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SLMA NEWS

THE OFFICIAL NEWSLETTER OF THE SRI LANKA MEDICAL ASSOCIATION

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Cover Story

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SLMA Theme 2018

Shifting Focus from Diseases to Patients: Today's Vision, Tomorrow's Reality

OFFICIAL NEWSLETTER OF THE SRI LANKA MEDICAL ASSOCIATION

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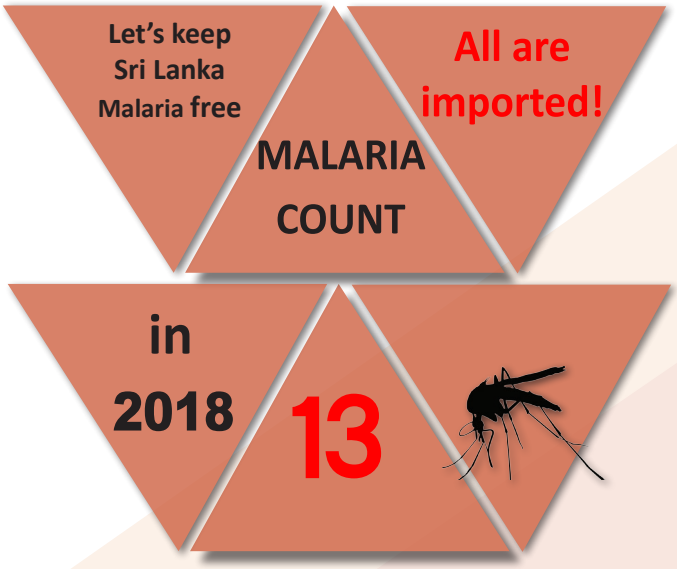

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President's Message

Dear Member,

We are two months away from the 131st Anniversary International Medical Congress. The Steering Committee is very busy putting the final touches to the programme, full details of which could be viewed on our website. The Run and Walk, on the theme "Eat Wise and Drop a Size", will be held on Sunday 24th June 2018 at BMICH. I very much look forward to seeing all of you at both these events and take this opportunity to invite your family to join in the Run and Walk and also for the Doctors Concert on Saturday 28th July 2018, 7pm onwards at the Galadari Hotel, Colombo.

May 2018 saw the conduct of the routine academic activities with much success. The Regional Meeting was held at Base Hospital Kattankudy, and I thank the Eastern Province SLMA Regional Representative Dr H R Thambawita, Consultant Surgeon, for organizing this very successful meeting. The Ceylon College of Physicians collaborated with us in conducting a very well attended Monthly Clinical Meeting at the Lionel Memorial Auditorium. The Palliative Care Task Force convened a stakeholder consultation with all Colleges and Associations to get their expert opinion on upgrading the "Palliative Care Manual for Management of Non-Cancer Patients: A Guide for Health Care Professionals", in preparation for its 2nd Edition. I also wish to make special reference to the Workshop for Pharmacy Sales Assistants organized by the Medicinal Drugs Committee of the SLMA, in collaboration with the Sri Lanka Chamber of Pharmaceutical Industry (SLCPI), the Sri Lanka Association of Pharmacy Owners and Lanka Pharmaceutical Traders Association. This landmark event fulfills a dire need in the dispensation of drugs and devices through the pharmacy system in Sri Lanka. On behalf of the SLMA membership I place on record my thanks to Professor Gita Fernando and her team for the successful completion of the event.

The Committee also organized a therapeutic update on Strokes. The SLMA collaborated with the WHO Sri Lanka Country Office to conduct a discussion/ brainstorming session on Human Resources for Healthcare (HRH), to gather the views from the private healthcare providers in Sri Lanka; both individual and institutional. This was done as a part of the wider process of development of a HR Road Map for Sri Lanka with special focus on Primary Care in Sri Lanka, on the invitation of the Ministry of Health.

Amidst these routine activities I thought it opportune to bring to the attention of the membership two issues which we as a profession should be mindful of:

1. Web based audio-visual medical consultations and issuing of e-prescriptions

The SLMA had an opportunity to comment publicly on the issue following a news item appearing in a leading English language Sunday Newspaper in the month of May 2018. This method of healthcare delivery, made possible by entrepreneurship and technological advancement, is fast developing in Sri Lanka. This issue needs objective, careful and constructive discussion within the medical profession and between the medical profession and other stakeholders (IT Professionals, Legal Professionals etc. etc.). The areas of particular concern are eligibility to undertake web-based audio-visual consultation, patient confidentiality and continuity of care. In the era of 'big data' the potential for accessibility by third parties to any and all types of data (with or without consent) is not a possibility but a reality. Therefore, it is of utmost importance that the medical profession must seek practical ways and means of getting involved in not only contributing towards discussing the issue but also getting proactively involved in setting up mechanisms/frameworks to protect the confidentiality of medical records we hold or are being held on our behalf by third party service providers. We should of course not discourage the inevitable advancement of medical technology but must be wise and smart enough to find acceptable ways and means to utilize it to deliver high quality value added healthcare to suit Sri Lankan healthcare delivery and consumption needs. At present the situation in Sri Lanka on this issue could be best described as 'fluid' with quite a few grey areas.

2. Right to Information Act, No. 12 of 2016

In the context of the issues highlighted above in (1), I wish to quote Part II (Denial of access to information) Section 5 (1) (e) from the RTI; 'The information could lead to the disclosure of any medical records relating to any person, unless such person has consented in writing to such a disclosure'.

The use of web-based audio-visual medical consultation and issuing of e prescriptions presumably will be undertaken after the patient and doctor have consented to the process and also consented to using the provided platform by the service provider. The information generated during this process will of course be held by the third-party service provider.

In this scenario the application of the clauses of the RTI act which is now the law of the land has the potential to breech the principles of the 'Doctor-Patient Relationship' upon which provision of all medical care is based.

I believe that members of the SLMA should very seriously and carefully ponder on the way forward with regard to the issues highlighted above. We invite you to share your opinion on these issues with us. In the context of the fact that the SLMA is the undisputed academic, professional, ethical and moral compass and guardian of the medical profession in Sri Lanka, we need to weigh in on these issues with some urgency.

With kind regards
Dr Ruvaiz Haniffa
President, SLMA

Commonwealth Centre for Digital Health

COMMONWEALTH CENTRE FOR DIGITAL HEALTH
http://www.cwcdh.org

The Commonwealth Centre for Digital Health (CWCDH) was launched on 20th April 2018 as a side event to the Commonwealth Heads of Government Meeting 2018 on 'Global Health Security & the Digital Health Society 2030 - Innovation & Investment for One Planetary Health & Universal Health Coverage' at the Royal Over-Seas League (ROSL) in London. The event was attended by His Excellency Maithripala Sirisena, President, Democratic Socialist Republic of Sri Lanka; The Right Honourable Dr. Christopher Fearne, Deputy Prime Minister and Health Minister of Malta; the Secretary of Health of Uganda, Officials from the Governments of UK, Australia, New Zealand, High Commissioners, Representatives of National Medical Associations of Commonwealth Countries and over 100 other participants representing various health professional organisations, international agencies, academia, and industry.

