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The variegated facets of physical and psychological well-being

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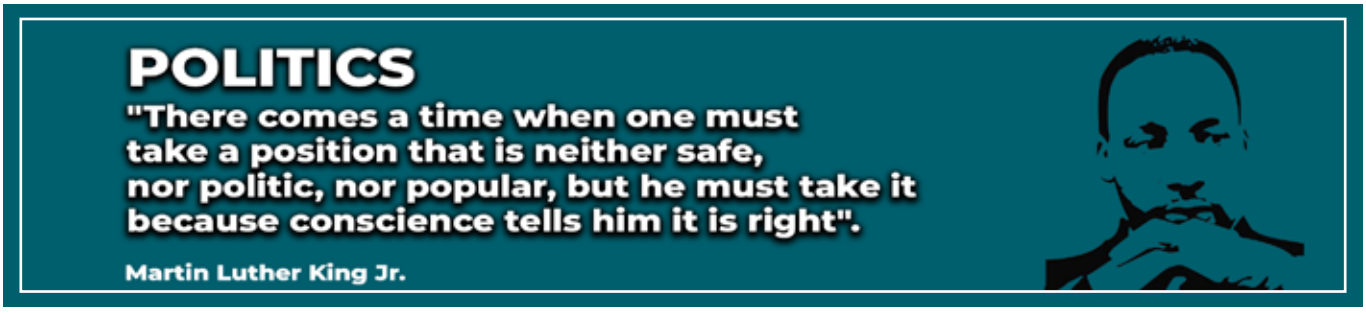


President's Message

Dear SLMA Members,

The Presidential Election is over, and a new President was elected on 21st September 2024, with much expected by the Sri Lankan citizens for much needed changes in governance as well as financial transparency, which were the calls of the *Aragalya Movement* of 2022.

In that aftermath, now there is a General Parliamentary Election, just around the corner to elect a government to take the country forward for the next five years.

SLMA has been in the forefront asking for non-violence before, during and after the elections. It was perhaps a miracle that we had the most peaceful election thus far since gaining independence and transition of power was done in a very smooth manner. That occurrence as the lack of violence seemed to be a combined effort of all political parties and they should be complimented for it. We need to give even the devil its due !!!!!

What do the medical professionals and medical organizations wish for from the new government that will be formed?

Should we not as individuals or as a team put forward our requests and suggestions at this juncture for them to consider when they are elected to parliament?

Some common themes that we as medical professionals can advocate to all the political parties vying to form the next government could be as follows.

- Implement policies improving healthcare delivery, access, and affordability, including policies that are of benefit to the citizens health and well-being.
- Increase investment in health care, as this is an investment for the future rather than an expenditure, to improve the facilities and ensuring access to all.
- Increase taxes on alcohol and tobacco, and on other injurious materials/products such as plastics, palm oil etc.
- More support for public health campaigns and initiatives that will have an impact on disease prevention and health promotion with community health involvement and inclusion of essentials in the school education.
- Increase attention and resources dedicated to mental health training and services, acknowledging the rising importance of mental health in overall healthcare provision of all citizens with special focus on teenagers and young adults.
- Institute Comprehensive Sexuality Education (CSE).
- Reduce restrictions on abortions and facilitate LGBTIQ community's access to services.
- Provide essential facilities for Medical and para-medical education ensure better access to care and quality medical and health education.
- Increase the number of medical schools in the country only after a full evaluation of the existing medical schools, including their infrastructure, staff and other allocations, and with a proper plan of providing necessary facilities.
- Initiatives should be undertaken to address workforce shortages in healthcare and look at the renumeration of all health professionals to keep them in Mother Lanka without migrating abroad.

Dr Ananda Wijewickrama
MBBS, MD, MRCP(UK), FCCP
Consultant Physician
National Institute of Infectious Diseases
President - SLMA

As medical professionals we should work as a team to be advocators and watch dogs and we would support the development and implementation of policies and plans while keeping an eye on proposals and policy statements that are put forward by the government to understand their potential implications and make positive observations for the betterment of healthcare of all citizens of the country.

The SLMA remains committed to the cause of providing the best possible healthcare to all citizens of our beloved Motherland. Towards that end, we are prepared to work amicably with anyone and any group that has the same vision and mission.

Activities in Brief
(15th September 2024 – 16th October 2024)

Activities in Brief

28th September - *'Does my patient have a genetic condition?'* by Dr Dineshani Hettiarachchi, Senior Lecturer & Medical Geneticist, Department of Anatomy, Faculty of Medicine, Colombo.

Media Activities

A media workshop was held on **11th October** to discuss 'Reporting *Suicides*' for the print & electronic media personnel.

Drs Sajeewana Amarasinghe, President, Sri Lanka College of Psychiatry, Chathurie Suraweera, Head, Department of Psychiatry, Faculty of Medicine, Colombo & Anuradha Herath, Child & Adolescent Psychiatrist, Colombo South Teaching Hospital (CSTH), Kalubowilla were the resource persons.

Therapeutic update

The Medicinal Drugs Committee of the SLMA in collaboration with Sri Lanka Association of Clinical Pharmacology and Therapeutics (SLACPT) organized a lecture on *'Rational Use of Human Albumin'* on **4th October** by Professor Chamila Mettananda, Professor in Pharmacology and Specialist Physician, Faculty of Medicine, University of Kelaniya.

Advocacy

A multi stakeholder discussion was held on **2nd October** on Continuous Professional Development (CPD) for middle grade doctors.

The meeting was chaired by Dr Palitha Mahipala, Secretary, MoH with the participation of many professional colleges/ associations and the Government Medical Association (GMOA).

Special Workshop

A clinical update for general practitioners was held on **10th October** at the SLMA Auditorium.

The resource persons & the topics of discussion were as follows;

Symposium 1 – Endocrinology

Dr Tharanga Samarasekara, Consultant Endocrinologist, District General Hospital, Negombo on *'Current management of diabetes'*, Dr Chathuri Jayawardena, Consultant Endocrinologist, TH Kegalle on *'Thyroid stories: a case-based approach to common thyroid disorders'* and Professor Sumudu Seneviratne, Consultant Paediatric Endocrinologist, Faculty of Medicine, Colombo on '*Vitamin D status of the growing child: facts and fallacies'*.

Symposium 2 – Cardiology

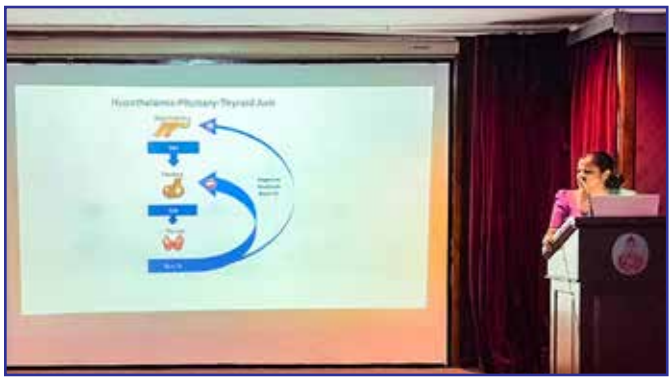
Dr Disna Amaratunga, Consultant Cardiologist, NHSL on *'Management approach to hypertension'*, Dr Tanya Pereira, Consultant Cardiologist, NHSL on *'Chronic coronary syndrome'* and Dr MBF Rahuman, Consultant Cardiologist, CSTH on *'Lifestyle modification'*.

Symposium 3 - Pulmonology:

Dr Wathsala Gunasinghe, Consultant Pulmonologist, DGH Moneragala on *'Upper respiratory tract infections'*, Dr Neranjan Dissanayake, Consultant Pulmonologist on *'Improving asthma outcomes'* and Dr Bodika Samarasekara, Consultant Pulmonologist, DGH Gampaha on *'Chronic COPD'*.


