreign and local paedophiles by the NCPA from 1998 to 2005 with local and international prosecutions sent shockwaves through these sex rings that warned its members through the Spartacus Magazine. Child Abuse A Global View – Sri Lanka, D.G.Harendra de Silva. - Eds. Swhartz-Kenny, Mc Caulley & Epstein. Greenwood Press, Westport, USA. ISBN 0-313-30745-8

Use of Children in War as a form of Child Abuse

The author and others, described the first definition of Child Conscription as a form of child abuse. Nineteen former child soldiers were interviewed in a rehabilitation centre using a standard questionnaire. Armed combat in childhood is a form of child abuse. It may lead to serious consequences, including post-traumatic stress disorder. The inherent emotional abuse and acts or omissions by caregivers may cause behavioural, cognitive, emotional or mental disorder in the child as well as omissions leading to injury as well as death. Conscription of Children in Armed Conflict. Personal Views. British Medical Journal, 2001, 322: 1372;

Using Children on suicide missions initiated another definition "Suicide by Proxy" Conscription of Children in Armed Conflict- A form of Child Abuse. A study of 19 former child soldiers. De Silva DGH, Hobbs CJ, Hanks Helga. Child Abuse Review. 2001;10:125-134.

Child Labour, appears to have raised its head once again, with sensational news of a high-profile politician accused as a perpetrator. A study by us in 1997 of 700 households indicated a prevalence of about 8% having child servants. Child domestic labour is not a hidden phenomenon and was relatively easy to address with media programmes against it and it drastically reduced. The NCPA increased the minimum age of employment to 14 years from 12 and it was not possible to increase it any further since the minimum age of schooling was 14. However, in Jan 2021 both these age limits have been raised to 16 years.

Legislation

In 1995 the penal code was amended (amendment 22 of 1995) to include child abuse as penal offences and the hallmarks of the amendments included; definition of new offences, Enhancement of punishment to a maximum of 20 years in some offences, and the introduction of mandatory sentencing for many offences. Subsequently, new legislation was brought in, including video evidence, soliciting and conscription. In fact, there is no inadequacy of laws but lack of monitoring, transparency of documentation and accountability of the legal process that has led to the present situation

Why is there no progress of action against child abuse?

During 1996 to 2005, Action was based on a conceptual framework

Society

Relative poverty and day to day stress of survival has reduced child protection as a priority in society. Constant pressure on the administrative accountability is limited to waxing and waning 'knee jerk' agitation often manipulated by the media and politics. Commitment on Child Protection has been reduced to survival of administrators playing a defensive role. Our studies showed that 10% of the male population who are now in various positions had perpetrated some form of sexual abuse of children. Physical abuse as well as corporal punishment is worse. Most have been beaten and many have been perpetrators. The biggest issue is emotional abuse of denigrating children, often for minute mistakes and inabilities. The vicious cycle of not only justifying but also of perpetration by adults is intergenerational and is one of the biggest obstacles to child protection. All animals including homo sapiens are territorial for security & survival. My family, my wife, my child is unchallenged territory: I am the owner to protect them! However, what right have I got to abuse my child or my wife? This attitude is one the main causes of a dysfunctional family with domestic violence, Wife battering, Child Physical, incest and sexual abuse.

The Child

A child does not come into this world knowing what is right and wrong and attention seeking is one of the main modes for survival and for development of relationships with parents. Crying and

being disobedient are ways of getting attention. When parents are ignorant of child psychology and child rearing which maybe based on their own experience during childhood, 'disciplining' comes to the fore. The more discipline in the form of physical punishment or verbal abuse is used the vicious cycle of misbehaviour and punishment comes into play leading to more punishment which is a spectrum of abuse from 'mild' to extreme. Most children unless made aware would not comprehend acts against them, they would also be threatened as well as a culture of obedience would not allow a child to complain.

In Sri Lanka, we do not give priority to the psychology of the mother, father and the child. Programmes of education and skills development of parents and extended families as well as teachers do not get priority. The subject of psychology is not even recognized as a medical specialty. Although a predominantly Buddhist country that should be promoting non-violence, we are often not educated on the effects of long-term consequences of abuse during childhood which includes delinquency, youth violence, promiscuous behaviour, alcoholism and other issues including abuse of your own children. We need programmes of awareness aimed at not only adults but also children.

A booklet was published by the NCPA on 'Corporal punishment is it really necessary' (D.G.H. de Silva, P. Zoysa, N. Kannangara. Published by NCPA. 2001.). 200,000 copies were distributed to teachers. Such programmes were not continued subsequently. Issues such as ADHD, Autism and dyslexia are often not recognized systematically in schools or the health system, leading to trauma to these children. The role of the media in continued public awareness to sensitize the public are replaced by sensationalism from time to time by the media, more for commercialism and politics. There is a huge need of recognizing and strengthening the cadre of psychologists and appropriately trained counsellors at school level

Skills development is an area that needs strengthening. Not only of the parents, but also the child, professionals such as teachers, police, media, doctors especially psychologists, as well as child psychiatrists and the judiciary should be provided with skills in prevention, how to recognize, what procedures to take within the legal framework, that ensures appropriate justice to the child. We had discussions during my role as Chairman NCPA with the judiciary, AG's dept, police and others with the intention of strengthening awareness and skills of all stakeholders. In 2000 the NCPA published 7000 books on recognition of child abuse (A Manual for Medical officers in Sri Lanka. D.G.H. de Silva and Chris Hobbs. Published by the National Child Protection authority 2000.) which were distributed to JMOs, Medical Students and the AGs department. There should be ongoing programmes on these lines.

Special Programmes on the protection of vulnerable children including those in institutional care, children of mothers working in the Middle East and street children, with regular research and monitoring, is essential.

The present legislation is more than adequate for successful prosecution of cases, although the implementation may be poor due to weaknesses at different points due to manipulations and corruption. The checkpoints are at the level of the NCPA, Police, Magistrates' Courts, Attorney General's Department and High Courts, which have to be systematically monitored, independently and those responsible made accountable. It is also essential to monitor progress of legal cases including the reasons for failure in prosecution which will enable legal reforms. One opinion is that the 1995 Penal Code amendments are too harsh and 'Draconian' that gives little discretion to the judiciary in making judgements. More discussions with the Judiciary are critical if amendments are sought.

In summary, Child Abuse is

widely prevalent in Sri Lanka. The Public is aware of the issue due to awareness creation by the NCPA, especially from 1999 to 2005 and later. The media should be more responsible in reporting with the intention of the best interest of the child. However, there is little attempt to address skills of parents and responsible professionals on child protection. The process of a transparent accountability system in prosecutions is necessary since delayed prosecutions by years, denies the child justice, serving only the interest of the adult perpetrator.

