

Sri Lanka Association for the Advancement of Science (SLAAS)

Section A Newsletter

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President's Message

Dear SLAAS members, friends and colleagues,

It is an honour to serve as president of SLAAS Section A (medical, dental and veterinary sciences) for the year 2022. Sri Lanka Association for the Advancement of Science (SLAAS) is the premier organization of science in Sri Lanka. Under this prestigious organization eight sections serve society under the vision, "to be a scientifically advanced nation".

Last year was a challenging but successful year for Section A. We were able to conduct several activities aligned with our four main objectives;

1. Advance the knowledge base of professionals of Section A and other sections
2. Disseminate scientific knowledge and promote science enquiry among school children as messengers of health
3. Promote health and dissemination of knowledge among the general public
4. Conduct activities to fulfil responsibilities towards society

For the upcoming year the SLAAS theme is 'Effective Science Communication for an Informed Society'. According to the theme, many activities are lined up such as lectures, workshops, media communique, and we hope to carry out as many activities as possible this year through effective science communications to contribute towards an informed society. The Section A newsletter showcases the services conducted in a particular period. Furthermore, scholarly articles that upgrade scientific knowledge are also included in the Section A newsletter.

I wish to personally thank all our members for their hard work in supporting the organization. Without your active contribution and help it would not be possible to accomplish the tasks we have set out to do. Stay healthy and continue to support SLAAS. Wish you a successful and productive year!

Dr. Kaumadi Karunagoda
President / Section A - SLAAS

R.M.G Karunaratne
Senior Lecturer
Department of Philosophy
Faculty of Social Sciences
University of Kelaniya

Coronavirus (COVID – 19) can be identified as an infectious disease which has potentially infected most people worldwide. Presently, it is a global health issue that everyone is expecting a permanent solution for. According to the WHO explanation, most people infected with the virus will experience mild respiratory illness and recover without special treatment. At the same time, some of them need medical attention. Older people and those with underlying medical conditions such as cardiovascular disease, diabetes, chronic respiratory disease, or cancer are more likely to develop serious illnesses. Anyone can get sick with COVID-19 and become seriously ill or die at any age (WHO, 2021).

Quarantine, a great technique used to control the virus spread has immensely aided in managing this infection. According to the Center for Disease Control and Prevention (CDC), quarantine separates and restricts the movement of personnel who are exposed to a contagious disease and observes them for a period to see if they become sick (CDC, 2017). Additionally, maintaining social distancing, wearing face masks, hand-washing, usage of hand sanitizers, and working from home were some of the other essential preventive methods used to control the spread of infection of the COVID-19 virus. Although these were great preventive techniques for physical health, they have caused significant psychological and behavioural issues among individuals worldwide.

The impact of quarantine and social distancing on mental health is significant. According to the existing literature, it is evident that people experienced significant mental health issues during the post-COVID-19 period. People experience emotional disturbance, irritability, insomnia, depression, and post-traumatic stress symptoms immediately after the quarantine period.

The long-term impact is considerable and wide-ranging, including anxiety, anger, depression, post-traumatic stress symptoms, alcohol abuse, and behavioural changes such as avoiding crowded places and cautious hand washing. These psychological symptoms can last from several months up to three years after the quarantine period (Brooks *et al.*, 2020). Galea, S. *et al.* (2020) highlight that social distancing could substantially increase loneliness, anxiety, depression, domestic violence, child abuse as well as substance abuse.

With the deep analysis of the research evidence mentioned above, it is clear that people are liable to experiencing significant mental health issues during the post-pandemic era. Affiliation or being with others is a terrific psychological need of individuals to satisfy their social needs. Social psychologists have explained the need for affiliation as a social motivation that individuals receive by birth. Due to quarantine and social distancing, it was hard to satisfy this motivation. People were psychologically disturbed and increased behavioural issues occurred due to this deficit of this social affiliation.

