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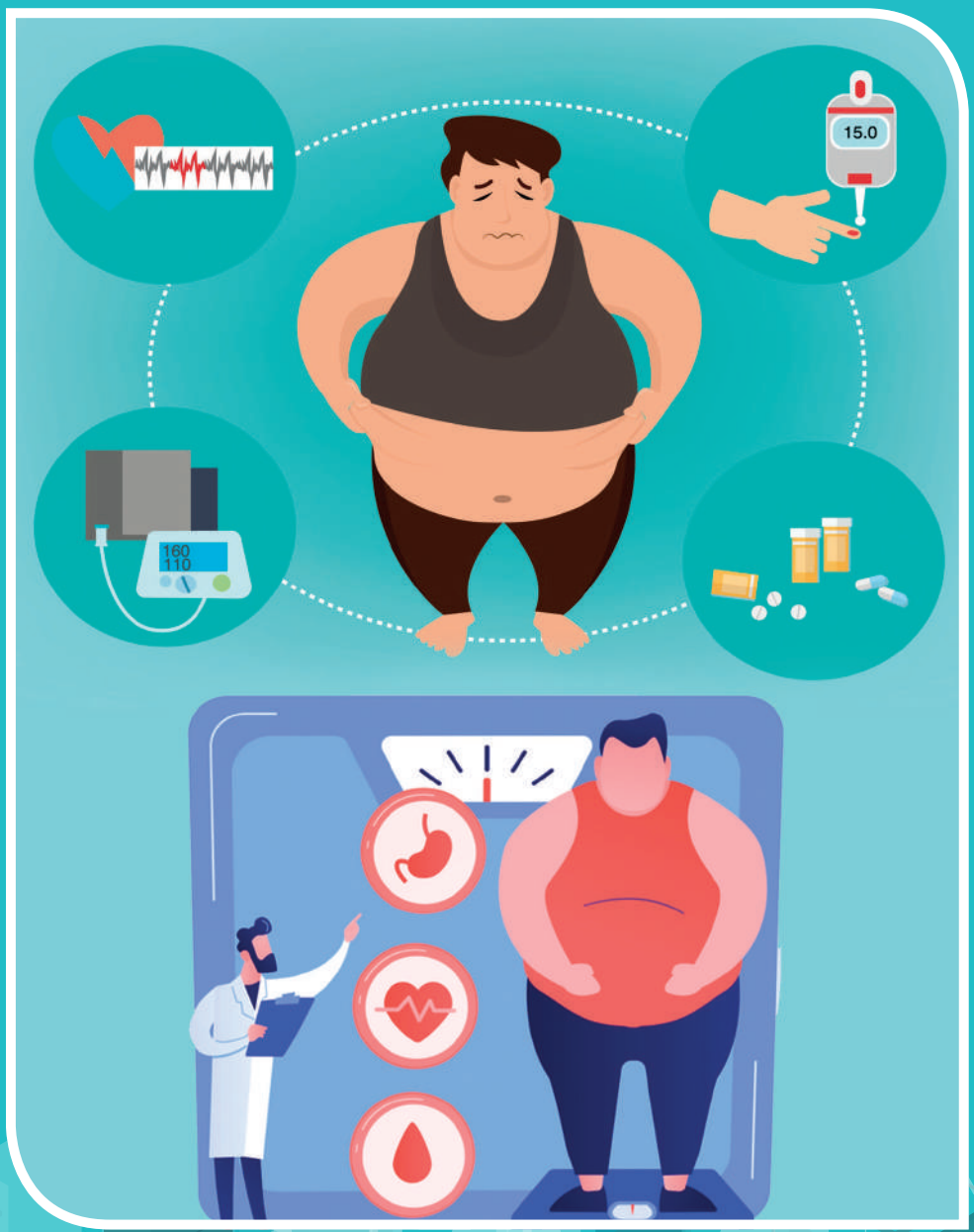

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SLMA President

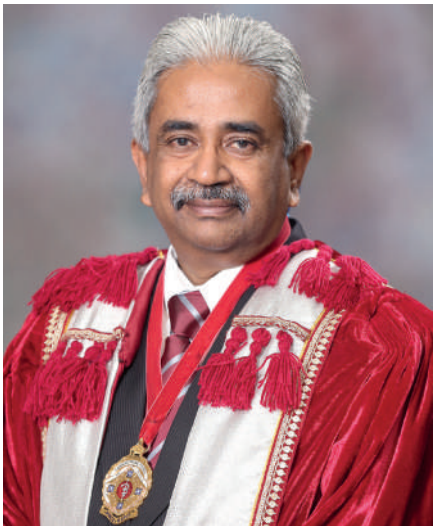
Dr Vinya Ariyaratne
MD, MPH, MSc Com. Med. MD Com, Med., FCCPSL
Specialist in Community Medicine,
Past President of College of Community
Physicians of Sri Lanka,
President of Sarvodaya Movement

President's Message

Dear SLMA Members,

I am quite sure that all of us have been, and continue to be, ever so proud of our country's healthcare system. We all grew up with the care and protection of a quality public healthcare system which has been hailed as a model-to-follow in low- and middle-income countries. Enough and more studies have been published on how a country with a comparatively low per capita income achieved this status of "good health at low cost". In Sri Lanka, health care is provided at State's expense and free of charge at the point of delivery to the entire population. Though in recent times concepts such as "Universal Health Coverage" (UHC) have come to the fore, Sri Lanka's public health system was "pro-poor" with equitable distribution of facilities and services at an accessible distance. These were the hallmarks of Sri Lanka's public health system. The public had utmost trust and faith in the "system", even despite issues such as acute shortages of health personnel in peripheral and remote area hospitals, shortages of medicines in hospitals and clinics, and occasional incidents and complaints made by the public on patient care.

Yet for all that, with much water that has gone under the bridge, what we had been seeing in the past few months have been the dangerous signs of the general public losing "trust" in the system due to incidents related to reactions to certain medicines administered to patients in several hospitals around the country. It is a fact that the country was facing severe shortages of medicines, reagents, and consumables for over a year now. The Sri Lanka Medical Association (SLMA) made representations to the highest authorities since early last year (2022) and took significant proactive steps to provide guidelines to the doctors on possible ways of the rational usage of available resources in clinical settings and inaugurating a fund to procure and supply essential medicines that were in



short supply. It also facilitated obtaining significant amounts of medicines and other supplies as donations both locally and internationally.

However, the most important interventions have been to influence the policymakers to ensure that, amongst other measures, the mandated National Medicines Regulatory Authority (NMRA) is made to deliver optimally to ensure a safe and adequate supply of medicines in the country. As the incidents involving the use of medicines were reported in the media drawing wide public attention, SLMA called a press conference and made an appeal to the public not to lose trust in the system while these incidents are being properly investigated.

We also made an appeal to President Ranil Wickramasinghe, drawing his attention to the emerging crisis. Responding to this call by the SLMA, a meeting was convened by the Secretary to the President on 7th of July 2023 at the Presidential Secretariat where the Secretary and the Director General of Health Services (DGHS) of the Ministry of Health, the Chairperson, and the Chief Operating Officer (CEO) of the NMRA, representatives from the Ministry of Finance and other relevant stakeholders were present. The key issues that were discussed included the appointment of representatives from the College of Surgeons, the College of Obstetricians and Gynaecologists, a Professor of Pharmacology and a Professor/Senior Lecturer in Pharmacy, to the Board of NMRA, the need to urgently have the laboratory testing facilities upgraded, and the transfer of experienced pharmacists from the NMRA. We are pleased to note that, by the time this Editorial is being written, 12 out of the 13 positions of the NMRA Board have been filled. However, it is quite regrettable that the most important representative in the form of a Professor of Pharmacology has still not been appointed despite SLMA making a very strong recommendation in this regard.

On the public engagement front, the SLMA Press Conference received wide coverage, both in print and electronic media, and the SLMA President and several Council members participated in live TV discussions which reached a wider public audience. We are very pleased that as the premier professional body in the country, SLMA was able to contribute significantly to try and restore the public trust in the health system and particularly on vaccination through educating the public on the facts based on evidence and science.

Even after noting the positive results due to SLMA's advocacy work, it is evident that we are still not out of the woods. The shortages and concerns regarding the quality of medicines persist, and issues related to migration of health personnel seeking greener pastures have imposed further strains on the proper delivery of services. The SLMA will continue to play a constructive role in addressing these issues and deliver on its much-exalted service provision protocol, *'Serve the Profession - Serve the Nation'*.

We appeal to our members and the public to join our collective efforts to protect the health and well-being of our people.

Dr Vinya Ariyaratne
President SLMA.