Background


mmonsense Approach...


Hypothalamic-Pituitary-Thyroid Axis


Significant Morbidity- add to health care costs
Some fatalities (rare)
Inappropriate use of Antibiotics is a major concern
Physicians and patients awareness about the expected clinical course and early review if poor resolution of symptoms are needed


IFESTYLE MODIFICATION OF
ISK FACTORS OF
ORONARY HEART DISEASE

Call for Nominations for Election to the SLMA Council 2025

Dear members,

I hereby call for nominations for the Posts of Council Members (28 positions) of the Sri Lanka Medical Association (SLMA). Nomination Form for Election to the SLMA Council – 2025 and Eligibility Criteria for nomination can be obtained from the SLMA office or downloaded from the SLMA web site (https://slma.lk/).

For any further details, please contact the SLMA office.

Thank you,
Sincerely,

Dr Lahiru Kodituwakku
Honorary Secretary
Sri Lanka Medical Association

The duly completed Application Form should reach Dr Lahiru Kodituwakku, Honorary Secretary, No.06, Wijerama Mawatha, Colombo 07 by post or delivered by hand on or ***before 01st December 2024 4.00pm.***

The AGM will be held on ***23rd December 2024 at 7.00pm*** *in the Professor N. D. W. Lionel Memorial Auditorium of the Sri Lanka Medical Association.*

Simple guide to detecting depression and assessing suicidal risk

Professor Athula Sumathipala

MBBS, DFM, MD – Family Medicine, FSLCGP, (Sri Lanka) FRCPsych, CCST (UK), PhD

Director, Institute for Research and Development in Health and Social Care, Sri Lanka

Emeritus Professor of Global Mental Health, Kings College London, UK

Emeritus Professor of Psychiatry, Keele University, UK

Background

The first ever island wide mental health survey carried out by the Institute for Research and Development in Health and Social Care (IRD) in 2007, revealed 6.9% suffering from mild to moderate depression and 2.4% major depression[1]. It's quite possible the prevalence is even higher now due to social, economic and political crises in the last few years.

Simple way to understand signs and symptoms of mental illness[3]

The easiest way to understand signs and symptoms of mental illnesses is to look at it as a quantitative or qualitative variation of normal human traits, cognitions (assumptions, beliefs, thoughts), feelings/ emotions, perceptions and behaviours.

Quantitatve variation

Normal suspiciousness → paranoia

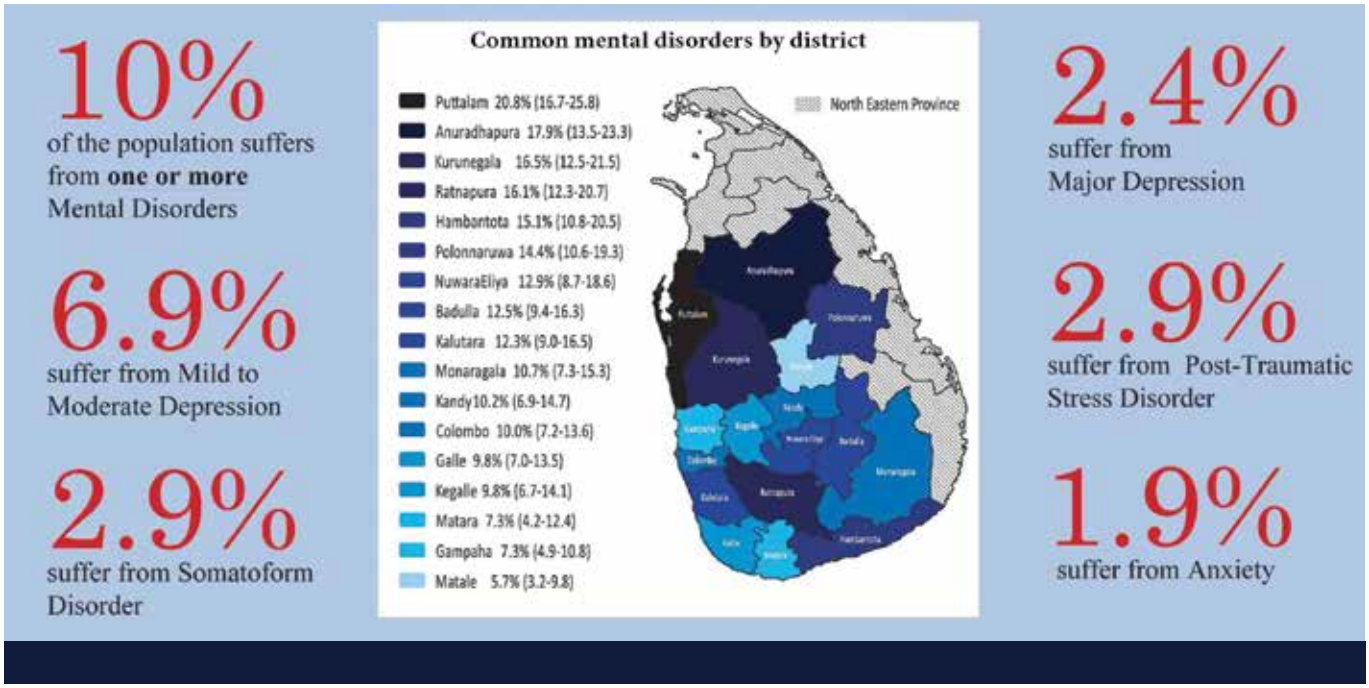
Normal Sadness → misery

Normal happiness → elation

Normal neatness and tidiness → obsession

Normal fear → phobia

Normal anxiety → overwhelming anxiety



In 1990s Sri Lanka had one of the highest suicidal rates in the world. However, now it's relatively low, but the current suicide rate of 15 per 100,000 remains high[2].

The issue of suicide has resurfaced recently. Therefore, its timely to discuss about these issues and empower the health care professionals.

These quantitative changes; that is an increase out of propotion to a given situation, is the extreme end of a continuam in other words. Under these circumstances, where do youi draw the line?

It will vary from person to person, depending on what has been 'normal' for a particular individual.

Qualitative variation

If one feels extremely happy when the situation should make him/her or anyone experiencing the same situation extremely sad, that can be cited as a qualitative variation. This is defined as 'incongruent mood' because he/she is having the opposite of the mood he/she should have shown in the circumstances.

However, any change observed may not necessarily be entirely quantitative or entirely qualitative, but a mixed change can also exist. Any change in thoughts, emotions, or behaviour therefore needs to be interpreted in a context and in comparison to his or her usual self and surroundings.

When these quantitative or qualitative variations affects a person's day to day functioning or affects another person, and these variations latsts for weeks, we consider those as signs and symptoms.

Clinical features that suggest the presence of a mental illness

- Recent onset changes in behaviour
- Irritability, feeling sad, crying, aggressive behaviour, attempted suicide
- Deterioration in functioning such as inability to work or study
- Significant disturbances in sleep, loss of appetite together with loss of weight
- Social isolation, withdrawn behaviour, poor self-care
- Talking to self or smiling to self
- Spending excessive amounts of money, talking excessively
- Hearing voices talking to the person when no one is there
- Suspiciousness, believing others are trying to harm the person
- Odd experiences such as believing that he is controlled by computers, electric rays or aliens
- False belief: believing that he is someone extremely important or that he has special powers which is out of context

Any human being may experience the above from time to time. Its normal. For an example one may feel sad at times. The frequacy and intensity of that sadness may vary depending on the person and the reason why you feel sad. Its not a symptom but a normal emotional reaction. However, if that sadness last longer than usual; for weeks, and the intensity becomes high, and it affects the functionality of the person, then we call it a symptom of depression.