Researchers have focused their attention on studying the most vulnerable groups. They have found a significant vulnerability among frontline health care professionals to have outstanding mental health issues during the post-pandemic period. Accordingly, Que *et al.* (2020) revealed that psychological symptoms including anxiety, depression, and insomnia are prevalent in up to 60% among physicians, nurses, and medical residents during the COVID-19 pandemic, which is likely to persist for several years. This evidence points out that health professionals should address mental health issues immediately. On the other hand, economic problems arising from the pandemic have greatly influenced community mental health.

The World Bank has predicted an abrupt global economic collapse for decades following the COVID-19 pandemic. This may harmfully impact mental health, especially among the vulnerable groups. The economic recession has been associated with an increased prevalence of psychological distress, anxiety, depression, substance abuse disorders, suicide, and suicide attempt behavior. Frاسquilho *et al.* (2016) have elucidated unemployment, insecure job situation, lower socioeconomic status, and pre-existing psychiatric problems as the determinants of mental health issues due to the post-economic recession. Additionally, Chag *et al.* (2013) have further explained that unemployment following the economic downturn is a significant risk factor for suicide, and suicide rates have considerably increased following the global financial crisis in 2008. Accordingly, it can be hypothesized that a potential economic recession with the rise in unemployment following the COVID-19 pandemic might have a similar impact on the suicide rate at the post-pandemic period.

During the outbreak of COVID-19, the world practiced physical distancing, referring to it as “social distancing”. It resulted in many changes in the lifestyle practices of the community. It remarkably affected the world’s education system as many countries closed schools to protect the children. Although this strategy prevented the COVID-19 outbreak, undoubtedly there are short and long-term negative consequences for the mental well-being of school children. According to UNESCO (2020) reports, one hundred and eighty-eight countries closed schools in April 2020. It reflects that the education system has been influenced by the pandemic outbreak and emphasizes the need to search for alternatives to continue the education system. Online education is one of the most vital alternatives, still practiced mostly, but it appears to increase loneliness, depression, fear, panic, anxiety, substance use, and domestic violence among school children (Xiang *et al.*, 2020). During the COVID-19 outbreak, some students locked themselves up inside their rooms for weeks, refusing to take showers, eat, or leave their rooms. For some students with depression or fear, there were numerous difficulties in adjusting back to normal life once school resumed. Students with special educational needs, such as those with an autism spectrum disorder, are also at risk. They become frustrated when their daily routine activities are suspended (Radwan *et al.*, 2020).

When deeply examining the existing research literature, it can be seen that the rapid outbreak of the pandemic has had a heavy impact on the community’s mental health. Although the intensity of physical symptoms could be controlled, the impact of psychological and behavioural issues on the community is still questionable during the post-pandemic era.

Doing more research to identify the roots and preventive techniques, immediately addressing the vulnerable groups with psychosocial interventions, dissemination of knowledge on psychological first aids, planning and implementing community mental health programs, and many other innovative psychological and behavioural modification techniques can be used to manage mental well-being and behavioural issues of the psychologically infected community in the world during the post-pandemic era.

Reference:

1. Brooks S.K., Webster R.K., Smith L.E., Woodland L., Wessely S., Greenberg N., Rubin G.J. (2020), *The psychological impact of quarantine and how to reduce it: rapid review of the evidence*. *Lancet*. 2020;395:912–920.
2. Centers for Disease Control and Prevention (2017), Quarantine and Isolation Retrieved from <https://www.cdc.gov/quarantine/index.html>
3. Chang S.S., Stuckler D., Yip P., Gunnell D. Impact of 2008 global economic crisis on suicide: time trend study in 54 countries. *BMJ*. 2013;347:f5239.
4. Frاسquilho D., Matos M.G., Salonna F., Guerreiro D., Storti C.C., Gaspar T., Caldas-de-Almeida J.M. Mental health outcomes in times of economic recession: a systematic literature review. *BMC Public Health*. 2016;16:115.
5. Galea S., Merchant R.M., Laurie N. (2020), The mental health consequences of Covid-19 and physical distancing: the need for prevention and early intervention. *JAMA Intern. Med*. 2020;180(6):817–818
6. Que J., Shi L., Deng J., Liu J., Zhang L., Wu S., Gong Y., Huang W., Yuan K., Yan W., Sun Y., Ran M., Bao Y., Lu L. (2020), Psychological Impact of the COVID-19 pandemic on healthcare workers: a cross sectional study in China. *Gen Psychiatr*. 2020;33(3)
7. Radwan, E., Radwan, A., & Radwan, W. (2020). The Mental Health of School Students and the COVID-19 Pandemic. *Academia*, 4 (2), ep2020 Retrieved from <https://doi.org/10.29333/aquademia/8394>
8. UNESCO (2020). UNESCO's data on school closures worldwide. Retrieved from <https://en.unesco.org/covid19/educationresponse>
9. WHO (2021), *Coronavirus Disease (COVID-19)* Retrieved from https://www.who.int/health-topics/coronavirus#tab=tab_1
10. Xiang, Y. T., Yang, Y., Li, W., Zhang, L., Zhang, Q., Cheung, T., & Ng, C. H. (2020). Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. *The Lancet Psychiatry*, 7(3), 228-229. [https://doi.org/10.1016/S2215-0366\(20\)30046-8](https://doi.org/10.1016/S2215-0366(20)30046-8)

COVID-19 and Mental Well-being of Children

Dr. Yamuna Ellawela
Consultant Community Physican
Directorate of Mental Health
Ministry of Health

Good mental health is as important as physical health in achieving developmental milestones in a child. It shapes up the way they handle day-to-day stresses, leading them to a happy and a fruitful future. Every child is unique in their thoughts, desires and behaviour. Thus, children with different characteristics face and respond to the pandemic in different ways. Despite being young in age, children are not immune to the psychological effects associated with COVID-19. In fact, the pandemic and lockdown have had a great impact on emotional and social development in children and adolescents. Fear, grief, uncertainty, social isolation, increased screen time, and other psychosocial issues such as parental financial difficulties have negatively affected the mental health of children.

This challenging time has affected the children in multiple ways. Pandemic related restrictions of movement and lockdowns have caused disturbances to the normal education system. The closure of pre-schools and the school system have made a huge difference in their day-to-day activities. They have lost the time they spent with their friends playing outdoors, limiting their opportunities for socialization. As a result, there have been limitations to their physical activity as well. In such a turbulent environment, it is common for children to experience negative emotions such as fear, disappointment, sadness, anxiety, anger and, loss, etc. These emotions, if unnoticed and unattended, may disrupt their functioning at home, school and in the society.

Thus, parents and teachers need to be more attentive and vigilant than they were before, to see if the following behavioral changes are present in their children since they are most likely to notice the changes first.

- . Impulsiveness (frequent anger)
- . Tearfulness
- . Excessive fear
- . Desire to be alone
- . Changes in sleep patterns (having trouble sleeping or oversleeping)
- . Showing various somatic symptoms (examples: headache, abdominal pain)
- . Loss of appetite or overeating
- . Decreased interest in academic work or hobbies
- . Sticking to electronic devices such as mobile phones and computers

As we are stepping into the third year since the onset of the COVID-19 pandemic, its impact on the mental wellbeing of children will continue to grow.

As children are relatively very resilient, most of them can manage to cope if adequate support is provided. However, some children are at a greater risk of developing mental health conditions.

Hence, it is important for children to have a safe and comfortable environment both physically and mentally that allows them to express their stress, anxiety and fear through various signals. Parents should pay close attention to the causes of the child's anxiety or restlessness and should respond in a way that helps the child feel that their parents understand and care them.