Delinquency, Juvenile Justice System and Individual Responsibility

Dr.H.T.D.W.Ariyaratna
Senior Lecturer
Department of Forensic Medicine
Faculty of Medical Sciences
University of Sri Jayewardenepura

Children and adolescents. are the future of any country. It is also determined by its physical and mental health. This is why a positive and healthy childhood is so important. This may appear to be a simple thing to achieve, but children are more than just miniature versions of adults. They require special care to ensure that they have the best possible upbringing in today's society.

Each and every citizen, regardless of age, bears a responsibility to society. We are all responsible for the final outlook of society, meaning that children and adolescents may also be victims, witnesses, or even perpetrators of an incident that violates national law. However, if a child has become a criminal offender, the process of punishment and rehabilitation differs greatly from that dealing with adults. The juvenile justice system essentially addresses and implements the special needs of the child involved in an illegal act to meet their unique circumstances and characteristics (1).

Children and adolescents cannot be understood as "separate entities." They are similar to "package deals." Genetical facts, family backgrounds, parental outputs, economic status, social backgrounds, gender, disabilities and illnesses, and so on are all interconnected. Whatever the case may be, portraying children and adolescents negatively is harmful because the vast majority of them succeed in school, in their families, and society without engaging in substance abuse or violence. As a result, professionals have two responsibilities: one is to reinforce the positive aspects of children, and the other is to be knowledgeable about all three levels of prevention, primary, secondary, and tertiary. Simply knowing is not enough; as academics, we must actively intervene in the delinquency prevention process.

WHO defines 'Adolescents' as people aged 10 to 19 years old, and 'Youth' as people aged 20 to 24 years old. 'Young People' refers to people aged 10 to 24. (2) There are international and domestic legal provisions in place to ensure the rights of children. Let's consider a few local and international legal aspects.

What is delinquency?

Within the context of criminology, delinquency is defined as criminal behaviour (behaviour that does not conform to legal or moral standards) by juveniles under the legal age of adulthood. (3) Illegal acts can range in severity from minor to severe.

What exactly is a child?

A proper definition of a child is required in order to provide them with the necessary protection. In any case, there is no unified definition of the term "child" in Sri Lankan law. The age of the "majority" is 18 years as stated by the Age of Majority Ordinance (1865) as amended by the Age of Majority (amendment) Act No. 17 of 1989. Based on this ordinance, a child is defined as anyone under the age of 18. A citizen is considered to be eighteen years of age or older for them to independently exercise all of his or her rights.

However, when it comes to different legal purposes, a child is interpreted differently in Sri Lanka. In other words, it must be understood that there is no single definition of what constitutes a child. According to Sri Lanka's "Children and Young Persons Ordinance (1939)," a "child" is defined as a person under the age of 14, and a "young person" is defined as a person between the ages of 14 and 16.

Different age limits had been established for certain other activities before the attainment of the age of majority. The age of employment (16 years), marriage (18 years), criminal responsibility (12 years), the age of purchasing alcohol (18 years), and the age at which a person can be sentenced to death

(18 years) (Penal Code as amended by Act No. 50 of 1980), etc. and there are 13 instances in Sri Lankan law where a child is interpreted differently. (4)

What distinguishes illegal actions by adults from those of children?

When a minor commits the same illegal act, a different set of terms is used. When an adult commits an offence, it is referred to as a crime, and when a child commits an offence, it is referred to as a delinquent act. When an adult is found guilty of breaking the law, he or she is referred to as a 'convict,' while a juvenile is referred to as an adjudicated delinquent.

In adult courts, punishments are pronounced, whereas, in juvenile courts, the emphasis is on treatments, therapy, and education rather than punishment. All of these efforts are made to avoid any injustice to a juvenile and to respect his or her rights. (5)

Legal provisions used in Sri Lanka

In Sri Lanka, the primary Acts governing children's justice are as follows:

1. The Children and Young Persons Ordinance, No. 48 of 1939 (CYPO)

Juvenile courts are established as a result of this act. Treatment for juvenile offenders and child and adolescent protection are also included. A 'child' is defined in this act as anyone under the age of fourteen.

A 'young person is someone between the ages of fourteen and sixteen. This also emphasises the different age limits used to define a child in different cases.

2. The Probation of Offenders Act, No. 10 of 1948 (POA)

This act provides information on how children are institutionalised, their circumstances, and the length of probation, among other things.

3. The Youthful Offenders (Training School) Act, No. 42 of 1944 (YOTSA).

This act represents an attempt to change such children's delinquent behaviour through education and training.

In addition to the foregoing, Sri Lanka has a number of other laws in effect, which will be discussed further below. One such act is the Prevention of Domestic Violence Act, No. 34 of 2005 (PDVA), which allows children to apply to a magistrate for a protection order.

Few other such provisions are mentioned in the amendment of 1995, Penal Code, No. 2 of 1883 introduced on behalf of children: section 308A (1) of the Penal Code provides for the offence of cruelty to children, section 350B of the Penal Code is for the offence of sexual exploitation of children, while section 360C of the Penal Code is for the offence of trafficking of children. (1)

The United Nations Convention on the Rights of the Child (UNCRC) is the most important international legal document, with 54 articles. It explains how a government should comply to secure children's rights in the areas of civil, political, economic, social, and cultural rights without discrimination, and it should assist children in reaching their full potential.

Despite the existence of international laws, the Sri Lankan court system is unable to directly comply with such international laws unless a corresponding act of parliament is passed.

Alternatively, such conventions should be directly incorporated into national law. However, it is worth noting that there are many laws in our legal system that adhere to the UNCRC.

Until the year 2000, there was no legal provision in place to protect children who were involved in armed conflicts.

Based on the UN Convention on the Rights of the Child, the Penal Code of Sri Lanka made it an offence to recruit a child for use in an armed conflict.

It was also permitted under the Evidence Ordinance to provide evidence via video recording. Another change made in accordance with the charter is the abolition of corporal punishment. The International Covenant on Civil and Political Rights (ICCPR) Act, No. 56 of 2007, recognised the best interests of the child, which is consistent with international law.

Existing practices and recent advances

Whatever is said and done, according to statistics (Daily News in 2019), "there have been 168 children under the age of 16 and 11,203 children between the ages of 16 and 22, directly admitted to prisons as un-convicted prisoners."

Furthermore, 1,933 young people between the ages of 16 and 22 were directly admitted to the prison system as convicted prisoners alongside adults."