Dame Davis, and Professor Dissanayake co-chaired the side event. Mr. Gilhooly and Dr. Allotey co-moderated the panel discussions that followed the launch.

Issuing a special message on the occasion, His Excellency Dr. Tedros Adhanom Ghebreyesus, Director General, of the World Health Organization (WHO), stated the following: "As you know, Universal Health Coverage is WHO's top priority. Our aim is a world in which all people receive the high-quality health services they need without suffering financial hardship. This year marks the 40th anniversary of the Alma-Ata Declaration which highlighted the vital importance of primary healthcare. Primary care remains the foundation of Universal Health Coverage. But today we have an extra tool that we did not have 40 years ago, digital technology.

Prof. Vajira H. W. Dissanayake launching the CWCDH.

His Excellency Dr. Christopher Fearne delivering the Keynote Address.

Mobile technologies and telemedicine can make a huge difference in helping to reach people in the remotest villages with medical services. Digital technologies can also be used to detect and respond rapidly to outbreaks and other health emergencies, to train health workers, and to improve health data. More than 120 countries including many Commonwealth states have now developed digital health strategies. A key challenge is to make sure that new technologies are made to work for the poorest and the most vulnerable and not just the rich. In that regard, I welcome the establishment of the Commonwealth Center for Digital Health with its focus on fostering innovative technologies for health that are appropriate for low income countries. Thank you for your commitment. WHO stands ready to work with you to harness the power of digital technologies for a healthier, safer and fairer world."

Issuing a special message on the occasion, Her Excellency The Right Honourable Patricia Scotland QC, Secretary General of The Commonwealth of Nations, stated the following: "Digital health systems are an increasingly important component in the delivery of health services and care. A range of Commonwealth contributions is enabling our member countries to adopt such solutions. These facilitate more equitable access for all communities in accordance with the values and principles of our Commonwealth Charter. The proposed Commonwealth Centre for Digital Health (CWCDH) has the potential to make new opportunities and tools available to health professionals in our member countries. Initiatives such as this exemplify the Commonwealth Spirit of Innovation which we encourage."

The Commonwealth Digital Health Initiative was founded by Prof. Vajira H. W. Dissanayake as the flagship project of his Presidency of the Commonwealth Medical Association in October 2016.

The CWCDH Team - From Left to Right: **Denis Gilhooly** (Chief Strategy Officer); **Prof. Vajira H. W. Dissanayake** (Chairman); Anoop Singh, (Chief Operating Officer); and Sinclair Stockman (Chief Technology Advisor).

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Commonwealth...

- From Left to Right: **Denis Gilhooly** (Founder & CEO, Global Health 2030 Innovation Taskforce-Mobile Action on Pandemic (MAP) 2030 alliance, and Chief Strategy Officer, Commonwealth Centre for Digital Health (CWCDH)); **Prof. Vajira H. W. Dissanayake** (President, Commonwealth Medical Association, and Chairman, CWCDH); **Dr. Pascale A. Allotey** (Director, International Institute for Global Health (IIGH) at United Nations University (UNU), Malaysia); **H.E. Maithripala Sirisena** (President of the Democratic Socialist Republic of Sri Lanka); **Professor Dame Sally Davis** (Chief Medical Officer (CMO) for England, Chief Medical Advisor to the UK Government, Co-Convener, United Nations Interagency coordination Group on Antimicrobial Resistance (AMR)); and **H.E. Dr. Christopher Fearne** (Deputy Prime Minister and Health Minister, Malta).

The establishment of the Commonwealth Centre for Digital Health in London during the Commonwealth Heads of Government Meeting (CHOGM) 2018 would ensure that it would be a lasting legacy of CHOGM 2018.

More information on the centre can be found on its website http://www.cwcdh.org

SLMA signs Memorandum of Understanding with FAIRMED

FAIRMED Foundation's involvement in Leprosy Control in Sri Lanka dates back to 1981. Since then, under an agreement signed with the Ministry of Health, Sri Lanka, FAIRMED Foundation has been providing technical and financial assistance to the Anti-Leprosy Campaign (ALC), Ministry of Health and district level government health authorities (RDHSs) for leprosy control activities.

In addition to that, since the year 2013, FAIRMED Foundation, in collaboration with the Sri Lanka Medical Association (SLMA), has provided research grants for Neglected Tropical Diseases (NTDs) with the objective of encouraging Sri Lankan medical personnel to undertake operational research with regard to local NTDs whilst prioritizing Leprosy and Leishmaniasis. The research grants are provided via the agreement signed between FAIRMED Foundation and SLMA.

On 1st May 2018, FAIRMED Foundation renewed the agreement signed with the SLMA with minor modifications to the agreement.

According to the new agreement both Sri Lankan medical and non-medical individuals can apply for research grants through the SLMA.

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Symposium on "Chickungunya: Another viral fever spread by Aedes mosquitoes"

Dr. Rohini Wadanamby
Consultant Clinical Microbiologist
(Organizer of the symposium on behalf of the Expert Committee on Communicable Disease/SLMA)

A symposium on Chickungunya took place on 26th of April 2018, at 12.00 noon at the Lionel Memorial Auditorium of SLMA. This was organized and conducted by the Expert Committee on Communicable Diseases of the SLMA and was the second symposium for 2018. It was a successful educational event with an attendance of over 100 participants.

Speakers at the symposium were as follows:

1) Dr. Samitha Ginige, Consultant Epidemiologist, Epidemiology Unit

Global picture, local epidemiology, case burden and effects on work force and vector control were discussed and highlighted.

2) Dr. Damayanthi Idampitiya, Consultant Physician, NIID

Pathogenicity, clinical picture, dengue and chickungunya, management of acute, sub-acute and chronic cases were discussed and explained.

Dr. Rohitha Muthugala, Consultant Virologist, Teaching Hospital Kandy

Description of the virus, laboratory diagnosis and preventive aspects for virus control were discussed and explained.

Discussion of the symposium was chaired by Dr. Neomal Gunaratne where participants and the speakers had a very fruitful dialogue about the topic.

Chairman of the ECCD/SLMA Dr. Ranjith Perera presented Certificates of Appreciation to the speakers.

The event was sponsored by Commercial Marketing and Distributors (Pvt) Ltd.

A Synopsis of the Presentations

Chikungunya is an infection caused by the chikungunya virus (CHIKV).

The disease was first identified in 1952 in Tanzania. The name is derived from the Kimakonde language and means "to become contorted".