Activities in Brief
(16th June 2023 - 15th July 2023)

SLMA Saturday Talks

17th June

'Physiological CTG Interpretation' by Dr Mohomad Rishard, Senior Lecturer in the Department of Obstetrics & Gynaecology, University of Colombo.

24th June

'Approach to Acute Paraplegia' by Dr Inuka Wijegunawardena, Consultant Emergency Physician, NHSL, Colombo.

1st July

'Nutrition in Day to Day Life' by Dr Sajitha Mallawaarachchi, Consultant Nutrition Physician, District General Hospital, Negombo.

8th July

'Dissociative disorder: physiological distress speaking through physical symptoms' by Dr Shanika Medagama, Consultant Psychiatrist, District General Hospital, Theldeniya.

15th July

'Cervical Lymphadenopathy in children: A rational approach to evaluation' by Dr DM Prasad Chathuranga, Senior Lecturer in Paedeatrics, University of Colombo.

Other Activities

16th July

The SLMA Expert Committee on Disaster Resilience and Management held an online session on *'Temperature changes in the future: Are we ready to face the challenges?'*.

The resource persons were Dr Shiromani Jayawardena, Director, Weather Forecasting and Decision Support, Department of Meteorology and Mr KMHS Premalal, Former Director General Meteorology

20th June

SLMA held a joint Regional Meeting with the General Practitioner's Association, Ratnapura and Provincial Directorate of Health Services, Sabaragamuwa on the topic *'Strengthening Primary Health Care Physicians for Effective Management of Common Ailments'*.

The resource persons and their lectures were as follows; Dr. Chinthaka Hathlahawatta,Consultant Cardiologist, TH Ratnapura spoke on '*Heart Failure, what is new?*', Dr. Chathurarya Siriwardena, Consultant Dermatologist, BH Balangoda on *'A hypopigmented patch; Could it be Leprosy, Challenges in leprosy diagnosis and management'*, Dr. Sanjeewa Kaluarachchi, Consultant Vitero-Retinal Surgeon, TH Ratnapura on *'Common eye problems for primary care physicians'* and Dr. Shalinie Fernando Specialist in Primary Care and Family Medicine Ministry of Health on *'Chronic disease management in Primary Care through Person Centeredness'*.

20th June

The SLMA Media Committee and the SLMA Expert Committee on Communicable Diseases organized

a joint media symposium on *'Rain again with water & soil bringing Melioidosis: Be prepared'.*

Professor Enoka Corea, Professor in Microbiology, University of Colombo spoke on *'Epidemiology of Melioidosis: What do we know?'* Dr Krishantha Jayasekara, Consultant Physician, *'Different presentations of Melioidosis: Dilemmas in clinical diagnoses'* and Dr Bhagya Piyasiri, Consultant Microbiologist on 'Antibiotic *management and follow-up of Melioidosis patients: Galle experience'.*

21st June

The third Pre-Congress workshop was held on *'Interventional Research in Sri Lanka*'.

Professor Saroj Jayasinghe, Emeritus Professor of Medicine, University of Colombo spoke on '*Need for interventional research in Sri Lanka'* , Professor Shalini Sri Ranganathan, Senior Professor in Pharmacology, Faculty of Medicine, University of Colombo on '*What is interventional research?'*, Professor Chandanie Wanigatunge, Chair Professor of Pharmacology, Faculty of Medical Sciences, University of Sri Jayawardenapura On '*Ethics & regulatory framework for interventional research in Sri Lanka'*, Dr Ashwini de Abrew, Administrator, SLCTR on '*Clinical trial registration'*, Dr Senaka Pilapitiya, Senior Lecturer, Department of Medicine, Faculty of Medicine & Allied Sciences, Rajarata University of Sri Lanka on '*Ayurvedic interventional research'*, Professor Senaka Rajapakse, Senior Professor & Chair of Medicine, Department of Clinical Medicine, Faculty of Medicine, University of Colombo & Joint Editor, CMJ on '*How to publish interventional research?'* and Professor Asitha de Silva, Senior Professor & Chair of Pharmacology, Department of Pharmacology, Faculty of Medicine, University of Kelaniya on '*Overcoming challenges & facilitating interventional research*'.










27th June

A clinical meeting was held with the collaboration of the Sri Lanka College of Sexual Health & HIV Medicine on the topic *'Thirty-five year fight against HIV'.*

Dr KAM Ariyarathne, Coordinator - Strategic Information National STD/ AIDS Control Programme (NSCAP) on '*HIV Epidemic in Sri Lanka: Challenges & Opportunities'*, Dr Nimali Jayasuriya, Coordinator – HIV testing & STI care & EMTCT, NSCAP on *'Diagnosing HIV: Are we in the right direction'* and Thilani Rathnayake, Consultant Veneriologist, TH Anuradhapura on *'Overview of Paedeatric HIV'.*

28th June

The SLMA Media Committee organized a media seminar on '*Current crisis in Quality and Shortage of Drugs'*. The panelists were Dr Vinya Ariyaratne, President, SLMA, Dr Ananda Wijewickrame, Consultant Physician, IDH and Dr Palitha Abeykoon, Former Member, NMRA

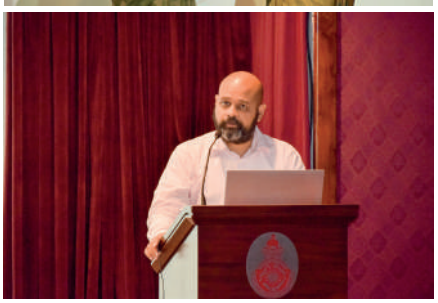
28th June

The fourth Pre-Congress workshop was held on '*Sleep & Health*'.

The resource persons and their lectures were as follows; Dr Kumarangie Vithanage, Senior Lecturer, Department of Physiology, Faculty of Medicine, University of Colombo on '*Sleep physiology: normal & abnormal'*, Dr Ruwanthi Jayasekara, Consultant Respiratory Physician *on 'Respiratory issues affecting sleep'*, Dr Kishara Gooneratne, Consultant Neurologist on '*Overview of sleep disorders'*, Professor Suranjith L Seneviratne, Consultant Immunologist

'Adverse immune effects of chronic sleep deprivation', Dr Sayuri Perera, Consultant Psychiatrist on *'Sleep & mental health'* and Dr Lakmini Pathberiya, Consultant Neurophysiologist on *'Sleep studies'*.

A Panel Discussion on *'sleep in children'* followed the lectures. The panelists were; Professor Miyuru Chandradasa, Consultant Child & Adolescent Psychiatrist, Dr Prasad Chathurangana, Consultant Paediatrician, Dr Ayesha Lokubalasuriya, National programme manager, School Health Programme, Family Health Bureauand Mr Nilantha Gunasekara, Deputy Director, Education, Health & Nutrition, Ministry of Education



29th June

SLMA in collaboration with Young Professionals' Alliance for Health (YouPAH) held a seminar for the media personnel titled '*HealthBeat: Reporting for Wellness'*.

8th July

The fifth Pre-Congress workshop was held on *'Integrating Genetics and Genomics into Clinical Practice'*.

The resource persons and their lectures were as follows; *Overview of Genomic Medicine,* Professor Vajira HW Dissanayake, Senior Professor and Chair, Dept. of Anatomy, Genetics & Biomedical Informatics & Dean, Faculty of Medicine, Colombo, *Genomic Diagnosis/ Interpreting a Genomic report,* Professor Vajira HW Dissanayake, Senior Professor and Chair, Dept. of Anatomy, Genetics & Biomedical Informatics & Dean, Faculty of Medicine, Colombo, *Dysmorphic syndromes,* Dr Dineshani Hettiarachchi, Senior Lecturer, Dept. of Anatomy, Genetics & Biomedical Informatics & Dean, Faculty of Medicine, Colombo, *Decoding skeletal dysplasia: Genotype-phenotype correlations,* Dr Yasas Kolombage, Lecturer (Prob), Dept. of Anatomy, Genetics & Biomedical Informatics & Dean, Faculty of Medicine, Colombo, *Cardiovascular Genetics,* Dr Kayalvily Perinpanayagam, Consultant Paedeatric Clinical Geneticist (Acting), LRH & TH Karapitiya, Genetics of cleft lip/ palate

Dr Lahiru Prabodha, Clinical Geneticist & Senior Lecturer, Department of Anatomy, Faculty of Medicine, Karapitiya, *Neurogenetic disorders,* Dr Kawmadi Gunawardena, Senior Registrar in Clinical Genetics, PGIM, Colombo, *Reproductive Genetics & prenatal diagnosis*