In simple terms, the usual person you have known has changed now. That is when you suspect that the person has symptoms.

Defeating stigma is one of the most important steps in accepting help. It is just yet another illness.

Widely regarded as one of the greatest leaders of the 20th century, Winston Churchill is believed to have suffered from bipolar disorder. After observing numerous symptoms such as depression, suicidal intention, mania, and a decreased need for sleep, Churchill often referred to his periods of intense and prolonged depression as his "black dog." According to his wife, Clementine, during these episodes Churchill exhibited little energy, few interests, loss of appetite, and trouble concentrating.

When to suspect depression?

This is when it is clear that the person's low mood is no more a normal reaction. The persons sadness or misery is dispropotionate.

A person suffering from depression will be low in mood, commonly described as feeling very sad and may become tearful easily. They may also feel low in energy which may lead to not being able to work as usual. Interest in normal activities decrease leading to not being able to enjoy things they did previously. For example they may not watch television or read books as they do not enjoy these activities anymore. Thoughts of wanting to harm oneself or feelings of worthlessness may be present.

Thinking may be predominantly negative with feelings of guilt and low self-esteem. Furthermore sleep may be poor with loss of appetite and loss of weight.

Simply the person is no more the usual self. Therefore the best people to notice such change will be family members, work colleagues or the family doctor. The longitudinal knowledge about the person is important.

The simple question to ask will be *"has she/he changed significantly over the last few weeks?"* That will be the clue to suspecting the possibility of depression.

What is the next step when one suspects depression?

The person should be assessed fully to establish depression. This can be done by an ordinary doctor who has been trained to assess depression or has experience in mental health. It is not essential to have a Consultant Psychiatrist to assess. However, when accessible it will be helpful to have a specialist opinion.

It is important to assess the degree of depression; is it mild, moderate or severe?

When to suspect severe depression

If lowering of mood, slowing of thinking and behaviour are grossly unusual for the person in question, and it is significantly disproportionate in the context of given situation, then suspect severe depression.

Easiest way to understand depression is to compare it with a grief reaction. Most features of depression are similar to grief. Another way is to understand depression

is as gross slowing down in all aspects of life. Thoughts become slow, behaviour and activities get retarded, speech is slow etc. In addition, a qualitative changes are that the content of thoughts become different from usual. The patients usually feel hopeless, do not enjoy things they used to, feel very negative. Only the down side of everything dominates the mind and feels guilty.

These changes should be present at least for two weeks in order to suspect depression but if they were present for more than 4 weeks, it is very likely a depressive disorder.

Important steps in the immediate management

- Ensuring the safety of patients by preventing suicidal attempts
- Decide on the best place of management (home vs. hospital)
- Starting medication if needed
- Planning on medium to long term management
- Engaging other relevant services

There is a need to do a quick assessment on the suicidal risk on every patient who has depression, particularly when it is moderate to severe.

Deciding on where you should manage the patient

Ideally, severely depressed patients should be referred to a psychiatrist, medical officer of mental health or someone who is experienced in managing such patients. They are ideally managed in a hospital.

One of the most important in referral is to start on medication as severe depression need pharmacological therapy.

Indications for urgent referral

Moderate to severe suicidal risk, which may be higher if there was a previous attempt.

No one else is present to ensure safety.

Unlikely to comply with medication.

Not eating or drinking at the time of the presentation.

Co-existing psychoses.

Do all with depression need anti depressants?

No, people with mild depression and some with moderate depression does not need anti derpressions. They can be managed with psychological interventions, especially cognitive behaviour therapy[6]. Eventhough therapists trained in cognitive behaviour therapy (CBT) are limited in Sri Lanka, interested people can be trained with relatively shorter sessions.

Is depression and suicide are intimatly linked?

There is an association between depression and suicide. However, every one who is depressed will not be a suicidal risk. Some with moderate depression and a greater proportion with severe depression are at risk of suicide. All those who attempt or complete suicide are not depressed. Those with poor copying skills may attempt deliberate self harm and end up completing suicide.

How to assess suicidal risk?

There are two kinds of suicidal ideation[3]: passive and active, which is important to distinguish. Suicidal ideation is a range from fleeting suicidal ideas to serious pre occupation leading to an attempt at suicide.

Passive suicidal ideations are not progressing to a plan or an attempt. Many may have a passive suicidal idea at least once in life time.

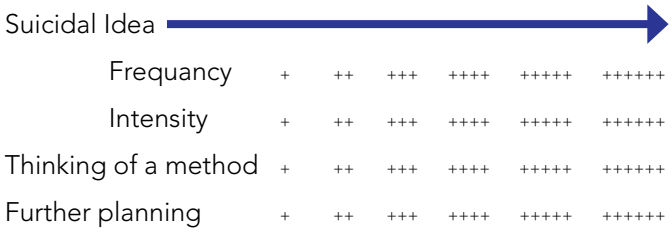
Active suicidal ideation, on the other hand, is not only thinking about it but having the intent to commit suicide, including planning how to do it.

Suicide is a process. It start with an idea and may or may not end up in an act. Therefore, assesing suicidal risk is a systematic process predicting the possibility of someone commiting suicide.

For an idea to become an act, the idea should be frequant enough and intensity to do is so strong. Therefore frequancy and intensity are important. More frequant the idea and more intense it is, will contribute to the idea bacoming an act. Planing to inact the idea adds to the risk. If someone has thought of a method of commiting suicide, this suggest an increased risk. If that plan develops further the risk increases.

If a person makes an attempt and does not suceed, it will add to the risk of attempting once again. If there is a family history of attmpting suicide or completing it the risk increases further [5].

Suicidal risk increases



Once you establish that there is a risk you may look into other factors of futher increaing risks.

(a) **Predisposing factors to suicidal behaviour**

- Previous psychiatric diagnosis
- Severe or chronic illness
- Previous suicidal behaviour
- History of abuse – physical, sexual of emotional
- Family history of suicidal behaviour

- Alcohol abuse
- Debt and serious financial issue
- Lack of social support

(b) **Precipitating factors to suicidal behaviour**

- Any significant loss – financial, interpersonal relationships
- Other interpersonal problems
- Other life events
- Rejection
- Hopelessness or helplessness

(c) **Socio-demographic factors**

- Sex (male>female)
- Age (older age)
- Marital status (divorced, separated or widowed)
- Unemployment
- Access to the means

Common deterrents of suicide are

- Concern about others, especially about family members
- Religious beliefs
- Fear about pain/ shame of an unsuccessful attempt

Protective factors for suicide

- Good social support from family/ other relatives/ friends
- Effective clinical care for mental illnesses
- Easy access to support for help seeking
- Restriction to lethal methods of suicide
- Learned skills in problem solving and conflict resolution
- Development of hopefulness

What should you do once you suspect a risk of suicide?

Severely suicidal patients may need immediate admission to hospital to prevent them from the act and for initiating pharmacotherapy.