Characteristic symptoms of chikungunya fever may result in an acute phase as well as a chronic phase of the illness. Within the acute phase, two stages have been identified: a viral stage during the first five to seven days, during which viraemia occurs, followed by a convalescent stage lasting approximately ten days, during which time the symptoms improve and the virus cannot be detected in the blood. Typically, the disease begins with sudden high fever that lasts from a few days to a week, and sometimes up to ten days. The fever is usually above 39 °C (102 °F) and sometimes reaching 40 °C (104 °F) and may be biphasic—lasting several days, breaking, and then returning. Fever occurs with the onset of viraemia, and the level of the virus in the blood correlates with the intensity of symptoms in the acute phase. When IgM, an antibody that is a response to the initial exposure to an antigen, appears in the blood, viraemia begins to diminish. However, headache, insomnia and an extreme degree of exhaustion remain, usually for about five to seven days.

Following the fever, strong joint pain or stiffness occurs; it usually lasts weeks or months, but may last for years. The joint pain can be debilitating, often resulting in near immobility of the affected joints. Joint pain is reported in 87–98% of cases, and nearly always occurs in more than one joint, though joint swelling is uncommon. Typically the affected joints are located in both arms and legs, and are affected symmetrically. Joints are more likely to be affected if they have previously been damaged by disorders such as arthritis. Pain most commonly occurs in peripheral joints, such as the wrists, ankles, and joints of the hands and feet as well as some of the larger joints, typically the shoulders, elbows and knees. Pain may also occur in the muscles or ligaments.

A rash occurs in 40–50% of cases, generally as a maculo-papular rash occurring two to five days after the onset of symptoms. Digestive symptoms, including abdominal pain, nausea, vomiting or diarrhoea, may also occur. In more than half the cases, normal activity is limited by significant fatigue and pain. Infrequently, inflammation of the eyes may occur in the form of iridocyclitis or uveitis and retinal lesions may occur.

Temporary damage to the liver may occur. Rarely, neurological disorders have been reported in association with chikungunya virus, including Guillain–Barré syndrome, nerve palsies, meningo-encephalitis, flaccid paralysis and neuropathy. In contrast to dengue fever, chikungunya fever very rarely causes haemorrhagic complications. Symptoms of bleeding should lead to consideration of alternative diagnoses or co-infection with dengue fever or coexisting congestive hepatopathy.

The risk of death is around 1 in 1,000. The very young, the old, and those with other health problems are at risk of more severe disease.

The virus is spread between people by two types of mosquitos: Aedes albopictus and Aedes aegypti.

They mainly bite during the day. The virus may circulate within a number of animals including birds and rodents. Diagnosis is by either testing the blood for the virus's RNA or antibodies to the virus. The symptoms can be mistaken for those of dengue fever and Zika fever. After a single infection it is believed that most people become immune.

The best means of prevention is overall mosquito control and the avoidance of bites in areas where the disease is common. This may be partly achieved by decreasing mosquitoes' access to water and with the use of insect repellent and mosquito nets. There is no vaccine and no specific treatment. Recommendations include rest, fluids, and medications to help with fever and joint pain.

Chronic disease

Observations during recent epidemics have suggested chikungunya may cause long-term symptoms following acute infection. This condition has been termed chronic chikungunya virus-induced arthralgia. Common predictors of prolonged symptoms are advanced age and prior rheumatological disease.

Diagnosis

Chikungunya is diagnosed on the basis of clinical, epidemiological, and laboratory criteria.

Clinically, acute onset of high fever and severe joint pain would lead to a suspicion of chikungunya. Epidemiological criteria consist of whether the individual has travelled to or spent time in an area in which chikungunya was present within the last twelve days (i.e. the potential incubation period). Laboratory criteria include a decreased lymphocyte count consistent with viraemia. However a definitive laboratory diagnosis can be accomplished through viral isolation, RT-PCR, or serological diagnosis.

The differential diagnoses may include infection with other mosquito-borne viruses, such as dengue and Zika virus infections or malaria, leptospirosis. Chronic recurrent polyarthralgia occurs in at least 20% of chikungunya patients one year after infection, whereas such symptoms are uncommon in dengue.

Virus isolation provides the most definitive diagnosis in early phases of the illness (within the first five days of the onset of fever), but takes one to two weeks for completion and must be carried out in biosafety level III laboratories. RT-PCR is the main method of diagnosis during first five days of the onset of fever. Blood collected in to an EDTA tube will be the appropriate sample. Results can be obtained within a day.

Serological diagnosis usually requires blood samples in the late phase of the illness and a serum sample is preferred. ELISA assay is used to detect chikungunya-specific IgM in the blood or serum. Serum IgM is detectable from 5 days to months after the onset of symptoms. False positives can occur with infection due to other related alpha viruses, such as O'nyong'nyong virus and Semliki Forest virus. Presently, there is no specific way to test for chronic signs and symptoms associated with Chikungunya fever although non-specific laboratory findings such as C reactive protein and elevated cytokines can correlate with disease activity.

Prevention

Most effective means of prevention are protection against contact with the disease-carrying mosquitoes and controlling mosquito populations by limiting their habitat. Mosquito control focuses on eliminating stagnant water where mosquitoes lay eggs and develop as larva; if elimination of such stagnant water is not possible, insecticides or biological control agents can be added.

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Symposium on Chickungunya...

Methods of protection against contact with mosquitos include using insect repellents with substances such as DEET, icaridin, PMD (p-menthane-3,8-diol, a substance derived from the lemon eucalyptus tree), or IR3535. However, increasing insecticide resistance presents a challenge to chemical control methods. Wearing bite-proof long sleeves and trousers also offers protection, and garments can be treated with pyrethroids, a class of insecticides that often has repellent properties. Vaporized pyrethroids (for example in mosquito coils) are also insect repellents. As infected mosquitos often feed and rest inside homes, securing screens on windows and doors will help to keep mosquitoes out of the house. In the case of the day-active A. aegypti and A. albopictus, however, this will have only a limited effect, since most of the contact between mosquitoes and humans occur outdoors.

No approved vaccines are available.

Treatment

Currently, no specific treatment for chikungunya is available. Supportive care is recommended, and symptomatic treatment of fever and joint swelling includes the use of non-steroidal anti-inflammatory drugs such as naproxen, non-aspirin analgesics such as paracetamol (acetaminophen) and fluids. Aspirin is not recommended due to the increased risk of bleeding. Despite anti-inflammatory effects, corticosteroids are not recommended during the acute phase of disease, as they may cause immunosuppression and worsen infection.

Passive immunotherapy has potential benefit in treatment of chikungunya. Studies in animals using passive immunotherapy have been effective, and clinical studies using passive immunotherapy in those particularly vulnerable to severe infection are currently in progress. Passive immunotherapy involves intravenous administration of anti-CHIKV hyper-immune human antibodies (immunoglobulins) to those exposed to a high risk of chikungunya infection. No antiviral treatment for chikungunya virus is currently available.

Chronic arthritis

In those who have more than two weeks of arthritis, NSAIDs and simple analgesics can be used to provide partial symptom-relief in most cases. Methotrexate, a drug used in the treatment of rheumatoid arthritis, has been shown to have some benefit in treating inflammatory polyarthritis resulting from chikungunya. For severe forms and long term arthritis, steroid therapy is also beneficial.