Dr Thushara Priyawansha, Consultant Paediatric Clinical Geneticist (Acting), Sirimavo Bandaranayake Children's Hospital, Peradeniya, *Approach to patients with a disorder of sex development,* Dr Hasani Hewavitharana, Senior Registrar in Clinical Genetics, Professorial Paediatric Unit, LRH, Colombo, *Cancer Genetics & Genomics,* Professor Nirmala Sirisena, Professor in Medical Genetics, Department. of Anatomy, Genetics & Biomedical Informatics, Faculty of Medicine, Colombo, *Genetics of Oral Cancer,* Dr Sajith Edirisinghe, Senior Lecturer and Clinical Geneticist, Dept. Anatomy, Faculty of Medical Sciences, University of Sri Jayewardenepura and *Current role of Genetics in Haematology practice*

Professor Hemali Goonasekara, Associate Professor & Consultant Haematologist, Department of Anatomy, Genetics & Biomedical Informatics, Faculty of Medicine, Colombo

10th July

Our own vocal performers Drs BJC Perera, Anula Wijesundere, Lakshman Ranasinghe, Manilka Sumanathilaka and Nimani de Lanerolle joined the Musical Maestro and Joint Social Secretary Dr Nilanka Anjalee Wickramasinghe at the *Joe Neth Recording Studio,* and Dr T Sundaresan joined all the way from Batticaloa electronically, to share their voices to record the song that was sung by the Council at the Doctors Concert 2023.

Together with the backing video, the medley *"The best of Sri Lanka"* came out as an absolute hit.

14th July

The sixth and final Pre-Congress workshop was held on *'Discard Myths & Enjoy Sex'*.

The resource persons and their lectures were as follows; *'Diagnosis and management of male sexual dysfunction'*, Dr Prageeth Premadasa, Consultant Venereologist, Provincial General Hospital, Pollonnaruwa, *'They are kinky NOT crazy – New thinking behind sexual deviatio'n,*

Dr Kapila Ranasinghe, Consultant Psychiatrist, NIMH, '*Female sexuality from puberty to menopause and beyond'*, Dr Manjula Rajapaksa, Consultant Venereologist, '*Managing sexually transmitted disease in primary healthcare settings'*, Dr Thlani Rathnayake, Consultant Venereologist, '*Adolescents, hormones and sex education'*, Dr Darshani Hettiarachchi, Consultant in Child & Adolescent Psychiatry and '*Sexual preferences/ diversity & current views'*, Dr Ajith Karawita, Consultant Venereologist.

A Panel discussion on '*Gender transformation, sexual diversity & humane care'* followed the lectures with Dr Ajith Karawita, Consultant Venereologist & Ms Bhoomi Harendran, Executive Director, National Transgender Network being the expert panelists.

Rising Obesity: Is it the next pandemic?

Dr Manilka R Sumanatilleke
MBBS, MD (Col), MRCP (Lon),
MRCP - Diab & ENDO (UK), FSLCE (SL), FCCP (SL),
FRCP (Edin), FACE (USA)
Consultant Endocrinologist,
National Hospital of Sri Lanka.

Dr S A I U Jayawardana (MD)
Senior registrar in Endocrinology,
National Hospital of Sri Lanka.

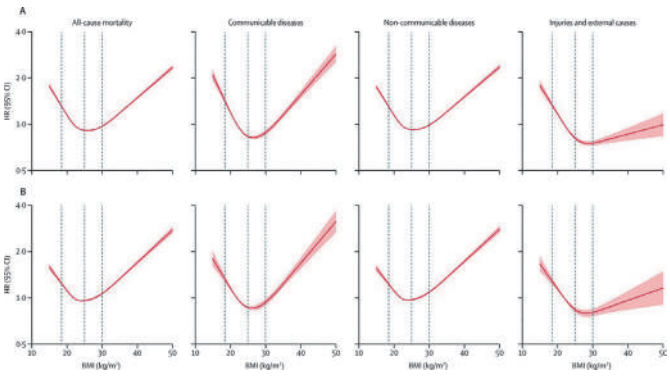
Rising Obesity. Is it the next pandemic?

Obesity is becoming a major health problem in Sri Lanka. The most recent survey done in Sri Lanka (The STEP survey 2021) shows an alarming increase in the numbers of people with obesity. The STEP survey was a population based survey of adults aged 18-69, which was done in 2021 which revealed nearly 50% of the Sri Lankan population is either overweight or obese. It is a "metabolic time bomb" for Sri Lankans unless quick remedial measures in the form of population interventions are taken.

Obesity is a chronic medical condition which leads to various adverse consequences such as impaired quality of life and considerable economic and social burden. Mammals have evolved in such a way to acquire food and store to use it in a food scarcity. Until modern era, food scarcity was a substantial threat to life. But now a day, even though the food craving is persisting and the lack of food is not a major problem, excess amount of calorie gets deposited as fat tissue, leading to obesity.

What is obesity?

According to the WHO, obesity is defined as abnormal or excessive fat accumulation that presents a risk to health. Internationally recognized definition is based on body mass index (BMI). There are different cut offs for Europeans and Asians. Depending on the BMI values, population is categorized into subgroups such as underweight, normal weight, over weight and obesity class I, II, III. Even though the BMI is internationally accepted, it has some shortcomings. If a person has more muscle mass compared to another person who has the same BMI with more fat tissue, denotes same mortality rate which is actually not true. While higher BMI values have increased mortality, lower BMI also has a significant risk due to various contributing factors such as, smoking, eating disorders and chronic diseases.



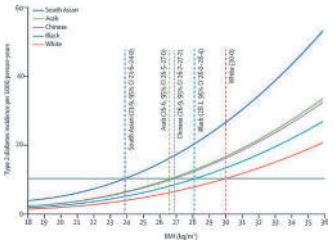
The Lancet Diabetes & Endocrinology 2018

WEIGHT CLASSIFICATION	OBESITY CLASS	BMI (kg/m²)		RISK OF OBESITY RELATED COMPLICATIONS
		Global	Asians	
Underweight		<18.5	<17.5	Increased
Normal weight		18.5 – 24.9	17.5 – 22.9	Normal
Overweight		25 – 29.9	23 – 27.4	Increased
Obesity	I	30 – 34.9	27.5 – 32.4	High
	II	35 – 39.9	32.5 – 37.5	Very high
	III	>40	>37.5	Extremely high

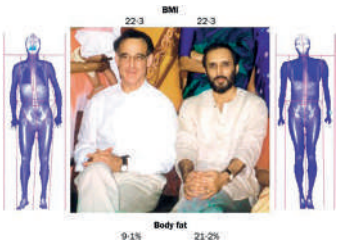
Ruban et al. Current treatments for obesity. Clin Med (Lond). 2019

Is BMI a good marker to predict cardiovascular morbidity and mortality?

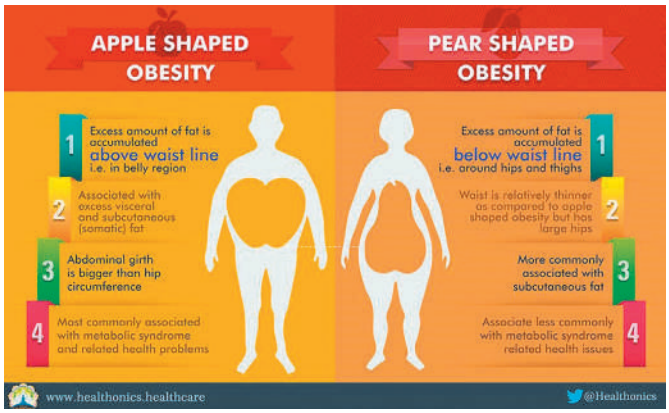
The relationship between BMI and health risk is not absolute but is influenced by body fat distribution. Excess body fat distribution is not equal in all individuals. Some people develop excess visceral obesity which is a stronger predictor of CVD risk compared to subcutaneous fat distribution. In Asians compared to Caucasians, visceral fat accumulation happens at lower BMI values and it was explained by Y Y paradox hypothesis. So their mortality and risk for non-communicable diseases increase dramatically from relatively lower BMIs. Waist circumference correlates with abdominal fat distribution which is a surrogate marker of visceral obesity Waist circumference thresholds for a Caucasian male is 102cm and a Caucasian female is 88cm. In Asian population, it is 90cm for males and 80cm for females.