Reference

1. Institute for Research and Development in Health and Social Care. Islanwdie mental health survey. Colombo, Sri Lanka
2. Piumee Bandara, DuleekaKnipe, PrabathWickrama, Sambasivamoorthy Sivayokan, Thilini Rajapakse. Reflections on the trends of suicide in Sri Lanka, 1997–2022: The need for continued vigilance. PLOSGlobalPublicHealth | https://doi.org/10.1371/journal.pgph.0003054 April 17, 2024
3. Athula Sumathipala, Sisira Siribaddana, Sudath Samaraweera, Gominda Ponnamperuma, Chesmal Siriwardhane. Psychosis, Severe Depression, Medically Unexplained Symptoms (MUS), Epilepsy and Heavy Alcohol Use. Identification, treatment and referral. A training manual. Institute for Research and Development in Health and Social Care, Colombo Sri Lanka.
4. Samaraweera S, Siribaddana SH, Sumathipala A. Bhugra D. Prevalence of Suicidal ideations from Sri Lanka. Crisis 2010 Jan 1;31(1):30-5.
5. Samaraweera S, Siribaddana SH, Sumathipala A. Bhugra D. Psychological autopsy on completed suicides of Sinhalese in Ratnapura. Suicide and life threatening behaviour 2008; 38(2):221-8.
6. Samaraweera S, Siribaddana SH, Sumathipala A. Bhugra D. RCT of Cognitive Behaviour Therapy in active suicidal ideation- a feasibility study in Sri Lanka. European Journal of Psychiatry 2007; 21(3):175-8.

Music, medicine, and the body: A symphony of healing in harmony

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I have always found the complex interaction between these two vocations to be fascinating, as a medical practitioner who has a strong affinity for music. Beyond its use as simple entertainment, music has long been seen as a therapeutic tool in many cultures. It has enormous effects on the mind and body, affecting our physiology, feelings, and even the healing processes. This article examines how the integration of music and medicine might improve mental health, improve patient care, and strengthen the body's natural healing capacity.

The brain is highly responsive to music, as evidenced by functional neuroimaging studies. Music activates various brain regions, including the auditory cortex, limbic system, and even the motor cortex. These areas are involved in auditory processing, emotion and movement, respectively. A 2011 study by Koelsch found that music activates the same reward centres in the brain that are stimulated by other pleasurable activities, such as eating and social interaction. (1)

Music has been shown to improve cognitive functions, particularly in patients with neurological conditions like Alzheimer and Parkinson disease. (2) Therapeutic music interventions can help patients with motor disorders in improving movement, balance, and coordination. (3) Musical rhythm, for instance, provides an external cue that the brain can synchronize with, thereby aiding in motor rehabilitation.

Another interesting phenomenon is the "Mozart effect", where classical music, particularly works by the maestro Mozart, has been shown to affect brain function, such as an increase in spatial-temporal reasoning and a decrease in epileptiform activity. (4)

Music also exerts a significant influence on the cardiovascular system. Studies have shown that listening to certain types of music, particularly those with slower tempos, can reduce blood pressure and heart rate. These effects are thought to be linked to the parasympathetic nervous system, which controls the body's relaxation responses. (5)

Music has been shown to enhance relaxation and reduce stress. This is of particular relevance in clinical settings, where reducing patient anxiety before surgery or during recovery can lead to better outcomes. (6)

Incorporating music into pain management strategies has shown promising results. Music therapy has been effectively used as an adjunct to traditional pain relief methods, particularly in patients undergoing surgery, cancer treatment, or labour during childbirth. Clinical trials have concluded that musical interventions can reduce the perception of pain and the need for analgesics in patients recovering from surgery. (7) The mechanism behind this effect is likely to be multifactorial. Music can distract patients from pain, alter their perception of time, and even induce the release of endorphins; the body's natural painkillers. (8)

The therapeutic benefits of music extend beyond the physical body. In mental health, music therapy has been employed to treat conditions such as depression, anxiety, and post-traumatic stress disorder (PTSD). By engaging with music, whether by listening, singing, or playing an instrument, patients can express emotions that may be difficult to verbalize. (9) The rhythmic and repetitive aspects of music can stimulate feelings of safety and structure, which are particularly beneficial for individuals with anxiety disorders. (10)

Given the robust evidence supporting the benefits of music on the body and mind, there is an increasing need to incorporate music-based interventions into medical practice. Music therapy should be considered as part of a multidisciplinary approach to patient care, especially in settings such as palliative care, rehabilitation, and mental health.

In Sri Lanka, where traditional healing practices such as *thovil*, often incorporate elements of music, there is an opportunity to blend these age-old practices with modern medical interventions. This holistic approach to patient care can not only improve outcomes but also enhance patient satisfaction and well-being.

To conclude, music, in its many forms, has the power to heal, uplift, and transform the human body. From its effects on the brain and cardiovascular system to its role in pain management and mental health, the synergy between music and medicine is undeniable. I, as an exponent of medicine as well as music, would encourage my fellow healthcare professionals to explore the integration of music into clinical practice, not only for its therapeutic benefits but also for its ability to reconnect patients with their innate capacity for healing.

Music will also undoubtedly heal the healer as well.

Doctors often face high-pressure environments, long hours, and emotionally challenging situations. Listening to soothing music, such as classical or ambient tunes, can lower cortisol levels and reduce stress. It provides a calming effect on the nervous system, which is crucial in mitigating against burnout and enhancing focus and emotional balance. Using soft, rhythmic sounds during meditation helps doctors slow down their thoughts, increasing their ability to handle stressful work situations calmly.

Music can act as an outlet for doctors to express emotions they may not be able to communicate in their professional role. Playing or composing music can be a therapeutic way to channel emotions like grief, and frustration and express their inner thoughts and experiences. This can be a healing phenomenon in processing difficult moments such as the loss of a patient or work-related frustrations.

Organizing or participating in music-related activities, such as the SLMA Doctors' Concert, can create a sense of belonging to a community among doctors. The shared experience of making music helps foster joy and a connection within the medical community. It also provides an outlet for doctors to showcase and celebrate their talents beyond the medical field.

So…, healer, heal thyself with music, and help heal others too by incorporating the power and joy of Music into Medicine.

References

1. Koelsch, S. (2011). Toward a neural basis of music-evoked emotions. *Trends in Cognitive Sciences* 2011;**15**(3):131-137.
2. Bleibel M, El Cheikh A, Sadier NS, Abou-Abbas L. The effect of music therapy on cognitive functions in patients with Alzheimer's disease: a systematic review of randomized controlled trials. Alzheimers Res Ther. 2023;**15**(1):65.
3. Braun Janzen T, Koshimori Y, Richard NM, Thaut MH. Rhythm and Music-Based Interventions in Motor Rehabilitation: Current Evidence and Future Perspectives. Front Hum Neurosci. 2022;**15**:789467.
4. Jenkins JS. The Mozart effect. J R Soc Med. 2001;**94**(4):170-2.
5. Darki C, Riley J, Dadabhoy DP, Darki A, Garetto J. The Effect of Classical Music on Heart Rate, Blood Pressure, and Mood. Cureus. 2022;14(7):e27348.
6. Thoma MV, La Marca R, Brönnimann R, Finkel L, Ehlert U, Nater UM. The effect of music on the human stress response. PLoS One. 2013;**8**(8):e70156.
7. Nilsson U, Rawal N, Uneståhl LE, Zetterberg C, Unosson M. Improved recovery after music and therapeutic suggestions during general anaesthesia: a double-blind randomised controlled trial. Acta Anaesthesiol Scand. 2001;**45**(7):812-7.
8. Holden R, Holden J. Music: a better alternative than pain? Br J Gen Pract. 2013;**63**(615):536.
9. Leubner, D., & Hinterberger, T. (2017). Reviewing the effectiveness of music interventions in treating depression. *Frontiers in Psychology* 2017;**8**:1109.
10. Mallik A, Russo FA. The effects of music & auditory beat stimulation on anxiety: A randomized clinical trial. PLoS One. 2022;**17**(3):e0259312.