Aneurin Bevan – The "Father" of the British National Health Service

On the "appointed day", 5th July 1948, having overcome political opposition from both the Conservative Party and from within his own Labour Party, and after a dramatic showdown with the British Medical Association (BMA), which had threatened to derail the National Health Service scheme before it had even begun, as medical practitioners continued to withhold their support just months before the launch of the service, Bevan's National Health Service Act 1946 came into force.

After eighteen months of on-going dispute between the Ministry of Health and the BMA, Bevan finally managed to win over the support of the vast majority of the medical profession by offering a

couple of minor concessions, but without compromising on the fundamental principles of his National Health Service proposals.

Bevan later gave the famous quote that, to broker the deal, he had "stuffed their mouths with gold". Some 2688 voluntary and municipal hospitals in England and Wales were nationalised and came under Bevan's supervisory control as Health Minister.

Given below are two of his memorable quotes about the British National Health Service which would be valid for any National Health Service, especially the one in Sri Lanka.

- "Illness is neither an indulgence for which people have to pay, nor an offence for which they should be penalised, but a misfortune, the cost of which should be shared by the community".
- "The collective principle asserts that no society can legitimately call itself civilised if a sick person is denied medical aid because of lack of means".

Compiled by Dr. B.J.C.Perera

Some of the content was extracted from https://en.wikipedia.org/wiki/Aneurin_Bevan Accessed on 16th February 2018

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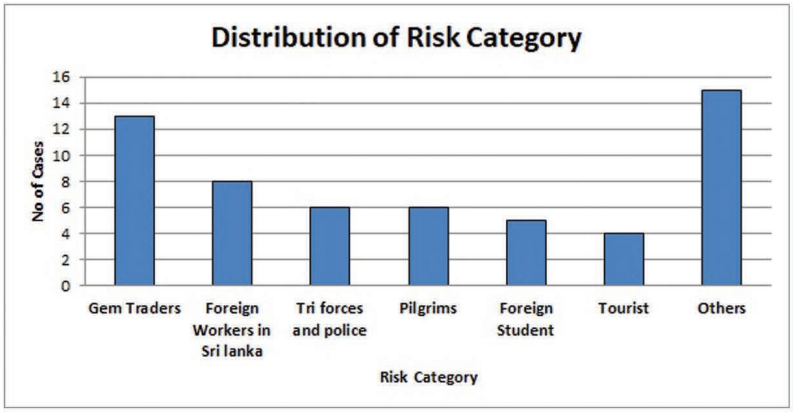

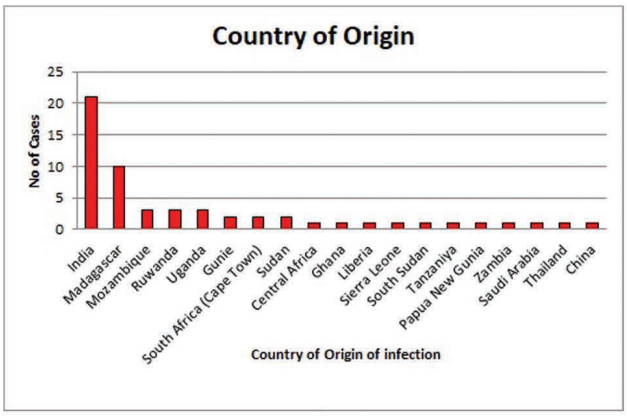

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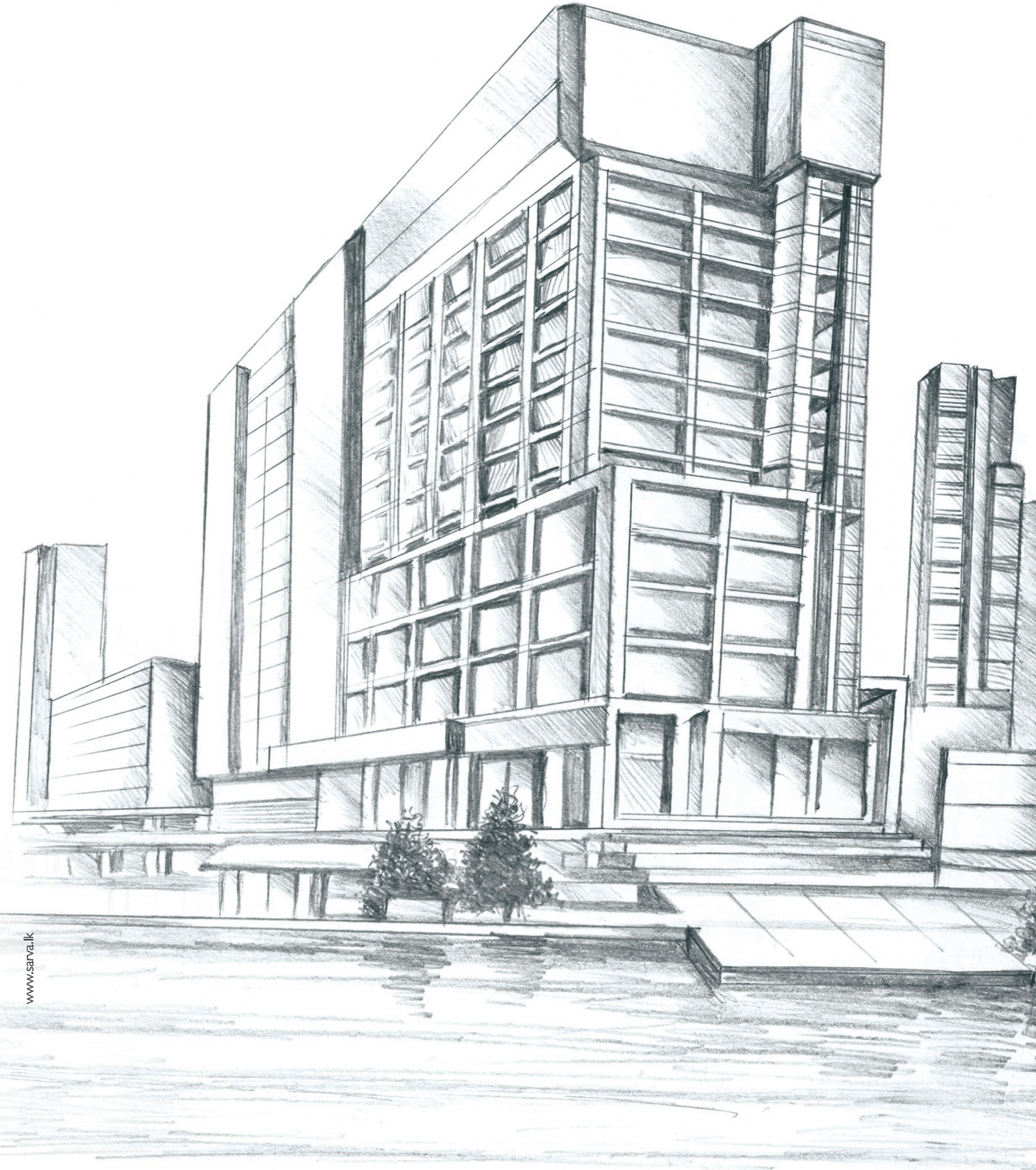