The Lancet Diabetes & Endocrinology 2021



The Lancet: The Y Y paradox



Current status and the progression

Prevalence of obesity is rising worldwide. By 2030, 1 in 5 women and 1 in 7 men will be obese. Greater proportion will come from low and middle income countries and invariably, it will be a huge burden to their national income. The situation is the same in Sri Lanka. The prevalence of overweight has increased from 26.26% to 29.10% by 2020 and obesity prevalence has increased from 7.58% to 11.20%

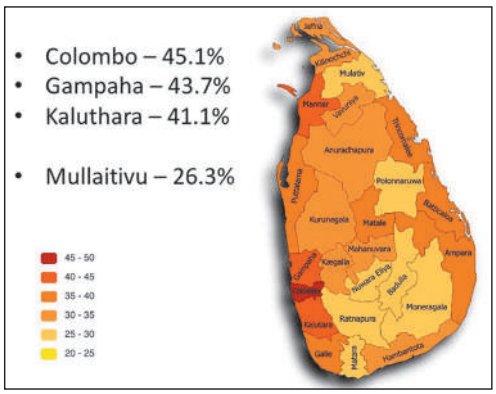
Behavioral or Intermediate Risk Factor	2014	2015	2016	2017	2018	2019	2020
Overweight (BMI 25-29.9 kg/m2)	100,618 (26.26)	99,873 (25.53)	78,695 (25.09)	136,137 (24.84)	150,098 (26.3)	175,021 (30.1)	101712 (29.10)
Obese (BMI ≥30 kg/m2)	29,043 (7.58)	32,300 (8.26)	24,955 (7.96)	41,440 (7.56)	47,888 (8.4)	67,526 (11.6)	38992 (11.20)

Source - Directorate of Non Communicable Diseases, Ministry of Health, Sri Lanka

According to the STEP survey 2021, 39.4% and 11% of the general population are overweight and obese respectively.

BMI	Both sexes	Males	Females
Mean body mass index (kg/m^2)	24.2	23.1	25.1
BMI > 25kg/m^2	39.4%	30%	47.6%
BMI >30kg/m^2	11%	6.3%	15.2%

District wise analysis of prevalence.



This clearly shows the marked difference between urban and rural areas. The highest burden from Colombo and the lowest burden from Mullaitivu district.

Does obesity mean just deposition of fat?

Researches which were done over the past few decades, showed an array of hormones which are responsible for maintaining our weight. Fatty tissue, gut and hypothalamus are the key organs which modulate the central control of metabolism in our body. Maintaining weight is a complex process. It is from the balance between energy intake and expenditure. Fatty tissue is becoming an endocrine organ which produces, Leptin, Adiponectin, Resistin and Estrogen which play a major role in energy homeostasis. Energy intake governs mainly by Orexigenic and Anorexigenic mechanisms and to a lesser extent by Endocannabinoid system. Energy expenditure is from main three components which are basal metabolic rate, physical activities and thermic effect of food.

Environmental factors as well as genetic factors are contributing to obesity. But the modern life style factors over weigh the genetic factors in propagating the current pandemic of obesity. In the modern diet, 50% of the energy comes from fat compared to early days where only about 15% contributed for energy. Availability of food, cost, cultural perspective, individual's social network, food habits of people and lack of exercises play a major role in obesity.

Endocrine conditions, such as Cushing syndrome, hypothyroidism, growth hormone deficiency and pseudo hypoparathyroidism and non-Endocrine conditions such as depression and some eating disorders contribute to obesity in a significant way. Medications like Risperidone, Olanzapine and steroids will have an effect on weight gain.

How our genes responsible for obesity

Apart from environmental causes, genetic factors contribute to obesity. When we consider genetic factors, monogenic causes, polygenic causes and obesity syndromes need to be discussed.

Only a small percentage of obese people have an identified single gene mutation that leads to obesity. If the obesity is due to monogenic cause, these people will have more severe form of obesity. Most commoner forms are Leptin deficiency, Leptin receptor mutations and Melanocortin 4 receptor mutation. Other majority group is with syndromic and other endocrine related problems.

Adverse consequences of obesity

Obesity is a multi-systemic disorder, paving way for a plethora of NCD's and increased CVD risk causing much morbidity and mortality.

Cardiovascular problems are the most important things among all. Ischemic heart diseases, heart failures, hypertension, ischemic and non-ischemic strokes are some of them. Mortality and morbidity from cardiovascular diseases(CVD) are multi factorial in which most of them are directly or in directly related to obesity. The major risk for obesity related CVD is type 2 diabetes followed by dyslipidemia, hypertension and insulin resistance. Prothrombotic state and proinflammatory markers which are secreted from the adipocyte also play a significant role. There is a 2-fold rise in mortality from CVD in obese patients when their BMI is over 40kgm2 when compared to people with normal BMI.

Risk of diabetes increases with earlier onset and severe obesity. Increased Triglyceride and low high density lipoprotein (HDL) levels go hand in hand with obesity. Those problems are commoner with visceral adiposity rather than subcutaneous fat.

Other important aspect in obesity is gastro intestinal problems. Nonalcoholic fatty liver disease (NAFLD) has increased by leaps and bounds in the recent past. In the US, NAFLD affects 30% of the obese population and 53% of obese children. Apart from NAFLD cases, hepatobiliary diseases and gastro esophageal problems are also rising.

Chronic kidney disease, urinary stone formation, incontinence and fertility related problems are also some of the consequences of obesity. When it comes to cancers, not only hepatocellular cancers, but other ones such as stomach, pancreas, colon, kidney, non-Hodgkin lymphoma, myeloma, uterine, prostate and breast cancers are important.

Obese people tend to have respiratory problems more frequently compared to general population. Some of them are, obstructive sleep apnea, obesity hypoventilation syndrome and asthma. Psychological problems are as important as physical problems in obesity. The number of depression cases and dementia cases are increasing among patients with obesity.

The increase mortality and morbidity from COVID 19 infection even among the young population was well documented.

What can be done?

Obesity management has 3 main arms; namely, dietary and life style modification, pharmacological treatment and interventional treatment. Monitoring and evaluation should be done in every 3 to 4 months. If the weight reduction is less than 5% from the initial weight or by 1.5kg over 3 to 4 months, reevaluation and additional measures should be taken. On the other hand, if the weight reduction is more than expected, close monitoring in every 2 months should be done while continuing the same measures.

Diet is all about re arranging your plate. Dietary calorie restriction is the hallmark of management in obesity. Before giving a proper diet plan, 24-hour dietary recall is important as diet plans are individualized rather than the fixed models. Initial recommendation is to have a reduced energy diet which comprises 480 – 960kcal less than the normal diet, the person used to have. The next step is to implement a low energy diet which has only 1000-1200kcal when the response to reduced energy diet is suboptimal. As the 3rd option, patients can be given very low energy diet plans which comprises only 800kcal. Replacement of other micronutrients and minerals along with these diet plans is important since these patients are more prone to develop micronutrients and mineral deficiencies which might lead to severe adverse outcomes. Moderate intensity physical activities of 150min per week is recommended along with dietary modifications.

Do drugs have a role in reducing weight?

Most medications currently available to treat obesity are associated with relatively modest weight loss. Cost is one of the limiting factors in countries like Sri Lanka. It is uncertain if patient who fails one therapy are more likely to succeed with other class agents

Most tolerated and effective class of medication is GLP 1 receptor agonists. Physicians usually use them to treat Diabetes and studies have found out that, even in non-diabetic patient, they have a significant weight lowering effect when they are given in small and more frequent doses. Liraglutide and Semaglutide are the more frequently used medications. Emerging medication in that class is Tirzepatide which has glucose dependent insulinotropic polypeptide action apart from glucogon like peptide 1 receptor agonist. Cost is the major limiting factor.

Phentermine is a sympathomimetic drug which increases the energy expenditure and suppresses the appetite by releasing norepinephrine, serotonin and dopamine. Phentermine/Topiramate combination is more effective than giving each medication alone. Topiramate is an anti-seizure medication which has a GABA receptor modulation action. Lorcaserin is a serotonin receptor agonist and it suppresses the appetite.

Orlistat is another class of medication where it inhibits gastric and pancreatic lipase and eventually causes fat malabsorption. It should be taken just before the meal or within 1hr of meal. Gastro intestinal side effects and fat soluble vitamin deficiencies are the limiting factors. Naltrexone, an opioid receptor antagonist and Bupropion, a dopamine norepinephrine uptake inhibitor, combination is used to treat obesity. It suppresses hunger centers at hypothalamus.