Chatbots: Their wise and lawful usage in medicine

Dr BJC Perera

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The word Chatbot is an acronym for Chatting robots. They are Artificial Intelligence (AI) programs that are designed to simulate human-like conversations through text or voice interactions. They can respond to queries, assist with tasks, and engage in various forms of dialogue based on pre-programmed logic or advanced AI models. The best-known chatbots in wide usage are ChatGPT and Gemini. Many industries and home-based systems use other less-well-known chatbots like Siri from Apple, Alexa from Amazon, Google Assistant from Google, Cortana from Microsoft, Replika, Woebot, Mitsuku, and Bing Chat, all with varying capabilities from general-purpose assistants to specialized ones like those focused on mental health or smart home controls.

Chatbots like ChatGPT and Gemini are being extensively used by undergraduates and postgraduates for garnering knowledge, generating ideas, assisting with research, creating summaries, clarifying complex concepts and a whole host of specific tasks in day-to-day activities.

This article attempts to provide some guidance on their rational usage.

It is crucial to appreciate that these programs have significant limitations and should not be used to replace professional judgment or provide real-time clinical decisions. Most chatbots are limited by static information up to a given year depending on the model and can sometimes generate incorrect or biased answers. These are definitely not a panacea for all ills type of solutions in treating patients and should not be used to replace many different considerations made by human intelligence. These programs should be used to enhance learning and not used as a sole source but as a supplementary resource or an additional spring of knowledge.

Chatbots can be used most effectively to propagate and enhance scholastic pursuits. Questions can be asked via the prompts and chatbots will provide answers with lightning-fast responses. Proper configuration of the questions or prompts is absolutely crucial to get valid responses. The usefulness and validity of the answers will depend on how well the prompts are articulated. This has to be very carefully and meticulously done and well-crafted prompts are the key to success. Even minor and subtle changes in the prompts can yield vastly different responses. For example, if the prompt is "*What are the causes of sudden death in children*?" one would get a list of causes of many different systems that could cause it. However, if the prompt is "*What are the cardiac causes of instantaneous sudden death in sporting arenas in previously well adolescents*?" we would get a different response which is much more specific.

Chatbots are very useful in Literature Surveys and even more importantly, in making summaries of relevant literature. These are vital for research initiatives. If correctly prompted, the programs could even help to suggest 'research questions' and 'research hypotheses'. The programs can help in sample size calculations and predictions of the feasibility of certain research procedures. The programs can also help in syntax and grammar checking and ensure that proper styles of writing are used.

It is important to use in fact-checking methods using different programs and search engines as well. Sometimes one may have to indulge in cross-referencing the information and even credibility-checking processes as well.

There are certain don'ts as well. Patient information that could lead to the identification of the patients should never be fed into chatbots. In addition, the programs should never be used for any form of academic misconduct. Ethical compliance has to be scrupulously followed in all efforts that use AI.

Like many things in life, there are the good, the bad and even the ugly aspects in the usage of chatbots in medicine. People who use the facilities of AI should be responsible and take all steps to use the programs to the very best and most beneficial effects for our patients.

Some sections of this article were formulated with assistance from Artificial Intelligence.

Sri Lanka Medical Association

ANNUAL GENERAL MEETING: 23RD DECEMBER 2024

The Annual General Meeting of the Sri Lanka Medical Association will be held at 7.00 p.m. on Monday, 23rd December 2024, at the NDW Memorial Auditorium, "Wijerama Mawatha, Colombo 7. All members are cordially invited to be present.

Any proposals/resolutions to be taken up at the AGM should reach the Honorary Secretary, SLMA on or before 5th December 2024.

The agenda of the meeting is given below.

Dr. Lahiru Kodituwakku
Honorary Secretary, SLMA

Agenda for the Annual General Meeting: 23 - 12 - 2024

1. National Anthem
2. Reading of the notice calling for the Annual General Meeting
3. Observation of one minute silence for departed members of SLMA
4. Adoption of the minutes of the last Annual General Meeting held on 22nd December 2023
5. Confirmation of new members of the SLMA who joined in 2024
6. Resolutions
7. Amendment to the Constitution IX. COUNCIL – 50. A. iv
8. President's address
9. Secretary's report for 2024
10. Treasurer's report for 2024
11. Election of office bearers and council members for the year 2025
12. Appointment of auditors
13. Address by the new President

Alcohol dependence and its consequences in Sri Lanka

Dr Anula Wijesundere

Consultant Physician
Chairperson, Sri Lanka Medical Association Expert Committee on Alcohol, Tobacco and Dangerous Drugs
Vice President, Temperance Association of Sri Lanka

On the 4th of January 2023, the World Health Organization proclaimed that "No level of alcohol consumption is safe for our health". This is an important message as we commemorate the "World No Alcohol Day" which falls on the 2nd of October each year. However, despite this landmark proclamation of the WHO, alcohol continues to be the commonest toxin willingly consumed the world over.

Alcohol Dependence Globally - Some alarming facts :-

Over 2 billion people use alcoholic beverages

- Harmful effects of alcohol cause more than 200 diseases and injuries.
- Worldwide 3 million deaths occur every year from alcohol dependence.
- Alcoholism accounts for 5.1% of global burden of disease.
- Alcohol consumption causes death and disability relatively early in life - In people aged 20-39 years.
- 13.5% of total global deaths are attributed to alcohol dependence.

WHO statistics 2022 from Global burden of alcohol

In Sri Lanka, alcohol dependence is a major health and social problem. Most medical and social workers are aware of this. Unfortunately, only a few speak openly of this malady which is destroying our countrymen in the prime of their lives. Consumption of increasing amounts of alcohol over a period of time leads to the development of the "Alcohol Dependence Syndrome". This is characterized by deterioration of physical and mental health, as well as interference with smooth economic function, inter personal relationships and decline of moral, spiritual and social standards.

Per Capita Consumption of Alcohol Rates in Sri Lanka

- 2005 - 2.6 litres per annum (https://www.statista.com)
- 2010 - 7.4 liters per annum (*source : Excise Department – 2010*)
- 2016 - 18.9 litres males over 15 and 6.7 liters females over 15
  14.9 litres for both sexes and
  3.5 litres per annum (*source : WHO Report*)
- 2018 - 4.1 litres per annum (*https://www.statista.com*)
- 2020 - 2.7 litres per annum and
  18.9 liters for males only

World Health Organization (2018) Global Status Report on Alcohol and Health - Sri Lanka Fact Sheet.

- 2023 - 4.3 litres per annum – both sexes 18.9 litres male only

ADIC Fact sheet November 2023

The above data clearly show that alcohol consumption has increased in Sri Lanka.

Alcohol Dependence in Sri Lanka - *Some alarming facts:*

- 36.9 of males and 2.24 of females consume alcohol in Sri Lanka.
- Daily expenditure for consumption of beer & arrack is Rs.400mn and
- Rs.600mn respectively (*NATA Fact Sheet 2023*).
- Low-income families spend 1/3rd of their total income on alcohol & tobacco.
- Around 18,000 men die annually from alcohol related deaths.
- Per capita consumption of alcohol in Sri Lanka is 3.5 litres -
  - This is the highest among SAARC countries.
- Per capita consumption among males alone is 18.9 litres.
- Government health expenditure on diseases related to alcohol consumption is Rs. 140 billion annually.

Chairman's report National Alcohol & Tobacco Authority 2017 and WHO Global Report 2020

Consequences of Alcohol Dependence in Sri Lanka - The disease burden:

- The disease burden – cirrhosis
  (Sri Lanka has the second highest rate of cirrhosis in the world - 55 per 10,000 population).
- Gastrointestinal complications - pancreatitis, gastritis, gastric and duodenal ulcers.
- Heart – cardiomyopathy, heart failure, high blood pressure.
- Carcinomas of liver, pancreas, stomach, oral cavity & breast.
- Neurological complications – dementia, myopathy, neuropathy & epilepsy.