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SLMA Regional Clinical Meeting

Dr. Shihan Azeez,
Assistant Secretary, SLMA
Dr. Sumithra Tissera,
Assistant Treasurer, SLMA

The third SLMA Regional Clinical Meeting organized in collaboration with the Ministry of Health, Uva Province and the Diyatalawa Clinical Society, was held at the Auditorium of Base Hospital Diyatalawa on 27th March 2018. Approximately 70 doctors participated in the event. The programme commenced with welcome addresses delivered by Dr. D.M.C. Gamage, Consultant Physician, Base Hospital, Diyatalawa, Dr. Ruvaiz Haniffa, President SLMA and Dr. Ranjith Amarakoon, Medical Superintendent, Base Hospital Diyatalawa.

In the first session chaired by Dr. Ruvaiz Haniffa and Dr. Janitha Tennakoon, Regional Director of Health Services, Badulla, the following lectures were delivered :-

- "Management of DHF" - Prof. Rasanayake Mudiyanse, Professor in Paediatrics - Faculty of Medicine, University of Peradeniya
- "Rational Use of Antibiotics" - Dr. Kishani Dinapala, Consultant Microbiologist, General Hospital, Monaragala
- "Asthma ... an update" - Dr. Neranjan Dissananyake, Consultant Respiratory Physician, Provincial General Hospital Badulla.

The second session was chaired by Dr. D.M.C. Gamage and Dr. Malik Fernando, Past President, SLMA. The following presentations were made:-

- "A patient with arthritis ... what to do and what not to do" - Dr. Uthpala Dissananyake, Consultant Rheumatologist, District General Hospital, Nuwara Eliya
- "Medical Ethics" - Dr. Panduka Karunanayake, Senior Lecturer Department of Clinical Medicine, Faculty of Medicine, Colombo
- "A practical approach to managing acute heart failure" - Dr. Dhananjanie Seneviratne, Consultant Cardiologist, General Hospital, Badulla
- "Universal Health Coverage" - Dr. Nimal S. Gamagedara, PDHS Uva/ Consultant Community Physician

A short documentary introducing the website of the SLMA Expert Committee on Snakebite was screened during the tea break.

The closing remarks were made by Dr. Hasini Banneheke and the meeting concluded with the vote of thanks by Dr. Sugath Bandara.

All participants were awarded a certificate of participation with CPD points.

The meeting was sponsored by SMM Halcyon (Pvt) Ltd.

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SLMA 131st ANNIVERSARY INTERNATIONAL MEDICAL CONGRESS

Programme

26th - 29th July, 2018 at Galadari Hotel, Colombo

Pre Congress Workshops			
Friday 1st June 2018			
Workshop 1	8.30am-4.00pm	**Wound Care**	College of Surgeons of Sri Lanka
Monday 23rd and Tuesday 24th July 2018			
Workshop 2	9.00am-4.00pm	**Communication skills workshop**	PGIM
Wednesday 25th July 2018			
Workshop 3	9.00am-12.00pm	**Establishing and sustaining meaningful Patient and Public Involvement and Engagement (PPIE) in Research**	Lionel Memorial Auditorium, SLMA
Workshop 4	9.00am – 12.00pm	**Multidisciplinary training of healthcare workers leading to collaborative delivery of holistic patient care**	CLINMARC, NHSL
Thursday 26th July 2018			
Workshop 5	9.00am - 12.00pm	**Liver diseases by Chinese Medical Association**	Lionel Memorial Auditorium, SLMA
Workshop 6	9.00am - 12.00pm	**Rehabilitation in Neurology**	Hotel Galadari, Colombo
Workshop 7	9.00am – 12.00pm	**Research Workshop**	Hotel Galadari, Colombo

Main Congress		
Thursday 26th July 2018 5.45 pm onwards	**Inauguration & SLMA Oration** Galadari Hotel, Colombo	
Friday, 27th July 2018		
8.00 am – 8.30 am	**Registration**	
8.30 am – 9.15 am	**Keynote Address What is Medicine for? Prof. Dinesh Bhugra, President (Elect) -British Medical Association, Emeritus Professor of Mental Health KCL**	
9.15 am – 9.45 am	**Plenary 1 Quality Assurance in Health Care Delivery Prof. Donald Li – President (Elect), WONCA and Past President, Hong Kong Academy of Medicine**	
9.45 am – 10.30 am	**Prof. N.D.W Lionel Oration**	
10.30 am -11.00am	**Tea & poster viewing**	
11.00 am -12.30 pm	**Symposium 1 Palliative care and elderly medicine**	**Symposium 2 Tropical Medicine – Dengue, Leptospirosis and Leishmaniasis**
12.30 pm -1.00 pm	**Guest lecture 1 Novel Biomarkers in NASH Dr Nicole Zitzman**	**Guest lecture 2 Dr. Garth Manning (WONCA)**
1.00 pm – 2.00 pm	**Lunch & poster viewing**	
2.00 pm – 3.30 pm	**Free paper sessions**	
3.30 pm – 5.00 pm	**Symposium 3 Dermatology – Interactive session**	**Symposium 4 Obstetrics and Gynaecology – "Evolution of human birth"**
5.00 pm – 5.30 pm	**Tea**	

SLMA 131st Anniversary...

Saturday, 28th July 2018			
8.00 am – 8.30 am	Registration		
8.30 am – 9.00 am	Plenary 2 Pain and prejudice: the importance of primary care research Prof Christian Mallen Deputy Director, Institute for Primary Care and Health Sciences, NIHR Research Professor in General Practice NIHR CLAHRC West Midlands, Deputy Director NIHR School for Primary Care Research Training Lead		
9.00 am -10.30 am	Symposium 5 Rural Health	Symposium 6 Respiratory Medicine	Symposium 7 Medical Education accreditation
10.30 – 11.00 am	Tea		
11.00 am – 11.30 am	Guest Lecture 3 Malaria	Guest Lecture 4 Health Economics Dr. Ravi Rannaneliya	Guest Lecture 5 Common ophthalmic emergencies - management in primary care Dr. Kapila Banduthilake
11.30 am – 1.00 pm	Symposium 8 Oncology – Prevention and control of cancer	Symposium 9 Breast diseases	
1.00 pm – 2.00 pm	Lunch		
2.00pm – 2.30pm	Guest Lecture 6 Community empowerment Prof. Masamine Jimba Professor of Community and Global Health, University of Tokyo, Japan.	Guest Lecture 7 Elderly as an asset Dr. Mahesh Rajasuriya	
2.30 pm – 3.30 pm	Free paper sessions		
3.30 pm – 5.00 pm	Symposium 10 Health informatics	Symposium 11 Psychiatry – Mental Health in the Elderly	
5.00 pm – 5.30 pm	Tea		
7.00 pm onwards	Doctors' Concert		