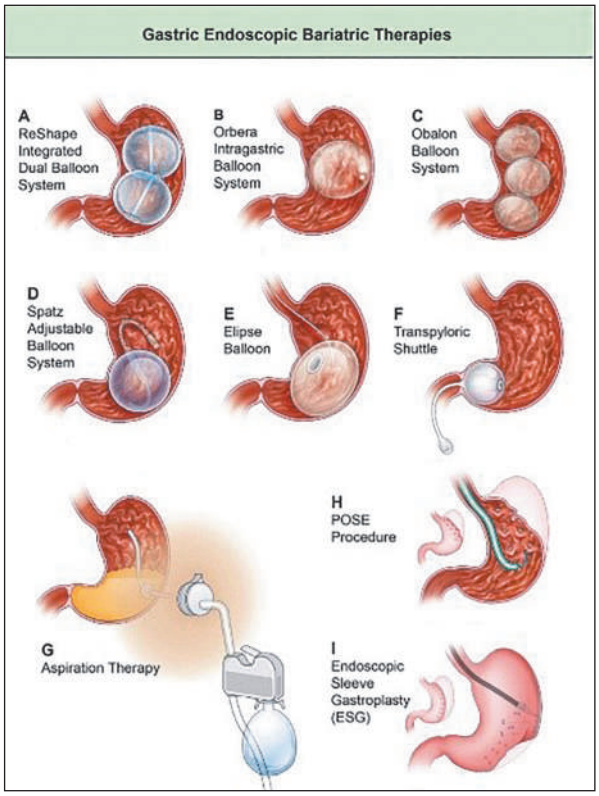
Following are the emerging drugs which will help in treating obesity

Drugs	Mechanism of action
Setmelanotide	MC4R receptor agonist
Metreleptin	Synthetic analog of leptin hormone
Tesofensin	Serotonin norepinephrine dopamine reuptake inhibitor
Oxytocin	Circumvents leptin resistance and elicits weight loss in diet induced obesity
NPY antagonists	Antagonize neuro peptide y and cause reduce food intake
Methylphenidate	Increased brain dopamine levels and suppress appetite
Endocanabinoid receptor antagonists	Antagonizing cannabinoid receptor 1 causes reducing appetite

Can surgery be helpful?

Among all interventions, bariatric surgery is the most popular one. If the BMI is more than 40kgm2 or BMI between 35-40kgm2 with comorbidities are the absolute indications for the procedure. Thorough pre-operative assessment is needed in collaboration with the Endocrinologist, Nutritionist, Psychiatrist, Respiratory physician and the Surgeon. Surgery carries only 0.04% - 0.3% mortality rate. Micronutrient deficiencies and Iron deficiency are expected post operatively and appropriate management should be done. Bariatric surgery improves or remits type 2 diabetes, dyslipidemia, hypertension and other weight related complications

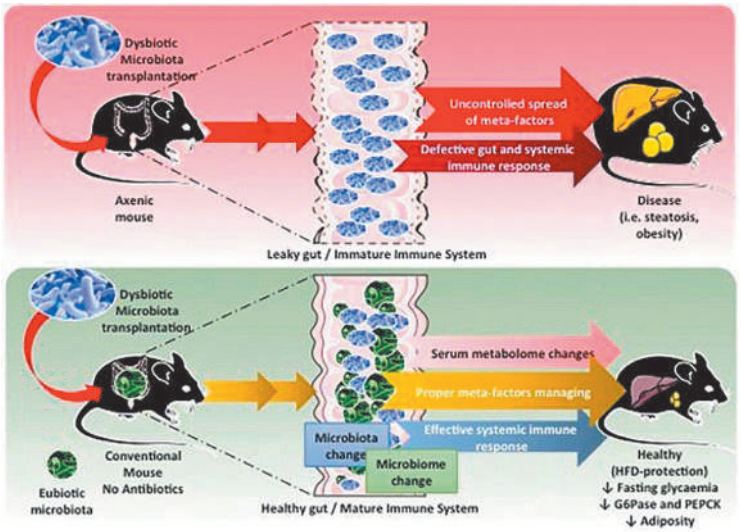
Other than bariatric surgeries, endoscopic procedures are also popular among surgeons. Out of which, endoscopic balloon surgeries, device therapy to aspirate gastric content following a meal, Electrical stimulators to block nerve activity between the brain and stomach, endoscopic sleeve gastrectomy and POSE procedure which reduces the size of the stomach, are the emerging techniques.

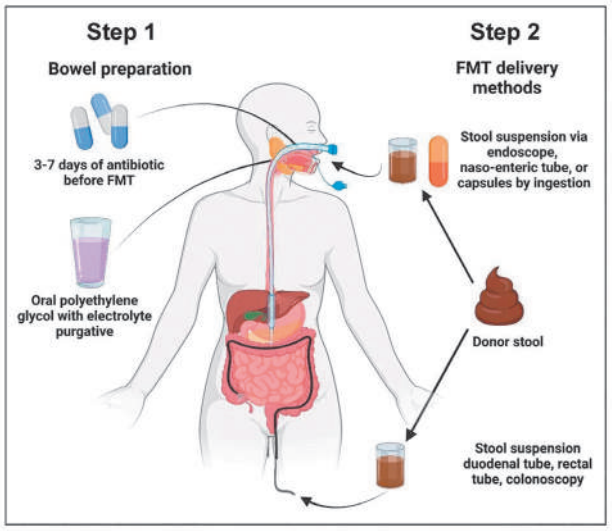


Can we manipulate the gut microbiome to treat obesity?

Fecal microbiota transplantation or in other words fecal transplantation is a process where we take feces from a healthy individual and transplant in to a person with some gut related problems. This method shows promising results in patient with pseudomembranous colitis where Clostridium difficile infection is needed to

be treated. Researchers have extended their scope of researches to see the effects on reducing weight with fecal transplantation. With the available data, promising results have been shown and further studies are needed to be done. But the studies done in mice, this has shown very promising results.





Life style modification, diet and exercises are the main pillars of weight reduction process. Pharmacotherapy and other interventions are supportive modalities. Bariatric surgery is now gaining more interest as some of the procedures are less invasive and radical. These procedures can attain more than 25% of weight loss and remits most of the obesity related complications. Treatment of obesity can be individualized but the battle cannot be won by only these measures. Population approach to reduce the overall energy intake and inculcate the habit of exercising is of paramount important to tackle this scourge.

This should be taken up by all relevant associations and authorities to formulate national policies to meet the challenge while community based awareness programs should be done in collaboration with the media.

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Anaemia in adults: Evaluation at primary care

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Anaemia is defined as a decrease in red blood cell (RBC) mass to a level below the normal values for the tested population, age, gender, and altitude. The decrease may result from decreased production of RBCs, increased destruction of RBCs or blood loss.

According to the World Health Organization (WHO), the prevalence of anaemia in Sri Lanka is 29% [1]. The only national survey on anaemia was conducted in 2006, which reported the prevalence of anaemia among females as 34% with 20.7% having mild anaemia and 13.3% having moderate to severe anaemia. Around 32.6% of women of reproductive age suffer from anaemia as reported in 2006 [2].

The role of primary health care physicians ranges from early detection and management of patients with common types of anaemia to early referral of patients with severe or complex anaemia to specialists for further evaluation and treatment.

When to suspect anaemia?

Symptoms of anaemia are vague and non-specific. Some of the well-recognized primary symptoms of anaemia include,

Fatigueability and lethargy

Inability to concentrate, leading to poor school or work performance

Muscle cramps

Hair loss

Shortness of breath on exertion or at rest

Angina

Signs and symptoms of hyperdynamic states such as bounding pulse and palpitations

A patient with anaemia can even present with life-threatening complications, such as congestive heart failure, angina pectoris, cardiac arrhythmia, and/or myocardial infarction

Symptoms and signs of anaemia can vary according to the severity and duration. For example, chronic mild anaemia may present with vague ill health only. Therefore, primary care physicians should have a high degree of clinical suspicion to assess and manage this common, yet often overlooked entity.

More importantly, anaemia is not a disease but a clinical feature of an underlying disease. Therefore, a primary care physician is responsible for detecting anaemia early, even in an asymptomatic patient, by routine examination of all patients for pallor. Furthermore, when evaluating for anaemia, physicians should always try to establish an underlying aetiology.

Definition and classification of anaemia

According to WHO anaemia is defined as haemoglobin value,

< 13 g/dL in males >15 yrs

< 12 g/dL in females >15 yrs

< 12g/dL in children 12-14 yrs

For pregnant women: <11 g/L in the first or third trimester or <10.5 g/L in the second trimester

The most commonly adopted classification of anaemia is based on the mean corpuscular volume (MCV).