(6) In any case, it was stated that the cabinet had addressed the issue. Anyhow, the Ministry of Justice has drafted the Children (Judicial Protection) Bill (CJPB) to address many prevailing problems in Sri Lanka. (1)

In Sri Lanka, there are currently only two functioning children's courts. The one in Battaramulla is solely for children, while the other is located at the Jaffna Magistrate Court.

In light of the importance of children's rights, the NCPA has already requested that the government establish a magistrate court and a high court in each district. (4)

How to prevent juvenile delinquency

Because juvenile delinquency is a crime, all methods of crime prevention must be used for this age group as well. When a problem escalates to a social problem,

we all are to blame in a variety of ways. The most prudent, practical, and efficient method of crime prevention is to address it before it occurs. (7), (8) In any case, the underlying causes of crime are complex.

Whatever it is, the ultimate negative consequences are devastating, and such consequences are endured by all of us as members of the given society.

As a result, the best way to address this issue is to provide adequate care, dignity, and affection to children.

The author believes that primary prevention can be achieved to some extent if each citizen is adequately educated about children's rights and the special attention that they require. Secondary prevention is directed at potential victims.

Those who are currently predisposed are assisted in avoiding imminent danger. Tertiary prevention focuses on the victims who have already committed a crime and aims to keep them away from engaging in similar activities in the future. (9)

A juvenile justice system is primarily concerned with tertiary prevention. The prevention of delinquency is not solely the responsibility of the judiciary or the police.

Other authorities, such as educational and social departments, as well as religious leaders, are directly responsible as main stakeholders for primary prevention.

Individual societal responsibilities as doctors, parents, siblings, sons, or daughters would be much more efficient because it addresses the core of the problem rather than leaving it to stakeholders to address through secondary or tertiary prevention. (10)

The legal system or justice system in Sri Lanka is changing in response to the needs of the country and the nature of the illegal acts that occur.

But it is time to ask ourselves whether we have sufficiently reformed ourselves to prevent juvenile delinquency in whatever role we play in our lives.

Conclusion

The age of the offender is critical in establishing a juvenile justice system. Its functions differ slightly from those of a typical court. Such facilities should be maintained with great care.

In any case, by implementing such a system, the rights of a delinquent must be respected at all costs. The juvenile justice system should be treated with the same respect.

However, addressing primary prevention beginning with individual responsibilities is much more useful than waiting till an illegal act is committed.

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CARTOON

Accidental versus Non-accidental Traumatic Head Injury: Subtle Demarcation Could Result in Erroneous Culpability

Sadik Siddique, Sarathchandra Kodikara, Chathula Wickramasinghe, Tharanga Nayakarathna, Sameera Gunasekara, Saman Chandradasa, Niranjala Kulatunga, Dinesh Fernando
Department of Forensic Medicine, Faculty of Medicine, University of Peradeniya, Sri Lanka

Non-accidental injury (NAI) is defined as any abuse inflicted on a person, or knowingly not prevented, by a caregiver. Injuries involving the head and abdomen are two very common causes of death in NAI. Head injuries such as subdural and subarachnoid haemorrhages are common, with or without skull fractures, and are often associated with retinal haemorrhages. The injury is not consistent with the account of its occurrence.

A 13-month-old unconscious boy was admitted to the hospital with signs of traumatic brain injury (TBI). On admission his Glasgow Coma Scale was 4/15. There were no external injuries (Fig. 01). He died three days after the incident. Autopsy revealed sub scalp haematoma and multiple, bilateral, linear skull fractures in the parietal bone (Fig. 02). The brain showed generalized oedema with bi-parietal subdural haemorrhage and diffuse subarachnoid haemorrhage (Fig. 03).

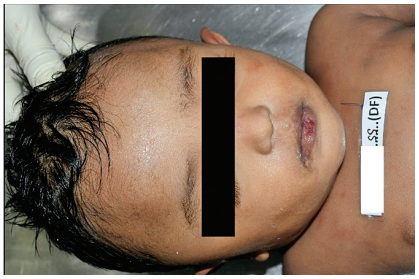

Figure 01 - Face and head without injuries

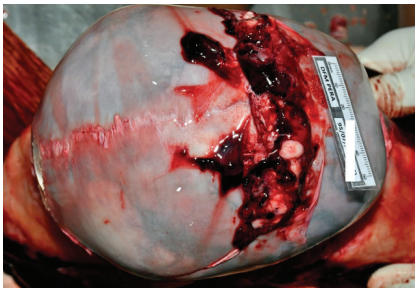

Figure 02 - Skull with linear fractures in both parietal bones

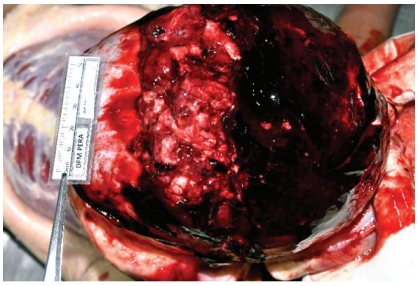

Figure 03 - Brain with subdural haemorrhage

There was an initial strong suspicion of NAI. Following a detailed investigation which included a visit to the scene with re-enactment of the incident by the eye witnesses, it was concluded as an accidental injury caused by a mentally and physically challenged relative living in the same residence, tripping and falling on the child who was playing on the floor just outside the door.

In the absence of an independent eye witness and a proper scene visit, the circumstance of death in this case could have been concluded as non-accidental or unascertained.

In such cases the law enforcement authorities would have to investigate extensively in order to determine the correct circumstance and a suspicion could have been raised towards the family members of the deceased.

Also it emphasizes the importance of taking extra protective measures by parents in order to prevent children from becoming victims of accidents caused by mentally challenged persons (who have no criminal culpability) at home.

Members are invited...

We would also like to invite the membership to contribute to the SLMA newsletter by sending,

- Articles on subject matter
- Letters to the editor-matters related to the profession
- Picture quizzes (with written consent from patients if photos are being used)
- Poems/funny stories/puzzles/cartoons etc on matters related to medical profession.

Author guidelines could be obtained from the SLMA office or the Editor (office@slma.lk or hasini.banneheke@gmail.com).

Thank you,

Professor Hasini Banneheke
(Editor-in-Chief-2021)

Internet Addiction in the Era of Online Learning: The New Problem among Children and Adolescents

Dr Jayamal De Silva
Senior Lecturer in Psychiatry
Consultant Psychiatrist
Faculty of Medical Sciences
University of Sri Jayewardenepura

The children and adolescents in Sri Lanka are getting addicted to internet in unprecedented numbers. The numbers which present to clinics have gone up according to our clinical experience. This include children of doctors as well. One reason appear to be an increase in the use of smart phones, tablets, and laptop computers in online education, which is a real requirement during the COVID-19 era.