Moreover, parents need to make sure that the environment at home is more loving and caring than before as the children can feel the parent's love. Love has to be expressed and shown as there is no use of having love in their hearts if the child cannot feel it. There is no greater comfort for the child than feeling that he or she is 'important' to their parents or adults.

Parents must also spend quality time with their children more than ever; encourage children to talk about their feelings with family members or trustworthy persons. Parents can chat with them, play games, study, etc. Moreover, parents need to make sure that the environment at home is more loving and caring than before as the children can feel the parent's love. Love has to be expressed and shown as there is no use of having love in their hearts if the child cannot feel it. There is no greater comfort for the child than feeling that he or she is 'important' to their parents or adults. They need to encourage children to carry out daily activities according to a proper routine. It is best to maintain the regular wake-up time and bedtime that was set when they were schooling. Late sleep and wake up time can adversely affect a child's overall health.

We also need to understand that children often imitate the feelings and behaviors of adults. Restless behavior of parents and adults regarding this pandemic also affects the minds of children. Children are a product of curiosity by nature. They pay close attention to what adults say and do during such stressful situations. Adults should be role models by behaving calmly and responsibly. Therefore, adults should reassure young minds by listening calmly to questions raised by their children and speaking kindly to them to minimize the distress that is being caused by the information about COVID-19. Parents have a great responsibility in helping their young children to feel reassured and relaxed by better understanding their emotions.

During the COVID-19 pandemic, children see and hear news about people getting sick and dying, and long lasting suffering related to the pandemic. Whether children are aware of it or not, exposure to electronic media reports and images about the Corona pandemic can also adversely affect their mental health. This is a major reason as to why children should be restricted from watching and listening to disturbing information spread through various media channels. Adults must refrain from talking about rumors or unconfirmed information in front of their children. It is difficult for children to distinguish between what they hear and see and what is real. Therefore, it is important to provide only age-appropriate information that ensures their security and care. Parents need to educate children in an understandable manner about how they can protect themselves and others. At present, we are unable to prevent children from being exposed to electronic media due to the online education system.

Prolonged and unlimited screen time can cause not only mental health issues such as poor concentration, decreased memory, but also diminish bonding with family members and friends. It also leads to a sedentary lifestyle resulting in many other physical problems as well. However, the use of such media can be restricted beyond the time used for educational purposes. It is important to set limits on online games and apps, create a separate online account for the child, and set screen time limits. If the child can develop self-discipline through understanding what is right and wrong on the internet, they are more likely to maintain it throughout life.

As parents, you need to be role models for the child by minimizing the frequent use of electronic devices in front of the child. It is essential to care about the discipline of the child. If you have ever followed a relaxed method of child rearing like permissive parenting style, adopt more responsible methods.

Encourage the child to engage in other activities that the child enjoys at times out of education. Drawing, singing, dancing and playing in the garden will help the child to grow mentally and physically. These activities help them express and communicate negative feelings they have in positive ways.

If parents worry about prolonged symptoms of stress, fear, sadness or irritability of the child they must seek professional help. The national mental health helpline (1926) functions 24/7.

Taking good care of the mental wellbeing of children is just as important as taking precautions against the virus. By doing that, all of us can contribute to create a mentally healthy future generation despite this challenging period.

Highlights from the Scientific Brief – Mental Health and COVID 19 – World Health Organization