- Psychiatric disorders – depression, suicide, convulsions & pathological jealousy.
- Morbidity and mortality from road traffic accidents (currently 8 deaths per day occur in the roads of Sri Lanka. Alcohol accounts for 70% of road accidents).
- Violence, homicide and crimes committed under the influence of alcohol.
- Sexual harassment and violence against women and children.
- Suicide – current rate of suicide in Sri Lanka is 15 per 100,000/-
  48% of suicides are related to alcoholism.

High Incidence of Alcoholism in Sri Lanka results from:

- The ready and easy availability and accessibility of alcohol via wine stores, restaurants, toddy taverns and supermarkets numbering more than 5,000 in all part of the country.
- The demand for alcohol has recently reduced due to the high cost of alcohol beverages. However, the recent issue of 273 liquor licenses in 2023 and issue of more than 500 licenses for sale of soft liquor in 2024 have been counter-productive with increase in supply of alcohol. (Excise Commissioner's statement September 2024).
- Un-estimated number of more than 200,000 distributing outlets of illicit alcohol makes illicit alcohol readily available.

There is no safe limit for the consumption of alcohol during pregnancy. In excess, can lead to the Foetal Alcohol Syndrome.

Addiction to alcohol

Alcohol is a psychoactive substance that leads to physical & psychic dependence and the development of tolerance. The development of addiction of alcohol is influenced by genetic, environmental, social, mental and developmental factors. These interact with each other leading to alcohol addiction.

Increased risk of addiction to alcohol correlates strongly with male sex and strong family history of addiction. Psychiatric disorders such as depression, anxiety, schizophrenia and bipolar disorders also increase the risk of developing alcohol addiction. Working in environments of easy accessibility to alcohol, eg: waiters in restaurants and bartenders also increase the risk of addiction.

Treatment of alcohol addiction

Screening methods such as AUDIT and CAGE Questionnaire are methods to identify apparently asymptomatic people at risk of developing addiction to alcohol. Treatment of alcohol addiction is best undertaken in psychiatric units in government or private hospitals under the supervision of consultant psychiatrists.

Depending on the extent of addiction the following methods can be adopted.

- Simple advice regarding harmful health effects of alcohol and the financial consequences to the patient and family.
- Brief counselling with continued monitoring at regular intervals.
- For significant alcohol addicts - referral to consultant psychiatrists/addiction specialists for evaluation and medical treatment of alcohol dependence with available drugs. Eg: acamprosate, naltrexone, disulfiram or topiramate if required.

Acute and sudden complete withdrawal of alcohol in a heavily addicted alcoholic which leads to the development of an acute toxic confusional state referred to as "delirium tremens" is a medical emergency. This condition requires urgent admission to hospital followed by sedation, correction of dehydration, electrolyte imbalance, hypoglycaemia and specialist treatment.

Reducing the burden of alcohol dependence in Sri Lanka:

Reduce the availability and accessibility to alcohol. This can be achieved by;

- Stopping the issue of new liquor licenses with immediate effect.
- Cancelling all liquor licenses issued to outlets situated within half mile radius of schools and places of worship.
- Increasing the minimum age for purchase of alcohol to 21 years.
- Restricting hours and days that alcohol is sold in outlets.
- Reducing the demand by increasing the price of alcohol.

  The price of alcohol should be increased in accordance with the rise in cost of living in every annual budget.
- Enacting appropriate drink driving policies and appropriate fines.
- Application of correct taxation formulae for alcohol.

  This will ensure that all increases in taxation of alcohol will result in appropriate increase of income from taxation to the treasury.
- Cancelling licenses of all distilleries that do not pay the correct taxes on time to the government.
- School based intervention to prevent alcohol, tobacco and dangerous drugs.

  Children must be educated about the harmful effects of alcohol, smoking and dangerous drugs.

The absolute necessity to say "No to alcohol, tobacco and dangerous drugs" must be impressed upon school children to save our future generations from the dangers of alcohol, tobacco and dangerous drugs.

Situational leadership II: A leadership framework for clinicians

Dr MP Deraniyagala
(MBBS) (MD) (MRCP) (ESEGH)
Consultant Gastroenterologist

Doctors are entrusted with both implicit and explicit leadership responsibilities, making it imperative for them to fulfil these duties in order to thrive as successful clinicians [1]. From a house officer to a visiting consultant, all are obliged to take up leadership roles on a day-to- day basis in their respective clinical environment, which may range from a small ward team to managing operations of the entire institution. Good leadership leads to a goal directed team behaviour which will improve clinical outcomes of both the patients and the providers.

Leadership is an ever-continuous, dynamic relationship between the leader, his followers and the situation[2] . This article will focus on Situational Leadership-II (SL-II) style, which is an excellent and simple tool for clinicians who are leading a team of colleagues.

Initially developed by two Organisational Behaviour experts, Blanchard and Hersey in 1969 considering interactions between the leader, his or her followers, and the situation[3][4], Over the years SL-II evolved correlating two fundamental behaviours of the leader, **Supportive behaviour,** and **Directive (relationship) behaviour** with the follower's level of **Development** (ability and willingness to accomplish a particular task/goal). *(Figure-1)*

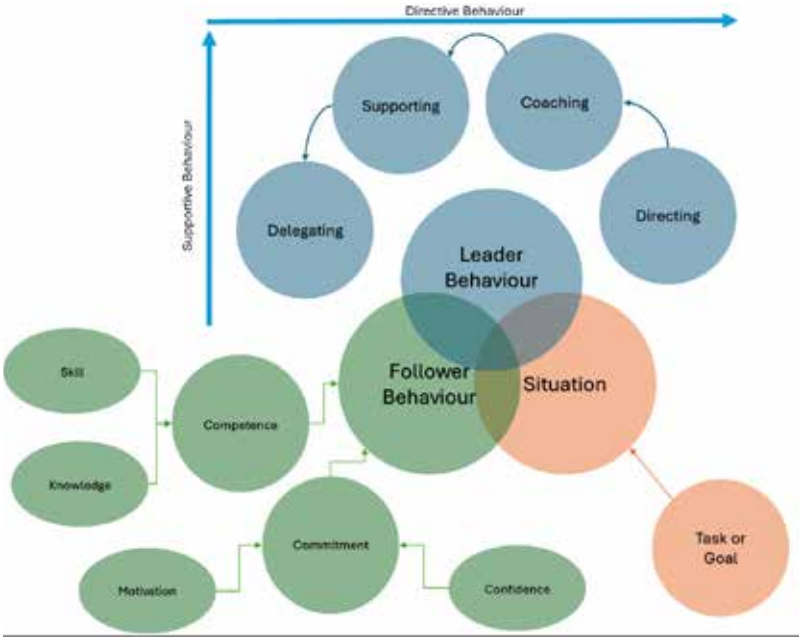


Figure-1: Leadership dynamics in practice.

Application of the model.