It is not just the increase in the use and time spent on smart devices that contribute to increase in addictions. Most devices are made to be addictive, and programmes are architectured to be compulsive, and designed to be dependence producing.

For example, the Facebook which is a social media app, has immediate notifications as a feature and social engagement with a group as an essential component. By nature children and adolescents are distractible. Furthermore, they love the attention of, for that matter immediate attention of peers.

This is the very feature capitalized by the tech firms such as Facebook and WhatsApp. These apps are designed by experts, who are well versed in the psychology of human-computer interface, with the aim of constant engagement and increase of use in mind – the factors drive up usage and profit emanating from that.

The youngsters will not notice themselves getting addicted at all.

Features of addiction:

So far, only gaming has been identified in classifications such as DSM and ICD as disorders. Some authors suggest the term "problem use of technology". Nevertheless, the persons presenting with this "problem use" often fulfil many criteria for addictions common to all addiction disorders.

The term "internet compulsion" is used in some textbooks (Benjamin J. Sadock , Virginia A. Sadock, 2015). Whatever the criteria, the differentiating features of an addiction would be - personal distress, functional impairment in the form of deterioration of studies, occupational performance, and significant relationship issues which include intimate sexual relationships (John R. Geddes, Nancy C. Andreasen, 2020).

The use of smart devices would take up most of the addicted person's waking time, and they would be found pre-occupied with the use of the device or the content of the programmes at most other times.

The Internet Addiction Diagnostic Questionnaire (IADQ) lists eight criteria for the diagnosis. They include the followings.

1)the person is preoccupied with the internet

2) there is a need to spend more and more time on the internet to achieve satisfaction

3) unsuccessfully attempts to control, reduce, or interrupt the use of the internet

4) feels anxiety and depression in reducing or stopping the use of the internet

5) remains on the internet much longer than it is intended

6) endangers personal con-

tacts, job, study, career

7) conceals the truth about addiction from family members and helping professional

8) uses the internet to escape the problem

(Černja, Vejmelka, & Rajter, 2019)

Internet addiction gives rise to some other psychiatric disorders as well. The documented co-morbidities include the following: alcohol and tobacco use, depression, anxiety, and increased suicidal ideation (Park, Jeon, Bae, Seong, & Hong, 2017).

Overuse and addiction of smart devices and internet make the users gravitate to selected sites frequently. These include cybersex, online gambling, and online shopping. Furthermore, they can just be addicted to the use of smart devices. Compulsive buying and selling of stocks and information overload are also mentioned as problematic situations.

Cyber relational addiction could affect the young in a significant manner. A generation of young adults develop getting used to use of internet as the primary mode of communication and interaction within a relationship.

This might have very significant problems in their current and future intimate relationships as they would give priority to "online relationships" than real life physical relationships.

They might have other issues such as sleep deprivation, psychological distress, low self-esteem, negative self-image, and suicidal tendencies (Abi-Jaoude, Naylor, & Pignatiello, 2020).

Game addiction is a major problem among the youth- mainly the male students. In our clinical experience, it was noted that gamers who are at a "high rank" level in the country or anywhere in the world are already addicted.

They would not be able to win at an internet gaming contest unless they spend hours gaming. Some presented with major mental health issues including depression and suicidality. Almost always there were significant relationship issues either with the family or partners. Sometimes it was too late for them to realize what has happened to them.

Gaming industry sucks out money in a massive way. A little known secret is that the gamers have to buy game components by paying through the internet providers. Otherwise, they would not be able to advance through the ranking system. A massive amount of money is drawn out of Sri Lanka through the games, burdening us some more as an indebted country.

What is normal in internet use?

The use of internet for academic, professional, and social uses (to some extent) are considered normal. The problematic use sometimes include pornography and gaming.

The use of pornographic material by youth is not considered abnormal unless there is personal distress, distress to others, or functional impairment. Likewise, the use of games within limits which allow the user to have control over one's behaviour and prevent functional impairment could be considered within normal limits.

However, these "normal" users are not spared of manipulations. Unlike the conventional printed media or the TV and Radio, the visibility of used content to others, for example parents, is almost absent with the use of a smart devices.

This allows the young to be targetted by vested interest groups. Research among university students have clearly shown that people who use Facebook and other social media in excess have emotional problems and deterioration of their academic performances. Even if nothing much happens, just the exposure to advertisements or "promotions" will make us unhappy.

It would not be difficult to understand this fact when we consider the mechanism of the action of an ad. For instance, an advertisement on fairness cream capitalizes on the notion that having a dark skin is unattractive.

In order to make young men and women purchase the product, the advertiser has to drive that notion to the minds of the whole generation of young adults.

This in turn damages their self esteem and self confidence in a very big way. Exposure to any kind of media, especially social media seems to make users more and more unhappy contrary to the teaching that they are used to curtail loneliness and isolation.

All children and youth, whether addicted or not, are under extreme control of the few cooperate giants in the world. The political ideas, attitudes towards other people, concepts of morality and ethics, as well as the humane consideration of the natural world are all under the control of the rich companies now.

The targetting of youth by industrial vectors now almost completely takes place via smart devices. For example, whilst advertising of tobacco and alcohol products are banned in conventional media in Sri Lanka, the industries have accelerated promotions (non-advertised) using internet and social media.

Even the very young could be targetted using programmes such as cartoons, and the adolescents are hooked in by circulating jokes, advertorials, and pseudoscientific news articles.

A generation of children is made to believe that they know more as they can search for anything by "googling", and deceived by the notion that social media belongs to people, when in fact, all these are controlled by algorithms

functioning for industries harvesting information and controlling minds.

Machines read their minds. (Burr & Cristianini, 2019) Evidence is appearing to show that the industries use gaming as a platform for promoting their products. (Kelly & Van der Leij, 2020)

Nowadays, adolescents tend to buy gadgets, clothes, and personal items over the net. Some of them spend a substantial amount of money doing this.

Whilst being mindful of all these dangers, as adults we also tend to get lost on the Web. Parental addictions contribute to children's problems to a great extent.

Parental response towards smart devices use and it's impact on children

When parents themselves show features of problematic use or addiction, naturally the children will also take up mobile phones as a lifestyle. Sometimes, parents reinforce the use of smart devices inadvertently.

For example, the children are appreciated, most of the time quite unnecessarily, for the use of the phone or the tablet. With pride some parents describe their children as geniuses in mobile technology. This is mostly untrue and harmful.