Sunday, 29th July 2018		
8.00 am – 8.30 am	Registration	
8.30 am – 9.00 am	Plenary 3 The Challenge facing Medical Humanities – Prof. Saroj Jayasinghe	
9.00 am – 9.45 am	Dr. S Ramachandran Memorial Oration	
9.45 am – 10.20 am	Symposium Environmental and Planetary Health – WONCA working party on environmental health and Prof Anne Kurth	Guest Lecture 8 Cancer immunology Dr. D.S Kumararathne
10.20 am – 10.45 am	Tea	
10.45 am - 12.15 pm	Symposium 12 Road Safety	Symposium 13 Hematology – Thalassemia and bone marrow transplantation
12.15 pm – 12.45pm	Guest Lecture 9 Autoimmune disease Prof S. Seneviratne	Guest Lecture 10 Prescribing for Sportsmen – The past present and future Prof Arjuna De Silva
12.45 pm – 1.45 pm	Lunch	
1.45 pm – 3.00 pm	Debate - "Doctor knows best"- Doctor centered approach is more beneficial than patient centered approach in the Sri Lankan context	
3.00 pm – 5.00 pm	Free paper sessions	
5.00 pm – 5.30 pm	Tea	
5.30 pm onwards	Dr. S.C Paul Oration	

Post Congress Workshops

Monday 30th July 2018			
Workshop 1	8.00 am – 12.00 pm	Digital Health	SLMA Auditorium
Workshop 2		Research Ethics - FERCSL	CLINMARC

Critical Care in Sri Lanka

V. Pinto, Professor of Anaesthesiology and Critical Care, University of Peradeniya

R. Amarasena, President College of Anaesthesiologists and Intensivists of Sri Lanka

B Kudavidanage, Consultant Anaesthetist with a special interest in Critical care, Ministry of Health

A.Goonarathne, Consultant Anaesthetist with a special interest in Critical care, Ministry of Health

V. Senanayake, Assistant Lecturer Department of Anaesthesiology and Critical care, University of Peradeniya.

B. Sandeepani, Assistant Lecturer Department of Anaesthesiology and Critical care, University of Peradeniya.

C. Rathnayake, Assistant Lecturer Department of Anaesthesiology and Critical care, University of Peradeniya.

In 1952 an area in the thoracic ward at General Hospital Colombo was designated as a recovery area, with an ECG monitor, to monitor post-operative patients. In the early 1960s an East Radcliffe ventilator was introduced in this recovery area. This was soon followed by the placing of the 'Iron lung' ventilators at the General Hospital Colombo and a few outstation hospitals. The 15th of June 1968 marked a major milestone of medical history in Sri Lanka by the inauguration of the first Intensive Care Unit. This was spearheaded by Dr. Thistle Jayawardhane, Consultant Cardio-Thoracic Anaesthesiologist.

In 1976, the second Intensive Care Unit was established as the recovery unit in General Hospital, Colombo to accommodate general surgical and medical patients. The radiometer pH and blood gas machine in that unit was the first blood gas machine in the country. In 1980 the third ICU was started at the Teaching Hospital, Peradeniya.

EXPANSION OF ICU FACILITIES IN SRI LANKA

Though the first ICU at GH Colombo was started in 1968, the exponential growth of ICU's occurred only since 1995 .Currently, as at the end of the year 2017, there are 99 adult level 3 ICUs (level 3 ;ability to provide basic and advanced respiratory support and support for minimum of two organ systems), distributed across the country (Fig 1, 2, Table 1) The rapid progression of intensive care units occurred when the expansion and extension of medical services to the provinces took place. During this period, anaesthesia emerged as a leading specialty in the country. Thus, the specialty of anaesthesia was able to provide:

- Dedicated specialists to man the ICUs that included administrative responsibilities
- A 24 hour service, seven days a week-including weekends and public holidays
- Advice to the Ministry of Health because of their expertise on the range of equipment required,leadership and training of medical officers and paramedical personnel in intensive care

Further, the post-graduate curriculum prepared by the Board of Study in Anaesthesia included an essential and comprehensive component of critical care. The inclusion of critical care increased the range of skills and knowledge of the specialists in anaesthesia. Further, post-graduates in other specialties were provided with the necessary theoretical and practical expertise to care for patients in ICUs. This encouraged the concept of multi-disciplinary care of patients in the ICU's.

Province	Population	Number of ICUs
Western	5,851,130	36
Central	2,571,557	14
Southern	2,477,285	11
Sabaragamuwa	1,928,655	4
Northern	1,061,315	9
North central	1,266,663	5
North western	2,380,861	8
Eastern	1,555,510	7
Uva	1,266,463	5
Total	20,359,439	99

Fig 1: Distribution of ICU facilities in Sri Lanka Table 1: Provincial distribution in relation to the population

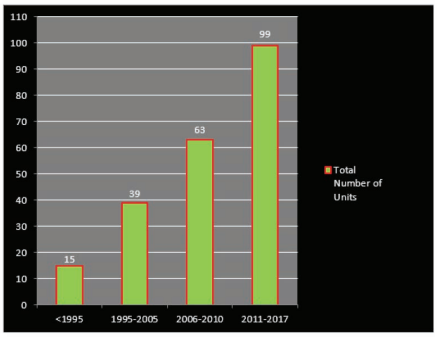

Fig 2: The growth of ICUs in Sri Lanka

DETAILED DISTRIBUTION OF ICUs IN THE COUNTRY

General ICU's were the first to be established outside Colombo. Most were multi-disciplinary ICUs under the administration of a Consultant Anaesthetist. However, care was always provided by both the admitting clinician and the anaesthetist, and thus a wide range of patients from differentspecialties were able to receive care. Increasing trends towards specialisation across all specialties resulted in establishment of specialised ICUs. These were developed to provide specific care for selected patient populations such as medical, surgical,maternal, accident and emergency and other specialties.(Fig 3)

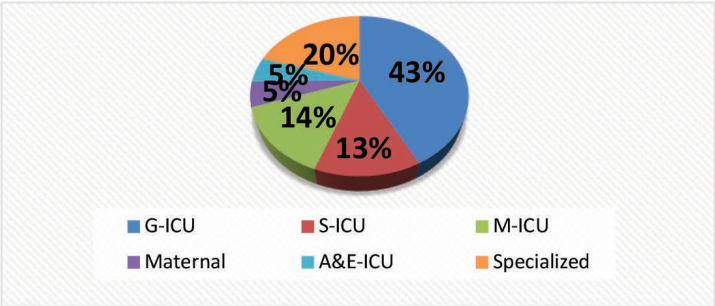

Fig 3: Types of ICUs

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Critical care in...

The total number of ICU beds in different categories of hospitals was identified as follows (Fig 4).