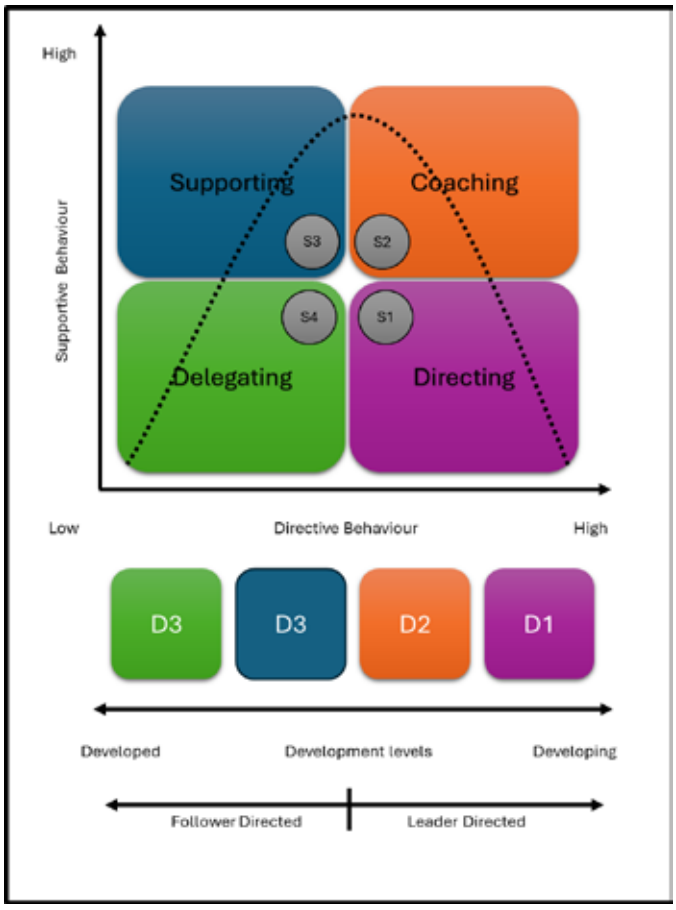


Figure-2: The Situational Leadership Model. Adapted from: Hughes RL, Ginnett RC, Curphy JC. Leadership, Enhancing the lessons of experience. 10th ed. New York: McGrawHill, 2022

The model should be approached from right to left *(Figure-2)*, follower development increases from right (D1-low) to left (D4-high), Interpolating leadership correlations of directive and supportive behaviour yields a 2x2 table, S1 to S4 (right to left), illustrating the appropriate leadership model to be used for each development stage.

The leader should initially assess the development of the follower (R1-R4) in relation to the task to be completed. It is important to note that development is not an assessment of the individual's personality, traits, values, age or personal characteristics, but the competence and commitment to

handle a particular task/goal. Competence depends on knowledge and skills whereas commitment encompasses motivation and confidence on a specific task or a goal.

Hence, a follower may have high development to one task but not for the other. (e.g.- The readiness to complete a diagnose card by a house officer vs the readiness to do a laparotomy.)

Next a line should be drawn from the centre of development stage to the intersection of the curved line. The quadrant of intersection represents the ideal task and relationship behaviour the leader should demonstrate towards the follower. Hence, effective leadership lies in matching the follower's (subordinate's) development with the appropriate leadership style[4].

Now let us dive into the model with an example. Consider a new intern doctor, he or she would demonstrate a development level of D1 (Eager to learn, excited, confident but has no true insight about the competence), hence the leader should demonstrate more directing approach (S1) focusing on one-way communication form leader to subordinate providing information of what to do, when to do, how to do, and providing focus and feedback on results.

Later, the intern will develop some competence and skills but is inconsistent, has low or no commitment, discouraged, frustrated, overwhelmed, confused, demotivated, afraid of making mistakes and may even have plans to quit (D2). Hence, it is of utmost importance that the leader quickly identifies this situation and adapt a coaching style of leadership (S2) with high supportive and directive behaviour. Supportive behaviour should include active listening, involvement and facilitation in decision making and provide feedback and develop two-way communication that promotes the follower to become an active participant in the decision- making process. The leader must be able to train the follower. Hence, both parties need a great deal of effort, especially if there are more than one follower at this level, which is the usual case in a ward setting.

With time the intern doctor develops more skills, competence and demonstrates variable commitment (D3), capable but a cautions contributor, demonstrates competency, may have developed their own methods or 'shortcuts' but sometimes demonstrate hesitant and self-critical behaviour. They may even be bored or apathetic, culminating to variable commitment towards team tasks and goals. At this stage the leader may adopt a supporting leadership (S3) style with high supportive and low directive behaviour with facilitation of broader freedom in decision making, facilitating problem solving and developing confidence while maintaining excellent two-way communication. Finally, the subordinate nears end of internship, he or she is independent, confident, inspiring to others, high in competence and commitment to pursue exciting carrier prospects (D4), he or she can solve tasks and has the commitment to do so.

Henceforth, the leader should adopt a more delegating role with low directive and low supportive behaviour. The follower may make most of the decisions individually within their boundaries. The role of the leader would be to value and appreciate the contributions and support the follower's growth. At a higher level (considering a post-graduate trainee) the leader may implement a 'developmental intervention' through thorough assessment of follower development and placing the follower in the next higher level which would promote skill, competencies and demand more commitment as a training measure.

However, it is important that the leaders should provide goals, maintain communication, and provide constructive feedback on the follower in all four leadership styles. Although this scenario describes an optimal match, in practice mismatches do occur. Two important ones to avoid would be over supervision- Leader demonstrating much more directive and supportive behaviour (S1, S2, S3) in comparison to the follower's development stage (D4) and under supervision – too little directive and supportive behaviour to an apprentice follower (S2 to D2). Either mismatches would lead to poor task/goal accomplishment, increasing friction and failure as a team.

It is also important to note that a particular follower would move continuously through the model and that at a given time different followers would be on various stages of the model as speed of passage would differ dependent on the leader and follower behaviour. The model is also task/goal specific, and the main drawback would be the determination of follower development through the leader's own perspectives of the follower.

References

1. Leadership and management for all doctors. General Medical Council, GMC UK, 2012. https://www.gmc-uk.org/professional-standards/professional-standards-for-doctors#leadership (accessed Feb 16, 2024)
2. Hollander EP, Leadership Dynamics. New York: Free Press, 1978.
3. Hersey P. Blanchard KH. Management of Organizational Behavior – Utilizing Human Resources. New Jersey: Prentice Hall, 1969.
4. Hughes RL, Ginnett RC, Curphy JC. Leadership, Enhancing the lessons of experience. 10th ed. New York: McGrawHill, 2022.

Ethical lifestyle – a sustainable choice

Professor Harshini Rajapakse
SLMA Ethics Committee

"Whenever I've worked up the courage to share a medical error or mistake, my colleagues listen raptly. But most don't say anything, even though I know they're just as guilty. The culture of medicine still won't allow it." – Peter Pronovost. [MD, PhD]

When a patient or a family member of a patient gives an interview about a medical misadventure, there are many hateful comments seen from readers or viewers. It is easy to dislike someone we don't know and make assumptions about their motives and beliefs. Also, some factors not directly related to that clinical setting or doctor patient relationship, spring up with a lot of personal details about the medical professional.

Hence it is important to discuss these errors or mistakes reflect upon them and make it a habit to develop so called "ethical intelligence "or virtue ethics in our lives. When I reflect upon few incidences happened during past few months, I realized that highly educated, skilled persons from sophisticated backgrounds were facing trouble, may be lacking ethics of care.

Bruce Weinstein describes five principles in "Ethical Intelligence", which are very simple and easy to practice.

1. Do no harm
2. Make things better
3. Respect others
4. Be fair
5. Be caring

Sometimes people who act ethically in clinical settings act differently in other settings like with other staff categories or with the pharmaceutical industry. It doesn't stop there, choosing eco-friendly products, supporting fair trade, reducing waste, and the list goes on. Therefore, it is important for us to move towards an ethical way of living more than just applying duty-based ethics or consequentialism only when we face an ethical dilemma. An ethical life style will help us develop the capacity to discover the right course of action, act upon what we discover and commit ourselves to make this exploration a lifelong journey.