Microcytic	- MCV <80fL
Normocytic	- MCV 81-99 fL
Macrocytic	- MCV >100fL

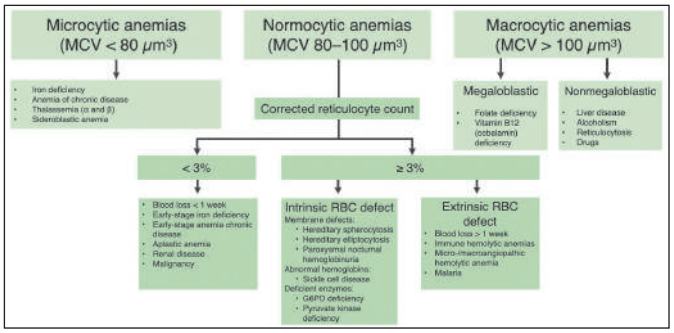

Diagram 1 - Classification of anaemia
(Image Courtesy - Lecturio Medical Concept Library)

Iron deficiency is the commonest cause of anaemia in Sri Lanka and is commonly due to poor dietary intake and chronic gastrointestinal losses due to drugs, hook worm infestations etc. Haemolytic anaemia such as thalassaemia is also an important cause, especially in certain areas of the country. Megaloblastic anaemia due to vitamin B_{12} deficiency is commonly seen among vegans, patients with malabsorption syndromes etc.

Assessment of a patient with anaemia in primary care settings

A thorough history and physical examination must be performed to aid the diagnosis and classification of anaemia.

History should include;

- Obvious bleeding - Per rectum or heavy menstrual bleeding, black tarry stools, haemorrhoids
- Comprehensive dietary history
- Consumption of alcohol
- Bulky or fatty stools with foul odour suggestive of malabsorption
- Thorough surgical history, with special emphasis on the gall bladder and gastric surgeries
- History of consanguinity, family history of anaemia, cancer and bleeding disorders
- Careful attention to the medications taken daily
- History of chronic diseases including kidney disease, liver disease, thyroid diseases, autoimmune diseases, chronic infections such as tuberculosis, sprue etc.
- Bleeding tendencies such as the presence of petechiae, ecchymosis, and gum bleeding suggestive of thrombocytopenia
- Recurrent or unusual site infections suggestive of associated neutropenia
- Leading symptoms towards aetiology – pica in iron deficiency

Full physical examination should be carried out in all patients with anaemia to evaluate underlying aetiology. (Table 1)

General	Cardiovascular	Abdominal	Neurological
The pallor of the conjunctiva Jaundice- elevated bilirubin is seen in haemolysis and in liver diseases Lymphadenopathy: suggestive of lymphoma or leukaemia Glossitis and cheilitis (swollen patches on the corners of the mouth): iron/folate deficiency, alcoholism, pernicious anaemia Koilonychia (spooning of the nails): iron deficiency Petechiae: thrombocytopenia, vasculitis Dermatitis herpetiformis (in iron deficiency due to malabsorption- Coeliac disease) Leg ulcers in chronic haemolytic anaemia	Tachycardia, bounding/ collapsing pulse Systolic flow murmur Severe anaemia may lead to high-output heart failure	Splenomegaly: In haemolysis, lymphoma, leukaemia, myelofibrosis Hepatomegaly: alcohol, myelofibrosis and malignancies Scar from gastrectomy: Gastrectomy or resection of terminal ileum can leads to vitamin B12 deficiency Scar from gall bladder surgery: Cholesterol and pigmented gallstones are commonly seen in sickle cell anaemia and hereditary spherocytosis	"Sausaging" of retinal veins: suggestive of hyperviscosity which can be seen in myelofibrosis Decreased proprioception/ vibration sensation: Vitamin B12 deficiency

Table 1 - Important points in the physical examination of patients with anaemia

Laboratory evaluation of anaemia in primary care setting

Simple laboratory investigations such as full blood count (FBC), blood picture and reticulocyte count provide much information regarding the type of anaemia and its aetiology.

FBC will help to detect the following.

- Severity of anaemia
- Broad category of anaemia by mean of RBC indices and morphology (mean corpuscular volume [MCV], mean corpuscular haemoglobin [MCH], mean corpuscular haemoglobin concentration [MCHC])
- Presence of other cell line involvement including white blood cell (WBC) and platelet counts
- Red blood cell distribution width (RDW) indicates anisocytosis and elevated RDW is present in iron deficiency anaemia

Examination of the blood picture reveals classical morphological features in different types of anaemia.

For example,

- Hypochromic microcytic RBCs in iron deficiency anaemia
- Oval macrocytes and hyper-segmented neutrophil nuclei in megaloblastic anaemia
- Round macrocytes in non-megaloblastic macrocytic anaemia
- Presence of classical cells in certain types of haemolytic anaemia

The reticulocyte count demonstrates how well the bone marrow is compensating for the anaemia and will be elevated in anaemia due to haemolysis and bleeding

Subsequent tests are selected on the basis of these results and on the clinical presentation.

Serum bilirubin and lactate dehydrogenase (LDH) can sometimes help differentiate between haemolysis and blood loss; both are elevated in haemolysis and normal in blood loss. Other tests such as vitamin B12, folate levels, serum iron levels and total iron binding capacity, are done depending on the suspected cause of anaemia.

Diagnosis	Value
Iron deficiency anaemia	Low ferritin (<30micg/L), low iron, low transferrin saturation, high total iron binding capacity (TIBG)
Anaemia of Chronic Disease	Normal/high ferritin, usually low TIBC, low serum iron
Vitamin B12 deficiency	Vitamin B_{12} level <180 – 910 ng/L
Folate deficiency	Normal: >5.4 ng/mL Intermediate deficiency: between 3 – 5.4 ng/mL Deficiency: <3ng/mL

Table 2 - Laboratory parameters in different types of anaemia [4]

Management of anaemia in the primary care setting

The recommended replacement therapy for anaemia due to iron, vitamin B12 and folate is summarized in the table below.

However, it is important to note that anaemia itself is not an indication for transfusion. Most types of anaemia are well tolerated and can be corrected with simple aetiology-based treatment.

To decide whether to transfuse several parameters should be taken into account. These are,

- Clinical tolerance of anaemia
- Underlying conditions (cardiovascular disease, infection, etc.)
- Rate at which anaemia develops.
- Hb levels (in general Hb levels less than 7g/dL would require transfusion.)[5]

<table>
<tr><th>Treatment duration</th><th>Doses</th></tr>
<tr><td>Iron supplement for 3 months
(Expected rise of Hb- 1g/dL per week
Failure to achieve this target should raise concerns of poor drug compliance or covert blood loss)</td><td>Children≥ 12 years and adults: 65 mg 2 to 3 times daily
<table><tr><th>Preparation</th><th>Dose (mg)</th><th>Elemental iron content (mg)</th></tr><tr><td>Ferrous sulphate</td><td>324/200</td><td>65</td></tr><tr><td>Ferrous gluconate</td><td>300</td><td>36</td></tr><tr><td>Ferrous fumarate</td><td>100</td><td>33</td></tr></table></td></tr>
<tr><td>Folic acid supplements for 4 months</td><td>5 mg once daily</td></tr>
<tr><td>B_{12} supplements
(B_{12} supplements should be given before Folate to prevent neurological complications)</td><td>Adults: Intra-muscular 1000IU EOD for 6 doses</td></tr>
</table>

Table 3 - Replacement therapy for anaemia [6]

When to refer?

All patients with acute symptoms (heart failure and ischemic heart disease) should be admitted for urgent management and correction of anaemia.

Patients with complex or unexplained anaemia, or with more than one cell lineage abnormality (i.e concurrent anaemia with thrombocytopenia or leukopenia) or suspected primary bone marrow disorder

Patients with suspected or overt bleeding should have endoscopies and other specialized investigations arranged. Iron deficiency anaemia with poor response to iron treatment should always raise the suspicion of covert bleeding. Patients who are intolerant to oral iron replacement should be referred to a secondary centre for intravenous replacement.

In cases of suspected malabsorption syndromes (Eg: Coeliac Disease), a detailed diagnostic work-up should be arranged.

Increased menstrual blood loss is one of the commonest reasons for iron deficiency anaemia in females. In cases of menorrhagia and abnormal vaginal bleeding, a gynaecology referral should be arranged.

Post-menopausal females with anaemia should be evaluated for underlying malignancy.

Conclusion

Primary care physicians play a major role in diagnosing and managing anaemia in the community. Anaemia, like fever, is only a symptom of an underlying problem or a covert disease. Therefore, great care should be taken not to overlook the aetiology of anaemia. Simple iron deficiency anaemia is the commonest cause of anaemia. However, complex cases should be referred to the relevant specialist as early as possible.