The smart devices today are made to be extremely user friendly. Even a child with mediocre capabilities, for that matter even a child with mental retardation, can easily master most of the functions of a phone.

When she is appreciated for doing so, a child gets more motivated to spend time with the phone. Spending too much time on a smart device is a formula for disaster. These youngsters themselves would not be able to set limits; they get addicted readily as a result.

What could be done?

One good starting point would be to question our own relationship with mobile phones and the internet. As adults and parents, we must set examples. Do we allow ourselves to be manipulated by industries which harvest our own data?

Do we allow machines to control our own lives? Do we take the trouble to think about and learn about these things? This manipulation takes place all the time, and unless all of us collectively think of doing something, it would be too late for us to do anything.

For the individual child who has already developed addiction behaviours, it might be beneficial to see a therapist such as a counsellor, psychologist, or a psychiatrist.

But the clinical approach has only a very limited benefit in this situation. The harm is already been done. There are important other preventive measures we should look into broadly.

For the very young children, it would be important NOT to give smart phones as seemingly harmless "baby TV" and other programmes aimed at young children do make them dependent on these devices. For the older kids, it would be important to limit the use of devices for absolutely essential activities such as online learning.

Controlling their use of smart devices sometimes leads to arguments, friction in relationship, and outright fights. This is programmed! The reality is once the children are capable of using a device, their minds are controlled from the "other end".

When they are capable of understanding things better, it would be important to get them on board to study what's happening. Children can be taught to stay away from unhealthy content, bullies, and troublesome persons and sites.

Going a step further, they can be taught, rather allow to learn together with adults, to identify the forces, processes and individuals who "brain wash" them for profit. This empowerment approach is doubly important in dealing with adolescents.

Otherwise, the inherently inquisitive and rebellious nature of adolescence would be exploited by the vectors for their advantage.

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SRI LANKA MEDICAL ASSOCIATION
134TH ANNIVERSARY INTERNATIONAL MEDICAL CONGRESS 2021
"Professional excellence towards holistic health care"

Main Congress **Venue: BMICH, Colombo**

Day 1	**Tuesday, 21st September 2021**		
6.30 pm	**Inauguration ceremony** *Chief guest: Professor Shanthi Mendis* *Guest of Honour: Dr. Palitha Mahipala*		
Session 1:	**SLMA Oration** "Before breath becomes air … A personal odyssey of ECMO in Sri Lanka" *Dr. Tolusha Harischandra*		
Day 2	**Wednesday, 22nd September 2021**		
7.30 – 8.30am	**Registration**		
Session 2: 8.30 – 10.00am	Parallel session – Hall A CLINICAL	Parallel session – Hall B PUBLIC HEALTH	
	Symposium 1 **Communicable diseases** The changing landscape of CNS infections – *Prof. Udaya Ranawaka* Leptospirosis – *Dr. Wimalasiri Uluwattage* Rickettsial infections in Sri Lanka; an overview – *Dr. Kheminda Thilakarathne*	**Symposium 2** **"No one is safe until everyone is safe"** **Health sector preparedness and response to disasters** Enhancing disaster and emergency preparedness and response within Sri Lankan Health system: A success story - *Dr. Hemantha Herath* Mainstreaming Disaster Risk Reduction into Health Sector in Sri Lanka – *Dr. Priyanga Ranasinghe* Hospital Preparedness in Emergencies: HOPE and Beyond – Joint session *Dr. Novil Wijesekera & Frederick John Abo*	
Session 3: 10.00 –10.45am	**Keynote** **Investing in Human Capital: In the pandemic and post pandemic scenarios** ***Dr. Trina Hague***		
10.45 – 11.15am	**TEA**		
Session 4: 11.15 – 12.45pm	**Symposium 3** **Practical approach in Geriatric care** Sarcopenia and nutrition – *Prof. Matteo Cesari* Practical approach to management of Diabetes in elderly – *Dr Uditha Bulugahapitiya* Detection of frailty in primary care – *Dr. Duncan Ronald Forsyth*	**Symposium 4** **Microplastics: Are we under threat** The problem of microplastics: are we under threat? – *Dr. Sajith Edirisinghe* Current status of microplastic pollution in Sri Lanka: findings of concern on human health – *Mr W R W M A P Weerakoon* Legal provisions on micro plastics and single- use plastic waste control in Sri Lanka – *Mr. N. S. Gamage*	
Session 5: 12.45 – 1.45pm	Hall A	Hall B	Hall C
	Free Paper session 1	**Free Paper session 2**	**Free Paper session 3**
1.45-2.45pm	**LUNCH**		
Session 6: 2.45 – 3.15pm	**Plenary 1: Diabetes** **Novel concepts in the management of diabetes** *Dr. Noel Somasundaram*		
Session 7: 3.15 – 3.45pm	**Plenary 2: Obstetrics** **Respectful maternity care during childbirth** *Dr. Probhodana Ranaweera*		
Session 8: 3.45 – 4.30pm	**Dr. S. C. Paul Oration** Acute Coronary Care in Sri Lanka: revelations from the first ever national clinical audit *Prof. Priyadarshani Galappatthy*		
4.30 – 5.00pm	**TEA**		