References

Ethical Intelligence: Five Principles for Untangling Your Toughest Problems at Work and Beyond Paperback – October 11, 2011

by Bruce Weinstein (Author)

SLMA Kids Art

Dr Kalyani Guruge
Consultant Paediatrician

"Never too late to create an enriched environment: be maker or beholder"

Magsaman

SLMA Kids Art was started as an effort to keep the children engaged while their parents took part in the SLMA Walk, an annual event in SLMA calendar few years ago. While adults were walking, attending health clinics discussing life style changes to achieve better health, enjoying tea & chit chat with their colleagues, we managed the children with story telling, singing, magic shows & painting on-site. Then came the idea of art at home which was to be exhibited at the venue & distribution of gifts. Initially named as SLMA Kids Art competition was changed to SLMA Kids Art creations on a very valid request from Education ministry.

Since then Kids Art creations has remained an attractive event in SLMA calendar. Naming year 2024 as Year of Kids Art Tsunami has become more appropriate with a count of around 5000 submissions at the last count & counting is still continuing.

Have you been aware that creating art can sculpt the brain & viewing art can improve empathy & tolerance?

"The aim of art is to represent not the outward appearance of things, but their inward significance".

Aristotle

"Neuroesthetics is the study of how arts measurably changes the body, brain & behaviour & how this knowledge is translated into practice".

Susan Magsamen

(*Founder & Director of International Arts & Mind Lab centre for applied Neuroesthetics.*

John Hopkins University School of Medicine)

Researchers Magsamen & Ross found that just 20 minutes of art a day makes a huge difference as either the maker or the beholder. Further Magsamen has claimed that "Art can create new neuropathway in the brain through sensorial experience. With high visual stimulation if we make or see a lot of art, we are growing dramatically parts of our brain" and also added "it's never too late to create an enriched environment, whether as the maker or the beholder".

Creating art improves a range of benefits from fine motor skills to social - emotional balance and resilience.

Cognitive development is another identified area. Art alleviates anxiety, depression & stress. The children get opportunities in learning self regulation, develop self esteem & gain a feeling of uniqueness. Being engaged in art can influence brain function, the effects lasting into adulthood.

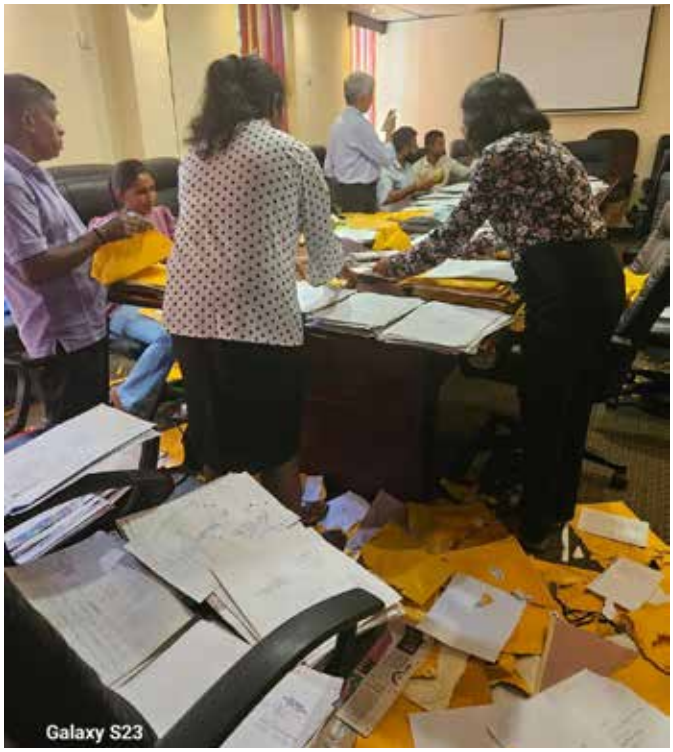
Pablo Picasso on viewing art stated "It's not what you look at that matters, it's what you see".

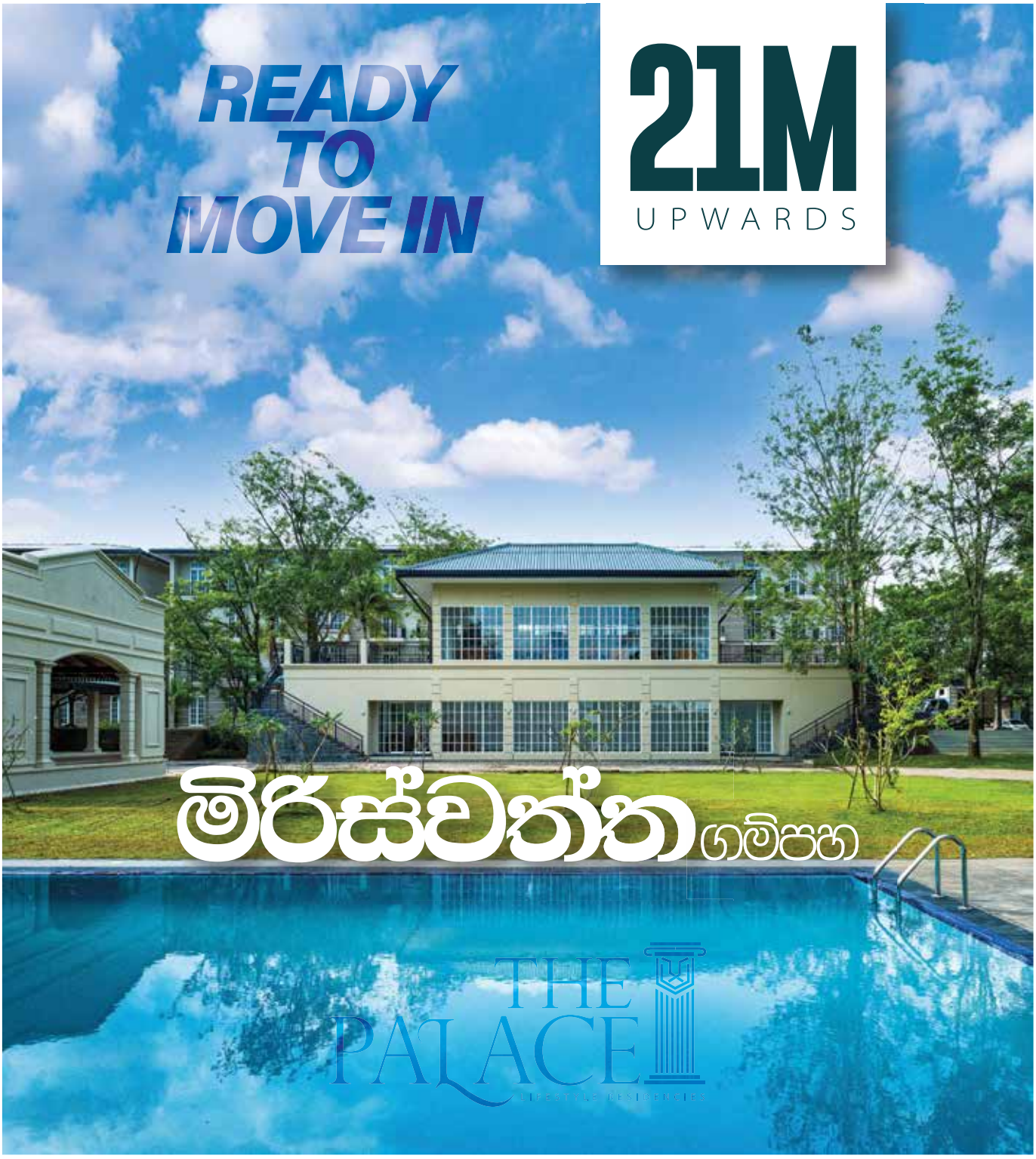
"Viewing art trains the mind through the eye & the eye through the mind"

John Lubbock

Viewing art can release dopamine, a neurotransmitter which creates a feeling of general well being. Merely gazing at art can reduce cortisol levels known to cause stress & mental exhaustion.

If it" s not too late to be a creator, start now or at least be an art viewer.





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