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Medical Tourism as a growing industry for a sustainable economy

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Director
Organization Development
Ministry of Health

Understanding Medical Tourism

Tourism is one of the most dynamic modes of earning foreign currency. Sri Lanka also identified its potential and developed an action plan for the year 2022- 2025 (CBSL, 2021). With the global economic crisis the world is moving towards low cost high convenience strategies. People seek medical care in Asian countries where the currency exchange rate is comparatively lower. The brain drain across the borders may also open another spectrum of business trends giving the opportunity of getting local treatment at a competitive price. Combination of these phenomena, makes it a promising business to open up the country for medical tourism. . Expectation of the tourist is high quality healthcare at an affordable and competitive price.

Medical tourism is not a simple process. The traveler who seeks the care is the decision maker and decisions will be taken based on the attributes of the host country, money value, standards of the healthcare provision, hospitality and the quality of the service delivery. This has a number of considerations including demand, affordability, accessibility and availability of better communication. Environment, weather and transport also has an impact on selecting the destination by the traveler.

Efficiency of the health workforce is another driving force to the client as the availability of a well trained staff is one of the key success factors. Efficiency of the universal languages, easy travel opportunities with user-friendly regulations, 24×7 access for information, flexible laws, cost effective services and service oriented citizens are the other factors affecting the highest penetration of the countries for medical tourism. Recognition of these factors is mandatory if the country is to succeed in this new venture.

Medical tourism is not a novel venture for Sri Lanka, since it has been recorded that this country was one of the hubs for medical tourism from ancient times. Even at the time when the Sacred Tooth Relic was brought to Sri Lanka (325-377 AD) this country was reputed as a medical hub and people used to seek care for various illnesses.

Health Tourism has a number of facets.

Health tourism could be categorized in a number of ways reflecting the need and the demand. It is more towards the multidisciplinary approach rather than the simple service management.

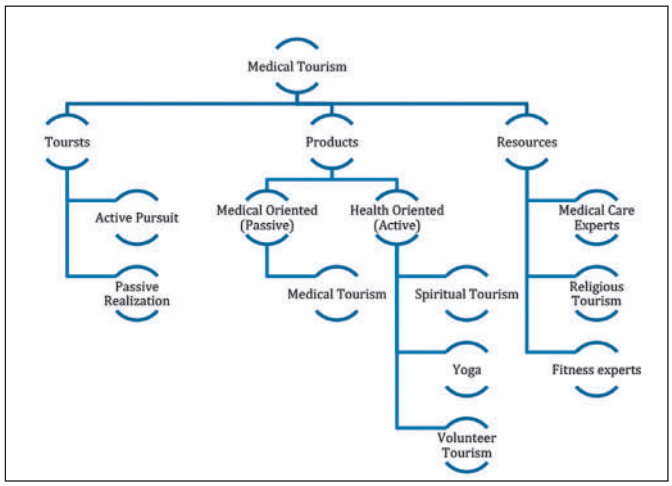

Figure 1: Facets of Health Tourism Industry (Sunny Sun, 2022)

People travel overseas, not only to get medical attention, but also to purchase medical products, especially wellness products and cosmetics of herbal origin. Few of the people travel for medical opinion rather than getting active treatment. Short-term education with hands-on experience may also be another avenue of interest under medical tourism, as they get lifelong experience on the medicinal practices of the host country. Cultural values embedded with the therapies, which are combined with the rituals, may have more attraction to the travelers. Therefore to get more visibility of the clients towards medical tourism, it has to offer more customized services to the seekers.

Controversies in Health Tourism

Health Tourism can be domestic or international and provide facilities to improve people's health. This will ensure the wellbeing of people who cross the borders for various purposes. Practice of targeted tourism has also been successful in a number of countries where

they target the demand of high-end customer needs to those who could pay for the services at comparatively higher prices.

Sri Lanka has a unique reputation towards wellness tourism for the traditional and complementary practices (Arachchi, 2019). Therefore services such as combined or integrated care will appeal more to the travelers, when it is delivered with a holistic approach. This includes the treatment, mental wellbeing with relaxation therapies, Yoga, meditation and food therapies with lifestyle modification.

Risks of Medical Tourism

Commonly associated risks are those associated with the long flying hours such as Deep Vein Thrombosis, pulmonary embolism and risk of infection due to the procedures. These risks are associated with the competency of the health services in the host country. Inadequate screening before surgical procedures and short premedication time may have an impact on the outcome of these services. These result if the service provider gives preference to income generation rather than providing a high quality service. There may be problems with the accreditation certification of certain institutions, as they may have certificates not issued by the recognized authorities (Crooks, 2013).

Also the outcome indicators of the treatment or procedures could not be assessed, as there is no mechanism to do the regular follow up management.

Industry Drivers and Factors Affecting the Growth of Medical Tourism

Medical tourism is a vast industry, which is commercially driven and depending on dclient demands. This is operating in a more autonomic, client oriented and economically beneficial manner. Availability of care for the needs and the trust of the clients are the main factors that decide the success of destination tourism. If Sri Lanka is planning to become a health tourism hub, a number of factors need attention (Lokupathirage, 2011). More on to the regulations and availability of other services such as Visa approval, currency conversion facility, affordable transport facilities, language proficiency of the service providers, information security & accessibility and safety & reliability of the offered services.

Market drivers of the Medical Tourism industry are cost factors such as cost saving, quality of service delivery, accessibility including transport & travel infrastructure, responsiveness, insurance schemes and timely information through the web. Cost factors were the main concern of the European travelers as they could receive better care at a lower cost than their native countries.

The cost difference between the selected country and the native country improves the willingness of selection. Therefore competitive market prices may enhance the number of travelers seeking medical care (Pasadilla, 2013).

Availability of world class health care facilities will improve the quality of the service delivery. Establishing partnerships with the private sector, foreign investors and technology transfer from world renowned hospitals need to be incorporated in getting the competitive advantage. The state -of - Art facilities may improve the client satisfaction in a number of ways..

Longer waiting hours in the hospitals are somewhat negative factors for the medical tourists, they need quicker attention and care. Therefore faster, cheaper and reliable alternatives should be planned. Accessibility to the services such as transport & travel infrastructure plays an important role in this Industry. Budget airlines and budget taxis and pricing of them need to be regulated by the government. Improvement of the information flow and the real time data are considerations of the clients. One of the main limitations is the lack of insurance schemes for them to arrange in their respective countries. Government policies need to be focused on such issues that limit the clients from developed countries.

Availability of sub specialties and a well-trained workforce at the centers with service readiness are the other deciding factors for the tourist to select the centers. Wider choice within close proximity and affordability with paying options may encourage the vast majority of travelers across the borders.

Need of a Medical Tourism Policy

This segment of tourism became popular after 15 to 20 years as an industry, and given tremendous opportunities for earning foreign currency. Similarly it has a number of risk areas, as there is no solid legal and ethical security with established governing mechanisms. Number of countries have initiated the practices of relaxed visa approval policies for those who seek medical care. The safety of the travelers also has to be ensured offering them the complete benefits and privileges, which the average tourists enjoy. The Insurance sector has already initiated to incorporate Medical tourism as an option and charge an unexpected amount from the people, referring to the issues of the tourism policies of the other countries. In some countries, which were very rigid on acceptance of the insurance policies of the other countries, clients may have to face problems in their payments. All these need to be regulated with global agreement of one policy for all countries. Unless otherwise this sector may not be serving to the client's expectations.

Key Players and Stakeholders

Currently in Sri Lanka, the main players are within the private sector. This is because of the inefficiency of the service management of the government sector with lower standards of facilities and delays. Commercially oriented private players are more geared to meeting clients' requirements. Lengthy procedures, rules and regulations of the public sector create a negative impression even though they maintain the required standards. (Cloutier, 2020).

Medical Tourism needs a more systematic approach to succeed as an industry. There are a number of agencies that give synergic impact to the growth of this industry. Key stakeholders in the market place should be the Government, companies involved with the travel and other related fields, hospitals, hospital staff and suppliers, transport industry both private and public, service providers in the ancillary services (Gupte, 2014).

There are a number of concerns in the service sector for the sustainability of Medical Tourism as an industry. Financing, continuous quality service delivery, Health workforce, Medical technology, Health insurance facilities and Health information are contributing to the sustainability of Medical Tourism.

Future of the Medical Tourism

This is a growing industry with competitiveness in service delivery. The front-runners are always not in the public sector. Public private partnerships in offering competitive services will improve the reputation of the country as a whole. Also a number of countries have business opportunities in other countries for their popular hospital brands. Therefore opening of such opportunities to the other countries may improve the tourism in the host country.

Optimum Diagnostic services with accredited laboratory chains are very important for the medical tourists, as they may have to travel from one hospital to another. Also availability of reputed brands of drugs and other devices may enhance the trust of the consumers.

Insurance providers may have to consider the alternative options to satisfy their clients who require the facilities for medical tourism. More coverage through the insurance policies and flexible regulations of payments needs to be introduced to minimize the countrywide disparities of currency and financial restrictions.