Day 3	Thursday, 23rd September 2021		
8.00 ñ 8.30am	Registration		
Session 9: 8.30 ñ 9.00am	**Plenary 3 – Digital health care** **Digital health care in Sri Lanka** *Mr. Abdul Ahamed*		
Session 10: 9.00 -10.30am	**Hall A**	**Hall B**	**Hall C**
	Symposium 5 **Future of medicine and medical technology** Wearables in healthcare - *Prof. Gamini Rajapakse* Robotic arm and minimal invasive surgery - *Dr Alastair John* Whole exome sequencing for the diagnosis of rare diseases - *Dr Helen Stewart*	**Symposium 6** **Learning from paediatric deaths** Clinician's perspective on Paediatric deaths & review - *Prof Shaman Rajindrajith* Paediatric Death Reviews - *Dr. Rajesh Mehta* Infant Death surveillance - The Sri Lanka's model - *Dr. Kapila Jayaratne*	**Symposium 7** **Nurses/ Allied health programme Communication in action (Role play)** *Prof. R. M. Mudiyanse/ Dr. Amila Jayasinghe/ Dr. Sajith Edirisinghe /Miss Anuradha Rathnayake/ S. Krishna Pradeep/ Dr. Kanthi Hettigoda/ Dr. Amali Dalpadadu/Ms Ramya Ekanayaka*
10.30 ñ 11.00am	**TEA**		
Session 11: 11.00-12.30pm	**Symposium 8** **3D's of Geriatric Psychiatry** Depression in older adults ñ *Dr. Kapila Ranasinghe* Dementia ñ *Dr. Anuprabha Wickramasinghe* Delirium simple but complex ñ *Dr. Rashi Negi*	**Symposium 9** **Health effects of indigenous and traditional foods** Health effects of coconut oil ñ *Prof. Ranil Jayawardene* Sri Lankan cereal food habit: a double-edged sword in health ñ *Prof. Anoma Chandrasekara* Traditional fermented foods and their health benefits ñ *Prof. Terrence Madhujith*	**Symposium 10** **Nurses/ Allied health programme Teamwork** Working as a team ñ *Dr. Upul Dissanayake* Ensuring workplace safety - *Mrs R A D C Karunaratne* Balancing the act ñ *Dr. Chathurie Suraweera*
12.30ñ1.30pm	**LUNCH**		
Session 12: 1.30ñ2.30pm	**Hall A** **Free Paper session 1**	**Hall B** **Free Paper session 2**	**Hall C** **Free Paper session 3**
Session 13: 2.30ñ4.00pm	**Hall A**	**Hall B**	
	Symposium 11 **Birth Defects: An emerging challenge**	**Symposium 12** **Current concepts in spinal cord rehabilitation**	
	Overview of birth defects - *Dr. Nathalie Roos* Genetic Testing in the Care and Prevention of Birth Defects' - *Prof Vajira Dissanayke* Counting Birth defects for practice change - *Dr. Kapila Jayaratne*	Basic concepts of spinal cord injury rehabilitation - *Dr. Champika Gunawardena* Medical issues and modern concepts in spinal cord injury rehabilitation - *Dr. Gerard Weber* Physiotherapy interventions in SCI rehabilitation - *Mrs. Samanthi Jayathilake* Occupational therapy interventions in SCI rehabilitation - *Dr. Ajith Kithsiri*	
4.00pm	**TEA**		

Day 4	Friday, 24h September 2021	
8.0 –8.30 am	Registration	
Session 15: 8.30–10.00 am	**Hall A**	**Hall B**
	Symposium 13 **Management of surgical emergencies** Vascular emergencies - *Dr. Rezni Cassim* Abdominal pain in children: surgical? - *Dr. Malik Samarasinghe* Current concepts in management of Urological emergencies - *Prof. Neville Perera*	**Symposium 14** **The impact of sexual Gender-based Violence (SGBV) on maternal and child health** *Panel Discussion;* *Ms Uthpala Devi* *Dr Harsha Atapattu* *Ms Niluka Gunawardena*
Session 16: 10.00 – 10.45am	**Professor N. D. W. Lionel Memorial Oration** Revitalizing the drug pipeline: silent microbial secondary metabolites as an untapped molecular resource in discovering new therapeutics *Dr. Pabasara Kalansuriya*	
10.45-11.15am	**TEA**	
	Hall A	**Hall B**
Session 17: 11.15 –12.45pm	**Symposium 15** **Essentials in childhood: Food, play and safety** Guiding children to eat right: Why and how - *Prof V P Wickramasinghe* Active child– *Dr Pavithra Godamunne* Are the children safe? – *Dr Nayana Liyanarachchi*	**Symposium 16** **Adolescent health** Chronic disease management in adolescent health - *Prof. Susan Sawyer* Positive mental health in pandemics for adolescents-*Dr Usman Hamdani* Bridging gaps: Transition from paediatric to adult health - *Dr Surantha Perera*
12.45 –1.45pm	**LUNCH**	
1.45–3.15pm	**QUIZ**	
3.15–3.45pm	**Closing ceremony**	
3.45 pm	**Tea**	
7.00 pm	**Doctors' Concert**	

Register for the SLMA congress via; https://slma.lk/Registration/conference-registration/

Why is nutritional care important for patients with COVID-19 across the healthcare continuum?

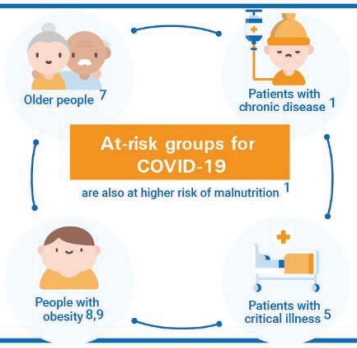
Medical Nutrition International Industry

«Prevention, diagnosis and treatment of malnutrition should be routinely included in the management of COVID-19 patients.» [1] *European Society for Clinical Nutrition and Metabolism (ESPEN)*

Who is impacted?

Up to **50%** of patients hospitalised with COVID-19 are malnourished [2-5]

Patients in intensive care can experience loss of up to **1KG** MUSCLE PER DAY [6]



Medical nutrition provides nutritional, functional and clinical benefits throughout the continuum of care[12]

- Better recovery: improved physical function and fewer complications[1,11]
- Improved quality of life[10,11]
- Fewer deaths[11], including for patients with respiratory infections[12]
- Fewer hospital admissions and shorter hospital stays[11,13]

Scientific experts highlight the need to integrate nutritional management in the care of patients with COVID-19

«Prevention, diagnosis and treatment of malnutrition should be routinely included in the management of COVID-19 patients.» [1] *ESPEN*

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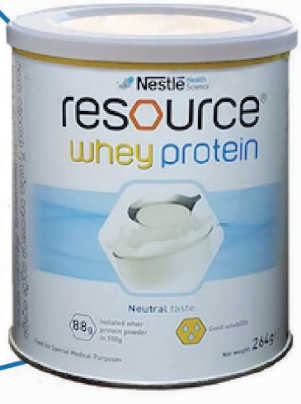

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C/o A.Baur & Co. (Private) Limited, No. 62,
Jetawana Road, Colombo 14.

www.nestlehealthscience.lk
email:optifast@baurs.com
Tel: 0114619399 | 0772992131

Call for Applications: Deshabandu Dr. C.G. Uragoda Oration on the History of Medicine 2022

This Lecture was established in the year 2012 the 125th anniversary year of the Sri Lanka Medical Association (SLMA), to mark the meeting attended by a group of doctors at the Colonial Medical Library in Colombo on 26 February 1887 to discuss the formation of the Ceylon Branch of the British Medical Association, which later became the Sri Lanka Medical Association.

The lecture was renamed the Dr. C. G. Uragoda Lecture on the History of Medicine in the year 2017 to honour the lasting contribution made by Dr. C. G. Uragoda to document the History of Medicine in Sri Lanka. In 2020, on the demise of Dr. Uragoda, the Council decided to elevate the lecture to that of an Oration and also add his national titular honour Deshabandu to the title of the Oration.