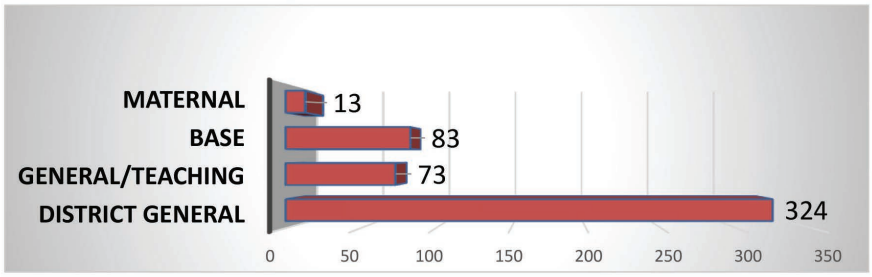

Fig 4: Number of ICU beds in different categories of hospitals

Province	Population	No. of ICU Beds	ICU bed per 100,000 population
Western	5,851,130	193	3.27
Central	2,571,557	63	2.42
Southern	2,477,285	57	2.28
Sabaragamuwa	1,928,655	26	1.3
Northern	1,061,315	40	4
North Central	1,266,663	23	1.76
North Western	2,380,861	37	1.54
Eastern	1,555,510	32	2
Uva	1,266,463	21	1.61
Total	20,359,439	492	2.42

Table 2: Bed availability in relation to the population

POPULATION TO ICU BEDS RATIO

Often considered more relevant to the degree of care is the number of beds per 100,000 population - displaying the availability of specialised care and reflecting the development of the speciality in the country. No standard requirement has been agreed upon across countries. Sri Lanka has an average of 2.42 beds per 100,000 population. Internationally, reports available reveal a range from 1 to 30 ICU beds per 100,000 people (United Kingdom 3.3-6.6 /100,000 and 24.0-29.2/100,000 in Germany). A detailed analysis of the state in Sri Lanka is presented in Table 2.

HOSPITAL BEDS TO ICU BEDS RATIO

The extent of care provided to seriously ill patients within a hospital is reflected by the ratio of the hospital beds to ICU beds. At present, this ranges from 76% in District General Hospitals to 93% in hospitals dedicated to Obstetrics and Gynaecology (Table 3). Internationally, the norm is to dedicate 10-40 beds per 1,000 patients .However, in Sri Lanka this ratio is reaching 12. This could be attributed to the rapid increase of hospital beds that has occurred during the past two decades (Table 3); however, the need for similar increases in ICU beds has not been achieved.

THE LEAD SPECIALIST IN AN ICU

Most ICUs in the country function as Semi Closed Systems. In this model, even though one lead speciality is in-charge of the ICU, the patient's primary physician actively participates in the care of the patient and contributes to patient management along with the ICU lead; hence the primary physician is not isolated. In Sri Lanka, the lead specialists in ICUs are illustrated in Table 4.

MEDICAL PERSONNEL ASSOCIATED WITH EXPANSION

Even though the lead clinician is most often the anaesthetist, the other specialists are readily available for the provision of multidisciplinary care (Fig 5).

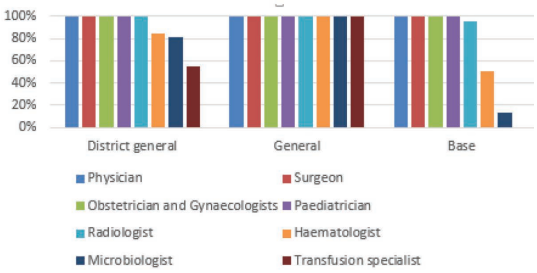

Fig 5: Other specialties available for multidisciplinary care

Medical Officers

International recommendations indicate that the ICU resident/patient ratio should not exceed 1:8. We only have data to express medical officer to bed ratio assuming all beds are fully occupied. The figure being less than 5 is indicative of a level of adequate care in the country (Table 5).

Type of Hospital	Hospital :ICU Beds Ratio	%	Ideal %
District General	76: 1	1.3	10-20
General	80: 1	1.2	7-10
Base	84: 1	1.1	-
Maternal	93: 1	1	-

Table 3: Availability of ICU beds in relation to hospital beds

Type of ICU	Total No	Anaesthetist	Physician	Surgeon
General/Multi-disciplinary	40	38	2	O
Medical	13	8	5	0
Surgical	13	13	0	2
Neurosurgical	6	4	0	2
Cardiothoracic	5	4	1	0
Neuro-trauma	5 (1 NT-ETU)	3	0	2
Oncology	2 (exclude Paed)	1	1	0
Obstetric	4	4	0	0
Accident Service	5 (ETC1+AT1)	4	0	1
Neurology	1	0	1	0
Cardiac	1	0	1	0
Nephrology	1	1	0	0
Respiratory	1	1	0	0
Toxicology	1	0	1	0
Dental	1	1	0	0

Table 4: The lead specialist in ICUs

The designation of these medical officers in ICUs being mainly anaesthetists indicates that they are not handpicked from the pool of doctors but trained for intensive care by the Consultant Anaesthetist. Even other Medical Officers allocated to ICUs as ICU MOs are trained by the lead specialist anaesthetist.

PARAMEDICAL OR OTHER HEALTH PROFESSIONALS

Type of Hospital	No of Medical Officers	No of Patients	Patient /MO	No of Beds	M0/Bed ratio
District General	676	2234	3.30	332	2.03
General	173	715	4.13	76	2.27
Base	155	527	3.40	83	1.86
Maternal	33	140	4.24	13	2.53

Table 5: The availability of Medical Officers in the ICU

Type of Hospital	No of Medical Officers	MO Anaesthesia	MO ICU /Anaesthesia
District General	302	74	300
General	46	53	74
Base	38	42	75
Maternal	29	0	4

Table 6: Trained Medical Officer's designations in ICU

Type of Hospital	No of Beds	Number of nursing Officers	No of Nursing officers per bed
District General	332	1325	4
General	76	218	3
Base	83	272	3
Maternal	13	54	4

Table 7: The availability of Nursing Officers in ICUs

Nursing officers

The requirement of nurses according to beds is a minimum of 3 nurses per ICU bed with a provision of an extra 50%, thus the ratio is 4.5. We are in the process of achieving that target (Table 7).

Ideally, a minimum of 50% of registered nursing staff should have had post registration training in Critical Care Nursing. It is encouraging to note that in 69% of the ICUs, the nurse-in-charge has been trained as recommended. However, training of the other nursing staff is low - 27% - and there is a necessity to improve on this below par percentage (Table 8, 9).