Managing the risk of travel related illnesses adequately, in between the host country and the residence is another issue that needs to be addressed. Need of secured and safe services considering the risk applying to both countries should be considered with every traveler. This will enable the travelers to understand the risk of spread of communicable diseases, especially in an epidemic or pandemic situation.

Government Role in Medical Tourism Industry

Government has bimodal involvement in Medical tourism industry. It has to safeguard its own citizens' health and similarly ensure the safety of the clients (Labonte, 2018). Government has to ensure the standards of the medical education of Doctors and other professionals in the health services. There are countries with substandard medical training in their Medical colleges. The accreditation of institutions should be on internationally recognized standards. Service delivery and facilities also need to be accredited in a government-accepted manner. Intermediary services such as brokering agencies and supportive agencies need to be regulated by the government. The procedures that are illegal in the home country should not be provided in the host country unless it is a life threatening situation. The gaps in the laws against medical malpractice should be addressed and a monitoring team should be in pkace to take care of such.

Law of the confidentiality of the information needs attention when the client is requesting the medical records. There should be at least a provider agreement in issuing the records while maintaining confidentiality. Countries should agree upon a global governance mechanism for medical tourism to address those issues in a diplomatic manner.

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AN INCOMPARABLE AND SUPERLATIVE DIABETIC

Dr B J C Perera

Specialist Consultant Paediatrician
Former nationally-ranked
tennis player

The stage setting was the 2023 French Open Tennis Grand Slam Tournament at Stade Roland Garros in Paris, France, from the 22nd of May 2023 to the 11th of June 2023.

Alexander "Sascha" Zverev, a top-class professional tennis player was playing a pre-quarter-final match. The competition was intense. He was 26 years old, seeded number 22 and had a current World Ranking of 27. He has suffered from insulin-dependent Type 1 Diabetes Mellitus since the age of three years and has a Therapeutic Use Exemption (TUE) for the use of insulin as a sportsperson. Insulin is on the list of banned drugs of the World Anti-Doping Agency (WADA).

He tried to inject himself with insulin on the tennis court and the organisers stopped him saying that it looked 'weird' !!!! He was asked to take a bathroom break to do it. A player is allowed two such bathroom breaks in a match and if he uses them up to inject insulin in a tough five-setter match, he will be at an unprecedented disadvantage. Besides, he may need to inject himself 4 to 5 times in a really tough match. In spite of all this, he went on to win the match and qualify for the quarter-finals.

Following this incident, there was an almighty furore from other players as well as many international organisations, especially those dealing with diabetics, against the French Open Grand Slam organisers. They were mercilessly and quite rightly hauled over the coals and openly accused of endangering the life of the sportsman. The accusers did not mince their words and cracked the whip quite harshly on the organisers. Tennis fans were furious and made it a point to say over social media that even more fuss should have been made over the mass media on behalf of the player.

In the face of such a tremendous backlash, the organisers had no alternative but to sheepishly capitulate and allow the player to inject himself on the tennis courts, in full view of the audience. They changed their minds about it being 'weird' perhaps !!!!! Yet for all that, they did not even have the grace to apologise to Alexander Zverv.

Alexander "Sascha" Zverev, born on 20th April 1997, is a German professional tennis player. He has been ranked by the Association of Tennis Professionals (ATP) as high as world No. 2 and was continuously ranked in the top 10 from July 2017 to November 2022. Zverev's career highlights include titles at the 2018 and the 2021 ATP Finals, and a gold medal at the 2020 Tokyo Olympics. He has won 19 ATP Tour titles in singles and two in doubles, and reached a major final at the 2020 US Open, finishing runner-up to Dominic Thiem.

In August 2022, while recovering from a horrendous ankle injury he sustained during the French Open in June 2022, this archetypal tennis player launched the Alexander Zverev Foundation from his own funds. The organisation was designed to support children with diabetes and the most laudable mission of providing medication for those with diabetes in developing countries.

At the inauguration he said "*Today, the Alexander Zverev Foundation has officially come to life, supporting children with type 1 diabetes and helping people prevent type 2 diabetes by living a healthy and active life. Our mission is to provide insulin and life-saving medicines to children in developing countries and those in need.*"

As part of his announcement, he said, "*As a Type 1 Diabetic myself, I want to encourage children with diabetes to never give up on their dreams no matter what others might say to you.*" He ended with these golden words; "*The only limit is the one you set yourself.*"

Need we say more? It is so very inspiring for other people who have to deal with diabetes, to see one of the best tennis players in the world go out there and compete fearlessly in spite of his diabetes. It can, and definitely will, inspire others in the future who have diabetes to take up sports and perhaps encourage even more people. There are no drawbacks to Zverev doing exactly that on the tennis court by playing at the highest level, even though he was told that injecting insulin on the court looked 'weird'.

As medical professionals, we need to salute Alexander "Sascha" Zverev as an iconic sportsperson, who will be a paradigm-shifting life-changer for those who suffer from diabetes mellitus.


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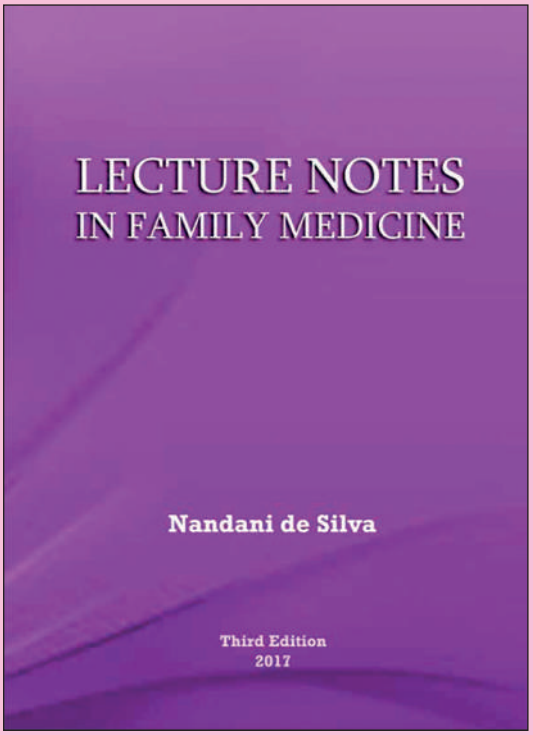

Lecture Notes in Family Medicine (Third Edition) 2017 by Professor Nandani de Silva is now available as a free 'e book' through the Postgraduate Institute of Medicine (PGIM) Library website E resources section under a creative commons licence.

https://library.pgim.cmb.ac.lk/lecturenotesfm/

Written in a reader friendly manner, the first edition of this book was published in 2000 to help medical students to understand the concepts, principles and process of Family Medicine that makes it a unique clinical discipline. The book covers important topics such as the doctor-patient relationship, clinical decision making, patient-centred care, communication skills and counselling skills, breaking bad news, palliative care, ethical issues in family practice etc. leaving the vast clinical content of family practice to be learnt during clinical attachments. The second and third editions of the book were published in 2006 and 2017 respectively with the addition of more chapters on other relevant topics to cater to practising doctors, researchers and postgraduate trainees at a higher level of learning.

Over the years 'Lecture Notes in Family Medicine' has had a wide readership amongst medical students, postgraduate trainees, family doctors, primary care physicians and family medicine teachers in Sri Lanka and South Asia. With the 'e book' now being available under a creative commons licence, the target audience across the globe will have easy access to this indispensable resource in family medicine free of charge and be able to share it with colleagues. This will help enhance the knowledge, skills and attitudes that family physicians need to acquire to ensure the delivery of compassionate and high quality primary medical care.

Sri Lanka Medical Association
Call for Applications
Deshabandu Dr C G Uragoda
Memorial Oration on the History of Medicine - 2024

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 26th February 1887 to discuss the formation of the Ceylon Branch of the British Medical Association. The Ceylon Branch 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 a Memorial Oration and also to add his national titular honour Deshabandu to the title of the Oration.

The event takes place on the 26th day of February every year.

Applications are called for the oration to be delivered on 26th February 2024. Applicants should submit a short abstract of the proposed lecture (no more than 500 words, font size 12 in Times New Roman with single spacing and margins set at 0.6 inches right round) and a brief curriculum vitae (no more than 3 pages of identical settings as above).

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

The SLMA wishes to encourage orations in areas of medicine that have not been covered in previous years. 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 2024 at the SLMA Auditorium as this is an oration scheduled to mark the founding of the SLMA.

Applications should be submitted to the Honorary Secretary, SLMA, *on or before 15th September 2023.*

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