The lecture is delivered on the 26th day of February of every year.

Applications are called for the oration to be delivered on 26 February 2022. Applicants should submit a short abstract of the proposed lecture (no more than 500 words, font size 12 in Times New Roman and margins set at 1 inch right round) and a brief curriculum vita (no more than 3 pages).

The speaker should have been considerably associated with and contributed to the field of medicine in his/her chosen topic.

The SLMA wishes to encourage lectures in areas of medicine that have not been covered in previous lectures. A list of past lectures can be found on the SLMA website – http://www.slma.lk. Applicants should bear in mind that they must make themselves available to deliver the lecture on 26 February 2022 at the SLMA Auditorium as this is a lecture delivered to mark the founding of the SLMA.

Applications should be submitted to the Honorary Secretary, SLMA, on or before 31st October 2021.

Awards and Research Grants SLMA 2021

It is hereby called for applications for the following awards and grants for year 2021

CNAPT Award: Applications are invited from doctors and others for the best research publication (article, book chapter or book) in medicine or in an allied field, published in the year 2020, for the Richard and Sheila Peiris Memorial Award. Five copies of the research proposal should be submitted.

Closing date: 30th September 2021

GR Handy Award: Applications are invited from Sri Lankans, for the best publications in cardiovascular diseases published in the year 2020 for the G R Handy Memorial award. Five copies of the research proposal should be submitted.

Closing date: 30th September 2021

Glaxo Wellcome Research Award: Applications are invited from members for research proposals on topics related to medicine. Five copies of the research proposal should be submitted.

Closing date: 30th September 2021

Professor Wilfred SE Perera Fund: Applications are called from life members of the SLMA, requiring financial support to attend an academic conference, provided an abstract has been selected for presentation at the event. Five copies of the application should be submitted.

Closing date: 30th September 2021

SLMA Research Grant: This grant is offered for research proposals on topics related to any branch of medicine. The maximum financial value of the grant is LKR 100,000.00. The grant is targeted at young researchers in their early career, for proposals on applied research that could be initiated (e.g. pilot study) or completed (e.g. audit) with the grant. Five copies of the research proposal should be submitted. The project should have a supervisor.

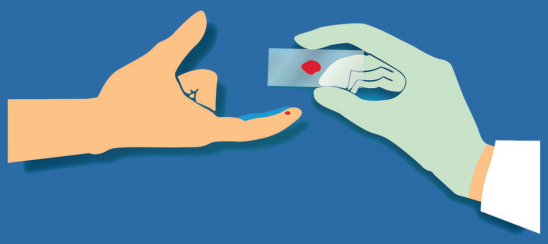
Closing date: 30th September 2021

Dr. Thistle Jayawardena SLMA Research Grant for Intensive and Critical Care: This grant is offered for a research project with relevance to the advancement of Intensive and Critical Care in Sri Lanka. The maximum financial value of the grant is LKR 100,000.00. Five copies of the research proposal should be submitted.

Closing date: 30th September 2021

For further details please contact:

The Honorary Secretary,
SLMA
"Wijerama House",
6, Wijerama Mawatha,
Colombo 7
Telephone: 0112693324



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Human–Elephant Conflict in Sri Lanka

This was from the webinar organized by the SLMA Young Members' Forum on 4th July 2021

Dr. Prithiviraj Fernando
(MBBS, MSc, PhD)
Chairman
Centre for Conservation and Research
Tissamaharama

Introduction

Human-elephant conflict (HEC) is a complex issue and has been around ever since people started growing crops in areas with elephants. In Sri Lanka, HEC has been steadily increasing for decades. Currently it is a major socio-economic, conservation and political issue and has become more and more intractable over the years. HEC has shown a rapid increase especially in the last few years. The highest annual human deaths due to HEC and the highest reported elephant deaths were reported in 2019 with 121 human and 405 elephant deaths. Currently Sri Lanka records the highest annual elephant deaths and the second highest human deaths due to HEC in the world, and hence is considered to have the highest level of HEC globally, particularly in consideration of the population size of people and elephants.

Impacts of HEC

HEC results in detrimental impacts on both people and elephants. The main issue people have with HEC is the loss of crops due to raiding by elephants, hence the economic impact. Added to this is damage to house and property due to attempts at raiding of stored grain by elephants. HEC also negatively impacts the health of people. Injury and death of people by elephants occur during raiding as well as due to accidental encounters. In addition to these direct impacts, people also suffer from indirect ways. When farming in areas with elephants, people have to guard their crops throughout the night. In addition to undertaking the labours of cultivation during the day, this imposes an added burden on them. In many cases, the farmland is far away from the place of residence. Therefore the man of the house has to be out every night, guarding the field, which may lead to family and social issues. When he is guarding the field, he is fearful of what maybe happening at home and whether elephants could be attacking the house. Similarly the rest of the family is always apprehensive about the safety of those guarding crops. Additionally, people are fearful of venturing out of the house after dark because of elephants. Children may have poor school attendance, as they could not get to school because of elephants. Even when sleeping at home they have to be ever watchful and mindful whether every sound is that of an approaching elephant. Therefore the fear of elephants can be a constant threat and lead to long-term stress and detrimental impacts on mental health. HEC may also result in lost opportunity costs. Due to the presence of elephants and likely raiding, farmers may not be able to cultivate particular crops which maybe more profitable. A worker may not be able to undertake a particular type of work as it may lead to exposure to elephants. Direct and indirect losses due to HEC may lead to exacerbation of poverty, which again impacts the health of people.

Similarly elephants also suffer in many ways due to HEC. Elephants get their legs and trunks caught in snares. The wire noose

that tightens around the appendage cuts off blood supply, which may lead to gangrene and death or festering chronic infections due to the wire getting embedded in the flesh. One of the leading causes of elephant deaths in Sri Lanka is 'jaw bombs', which is an improvised explosive device that is hidden in a vegetable or fruit. When an animal bites on it, it explodes inside the mouth, fracturing the jaws, destroying the tongue and soft tissues of the mouth, and shattering the teeth and palate. Animals getting caught to these jaw bombs suffer immensely and finally die of dehydration and starvation. Often elephants fall into agricultural wells, and die from getting hit by trains and motor vehicles. Another cause of elephant deaths that is becoming increasingly common is electrocution. People put up lethal fences by connecting mains grid electricity to barbed wire fences, which not only kills elephants but many times the perpetrators themselves. Elephants get poisoned and shot at and a handful of lead, from pellets that get embedded can be recovered from many dead elephants. In addition to these direct impacts, elephants also live their entire lives in fear. However hot the day is, they have to wait till nightfall to venture out to take a sip of water. Whenever people see them they are harassed and chased. Many of the HEC 'mitigation' actions undertaken such as translocation and elephant drives are extremely detrimental to elephants and results in elephants being chased out of their home ranges; a severe harassment.