Type of Hospital	Trained	Percentage	Not trained	Percentage
District General	44	71%	18	29%
General	10	91%	1	9%
Base	12	56%	10	44%
Maternal	3	75%	1	25%

Table 8: Levels of training of lead Nursing Officers

Type of Hospital	Trained	Not trained	Percentage
District General	328	997	25%
General	79	139	36%
Base	84	188	31%
Maternal	18	36	33%
Total	509	1360	27%

Table 9: Levels of training of other Nursing Officers

Other paramedical personnel

Even though in general there is a shortage of Physiotherapists in the country, their availability for patients in the ICU appears to be adequate (Table 10). Critical care pharmacy and pharmacist services are essential for ICUs and pharmacists should participate regularly with the critical care team during their assessments of patients in the ICU. However, this practice does not occur in Sri Lanka probably due to the inadequate numbers of trained pharmacists. There is also a deficiency of Nutritionists in the country.

Type of Hospital	Physiotherapists (for ICU care)	Pharmacist (in the Hospital)	Nutritionist (in the Hospital)
District General	100%	100%	55%
General	100%	100%	85%
Base	95%	95%	22%
Maternal	100%	66%	100%

Table 10: Availability of other paramedical personnel

ADVANCES IN EQUIPMENT AND THE SPECIALISED SERVICES PROVIDED AT THE ICUs

To ensure that services are internationally accepted and recognized, there existed a need to upgrade the equipment in ICUs. These upgrades were carried out by the Ministry of Health under the guidance and advice of the College of Anesthesiologists and Intensivists.

Portable Chest XR 24 hrs a day, prompt availability of CT or MRI and angiography, ultrasonography including Duplex and Echocardiography (transthoracic and trans-oesophageal) and Point-of-care technology should be immediately available to an ICU. The need for increasing numbers of such equipment may be considered as urgent. Renal support is considered mandatory , the availability is satisfactory at the hospital level, but needs improvement in terms of availability in the ICUs.

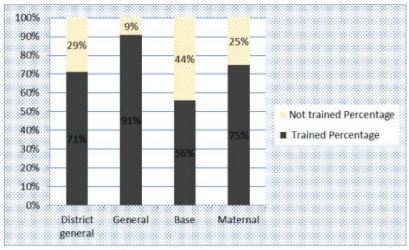

Fig 6: Levels of training of other Nursing Officers

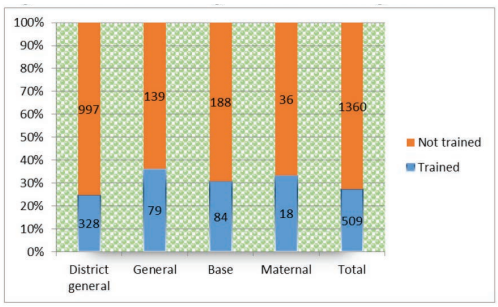

Fig 7: Levels of training of other Nursing Officers

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Critical care in...

TRAINING OF STAFF IN INTENSIVE CARE

Medical officers

1. Specialist grade

The College of Anesthesiologists & Intensivists has had a long-standing dedicated structured programme for training of qualified specialists, medical officers and other allied health professionals in the field of Intensive Care.

The postgraduate training of Anaesthesia included a 13 month period to provide the required knowledge, skills and attitudes to the trainees for Surgical and Medical ICUs and specialised ICUs (e.g. neurosurgical, cardio-thoracic, Accident and Emergency, paediatric). Those undergoing post-graduate training in Respiratory Medicine, Urology, Renal Medicine, Gastroenterology and Radiology were also provided with exposure to Intensive Care Medicine. The MD examination conducted by the PGIM always included foreign examiners from the Royal College of Anaesthetists & Intensive Care, UK.

After successful completion of the MD in Anaesthesiology, trainees were required to undergo a three months period of training in critical care as a Senior Registrar in Sri Lanka along with a minimum one year period overseas, also in critical care.

This programme also provided a category of specialty training with special interest in critical care of 6 months for advanced training in General Intensive Care and specialized ICU care in Sri Lanka and abroad. Most of the trainees obtained the FRCA or FCARCSI from United Kingdom. These trainees were board certified as specialists in Anaesthesia with special interest in intensive care.

In 2013, the need for specialized intensivists in the country was discussed and the College of Anaesthesiologists and the Board of Study in Anaesthesia initiated a training program. The post MD Anaesthesia and Medicine Senior Registrars were recruited for specialised training for 2 years in Sri Lanka. They were also required to undergo a 1 year mandatory training in critical care in the UK.

The Royal College of intensivists, UK, exempted the post-graduates from Sri Lanka from training for PART 1 - Fellowship of Critical Care Medicine, an indication of the quality of training in Sri Lanka. They become board certified specialists in critical care medicine after obtaining the Fellowship. By formulating these structured programs, the College of Anesthesiologists & Intensivists has taken appropriate action to develop skilled and competent specialists to uplift intensive care in the country.

2. Non-specialists.

In addition, the College and the Board of Study are involved in training senior grade medical officers for a Diploma in Critical Care. The medical officers affiliated to the ICUs in the country were also trained in critical care by Consultant Anaesthetists. In addition, the College of Aaesthesiologists and Intensivists conducts regular workshops and training sessions for medical officers and postgraduates in critical care.

UNDERGRADUATE EXPOSURE TO CRITICAL CARE

There are 8 medical faculties in the country. The undergraduate curriculum of all medical faculties has a devoted period for training in anaesthesia and critical care varying from 2 to 4 weeks.

PARAMEDICAL STAFF-NURSES AND PHYSIOTHERAPISTS

The curriculum for Allied Health Professionals also includes a mandatory period for critical care. Consultant Anesthetists from the Ministry of Health and University Academics provide this training. The training is conducted by specialists in many fields of medicine that have a role in care of the critically ill, emphasising the multi-disciplinary concept of care.

References

1. Fiona, E., Kelly, A., Fong, K.B., Hirsch, N.C. and Nolan, J.P.D. Intensive care medicine is 60 years old: the history and future of the intensive care unit: Clinical Medicine 2014 Vol 14, No 4: 376–9
2. Jayasuriya J, how we got to where we are ;presidential address. Sri Lanka Journal of Anaesthesiology,2011,xvix:5-16
3. Masterson G., Levels and Guidelines for the Provision of Intensive Care Services,Core Standards for Intensive Care Units Professional Standards Committee of the Faculty of Intensive Care Medicine and the Standards, Safety and Quality Committee of the Intensive Care Society; 2013
4. Ranatunga K. Anaesthesia and critical care – Presidential address :Past, present and the way forward

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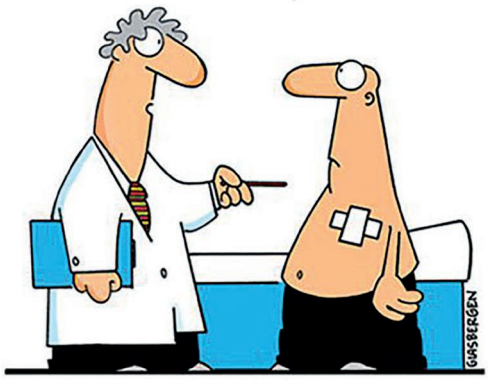

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10.00 am	:	Conclusion

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