HEC management

The HEC mitigation approach we have followed so far was formulated by a committee appointed by the government in 1959. It recommended that elephants should be driven into designated protected areas and confined. However, perhaps understanding that their recommendation was not based on data on elephants, the committee also suggested that studies be conducted to assess elephant numbers and distribution. However, for over 60 years since, we have blindly followed the guidelines suggested, without assessing the results.

Elephant drives

The main method of limiting elephants to protected areas is 'elephant drives'. Such elephant drives have been conducted for many decades in Sri Lanka. In a drive, up to hundreds of people go into the forests where the elephants are living and create a massive disturbance by shouting, lighting thousands of firecrackers and shooting at the elephants to make them run. This goes on day after day, subjecting elephants to severe and continued harassment till they move away. The drivers follow the elephants, chasing them, till finally they are driven out of their home range and into a protected area. In addition to these large-scale drives which may take months to more than a year to complete, small scale drives to drive elephants short distances or from a location, are undertaken practically on a daily basis.

Research conducted over the past two decades, has shown that elephant herds consisting of adult females and young when driven out of their home ranges and confined to protected areas, lose body condition and die of starvation. This fate is not limited to elephants driven into protected areas but also suffered by the herds that were resident within the protected area before the drive, as a result of exceeding the carrying capacity of protected areas (Fernando & Pastorini 2020a).

Translocation

Elephants have a sexually dimorphic social structure with the females and young living as herds and the males leaving the herds at puberty. As adults, males lead largely a solitary life. HEC incidents, particularly property damage and human injury and deaths and the larger extent of crop raiding, is due to some of these adult males. Of particular relevance to HEC mitigation is the failure to remove problem-causing adult males from their home ranges in areas with people and confine them to protected areas. When an elephant creates a major problem such as repeatedly breaking houses or killing people, a decision is taken to capture and translocate the offender. Invariably such elephants are adult males. The offending animal is then sedated, captured and put in a truck and taken to a remote protected area and released. However, research has shown that such translocations are mostly unsuccessful as they do not stay in the protected areas but return to the site of capture or create conflict in other areas (Fernando et al. 2012). In the past decade or so, the failure of translocating males to protected areas has led to them being released to holding grounds. However, this too has completely failed with most of the males so released escaping or starving to death inside.

Elephant barriers

As elephants driven inside protected areas did not stay there, but back-tracked to their original locations, the Department of Wildlife Conservation (DWC) started constructing electric fences on the boundary of protected areas since the early 1990s. Currently, there are around 4,500 km of fencing erected by the DWC as a HEC mitigation measure. A significant extent of these electric fences is on the administrative boundaries of the DWC. In many instances, such fences are between DWC and Forest Department areas and have forest and elephants on both sides of the fence. As there is no barrier between the elephants on

the 'wrong side' of the fence and they cannot use any part of their home range 'inside' the fence, the elephants are driven to look for resources in developed areas in order to survive. Therefore, fences inside forests actually increase the conflict.

Many other barriers have been proposed to prevent elephants from raiding crops. Among them are bio-fences consisting of thorny plants grown as a hedge, 'chillie fences' with ropes daubed with chille paste, 'bee-hive fences' with bee boxes strung along a fence line, physical fences constructed of steel girders, rubble walls and ditches. However, none of these have proven to be effective and/or practical to implement along any significant length.

Some are extremely expensive and/or require a very high level of maintenance. Therefore, in practice none of these barriers have had any success as a HEC mitigation method at a relevant scale. In contrast, electric fencing has been very effective and adaptable to varied situations and physical conditions. However, even electric fencing also fails when used incorrectly, as in the case of fences with elephants on both sides. Since the function of an electric fence is to protect settlements and crop fields, the fences need to be located at the boundary between them and habitat used by elephants and not inside forests.

Electric fences constructed according to the principle of providing protection where protection is needed, hence along the boundaries of settlements and agricultural areas, have been effective in preventing raids by elephants. Such community-based electric fences provide a way of effectively mitigating HEC. However, because of the technical issues in putting up an electric fence and the costs involved, communities who suffer from HEC cannot construct such fences by themselves. Therefore, they have to be assisted through agencies responsible for people's welfare such as Divisional Secretariats, Department of Agrarian Services, Irrigation Department and the Mahaweli authority (Fernando 2020).

Current situation

After over 60 years of attempting to restrict elephants to protected areas, today 70% of elephant range occurs in areas with resident people, thus demonstrating its complete failure. HEC occurs entirely outside protected areas. In areas such as Polonnaruwa, Puttlam and Hambantota, electric fencing on protected area boundaries has been mostly completed for many years, but HEC continues to be a major issue. The failure of limiting elephants to protected areas, in spite of an immense effort by the DWC over many decades, is due to a number of biological and ecological reasons including elephant behaviour, and issues with carrying capacity.

Future direction

Effective HEC mitigation requires a paradigm shift. For all intents and purposes HEC is a problem faced by people, as evidenced by the HEC mitigation methods we adopt and the scant regard we pay towards HEC impacts on elephants. HEC is very widespread in Sri Lanka and is a problem faced by many millions of people sharing the land with elephants. Therefore, if HEC is to be effectively mitigated, all stakeholders of HEC must play an active part and the main responsibility for mitigation has to be borne by the communities who are affected by it. They need to be supported by the institutions whose primary responsibility is the people's wellbeing, such as social, welfare, agricultural and economic development agencies. Administrative and regulatory authorities need to ensure that mitigatory and preventive strategies are adhered to. Political authorities need to allocate the resources needed to the appropriate stakeholders and provide leadership. Researchers need to provide scientific information that can guide management and development. Mass media needs to be activated to increase awareness of the relevant aspects. Conservation agencies need to identify the instances that need direct management of elephants and conduct such management in a responsible manner.

A step forward in this direction was taken by the appointment of a committee to develop a National Action Plan for HEC mitigation by H.E. the President in July 2020. The committee prepared a holistic and comprehensive Action Plan based on the best scientific evidence to date and considering the successes and failures of past HEC mitigation efforts. Its implementation is expected to significantly reduce the level of HEC in the country.

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+94 112 693 324,
office@slma.lk

9 772550 277003