- In the first year of the COVID-19 pandemic, global prevalence of anxiety and depression **increased by more than 25%.**
- The greatest increases in depression and anxiety were found in places highly affected by COVID-19, where infection was high, and movement was restricted.
- Females were more affected than males, and **younger people**, especially those aged 20–24 years, were more affected than older adults.
- People **with pre-existing mental disorders**, particularly severe mental disorders (such as psychosis or bipolar disorder), when infected with COVID-19, had a higher risk of COVID-19-related hospitalization, severe illness and death.
- The increase in the prevalence of mental health problems has coincided with severe disruptions to mental health services, which were already limited in many countries, leaving huge gaps in care for those who need it most. By the end of 2021 more care was available than in the previous year but today too many people remain unable to get the care and support they need for both pre-existing and new mental health conditions.
- Unable to access face-to-face care, many people have sought support online, signaling an urgent need to make reliable and effective digital tools available and easily accessible. However, there are barriers to the feasibility of these interventions in low-resource settings and countries without the necessary infrastructure.
- Throughout the pandemic, WHO has worked with partners and led an inter-agency response to the mental health impacts of COVID-19 by disseminating guidance, tools and resources for responders and the general public and by promoting the integration of mental health and psychosocial support within all aspects of the wider response.
- Governments have recognized the impact of COVID-19 on mental health and are taking action. WHO's most recent pulse survey on continuity of essential health services indicated that 90% of countries are working to provide mental health and psychosocial support to COVID-19 patients and responders alike.
- However, we have yet to see the full impact of the pandemic on people's mental health. This renewed focus on mental health must continue in the longer-term; according to WHO's latest data, just 2% of health budgets are currently spent on mental health.

List of activities of SLAAS Section A from January to March 2022	
January	
06 January 2022	A Live radio program on “Malvaraya” was conducted via the Sri Lanka Broadcasting corporation Suva Arana with Dr. Kaumadi Karunagoda as the resource person. Activity coordinator: Dr. Kaumadi Karunagoda
14 January 2022	Dr. Kaumadi Karunagoda was a panelist to evaluate the inter school essay and reading competition organized in collaboration with the Lions Club, Moratuwa at President’s college, Maharagama. Activity coordinator: Dr Kaumadi Karunagoda
16 January 2022	A Quiz competition was conducted on the 16 th January 2022. Activity coordinator: Dr Kaumadi Karunagoda
26 January 2022	An online programme on life style modification and cancer reduction was conducted for insurance company workers from 10 am to 1pm with Dr. Thilina Wanigasekera as the resource person. There were 96 participants. Activity Coordinator: Dr Thilina Wanigasekera
28 January 2022	A workshop was conducted for all categories of staff including medical from 9 am to 4 pm at the Ministry of Health on the E code with Dr. Thilina Wanigasekera as the resource person. Nearly 35 people participated. Activity Coordinator: Dr Thilina Wanigasekera
Feburary	
10 February 2022	A Radio programme was conducted on the topic “Diary Farming and Issues with Parasites” on the “Kandurata Sevaya” from 10 am to 11 am specifically targeting diary Farmers. Activity Coordinator: Dr Samantha Iddamaldeniya
26 January 2022	An online programme on life style modification and cancer reduction was conducted for insurance company workers from 10 am to 1 pm with Dr. Thilina Wanigasekera as the resource person. There were 96 participants. Activity Coordinator: Dr Thilina Wanigasekera
26 February 2022	A webinar on “Evidence Based Practice” was carried out for physiotherapists with Prof Gominda Ponnampuruma as the resource person. There were 30 participants present. Activity coordinator: Ms Cinthuja Pathmanathan
28 February 2022	A technical guidance programme was carried out for the employees of the Ministry of Health from 9 am to 4 pm with Dr. Thilina Wanigasekera as the resource person. There were 50 participants. Activity coordinator: Dr Thilina Wanigasekera
March 2022	
2 March 2022	A programme was carried out from 9 am to 3 pm for employees in the Ministry of Health on “Work Life Balance” with Dr. Thilina Wanigasekera as the resource person. There were 43 participants. Activity coordinator: Dr Thilina Wanigasekera
3 March 2022	A workshop was carried out for the employees of the Ministry of Health on “E code and Human Right” with Dr Navavi as the resource personfro m 9 am to 12 noon. Activity coordinator: Dr Thilina Wanigasekera
13 March 2022	A newspaper article on climate change and its impact on health was published. Activity coordinator: Dr Thilina Wanigasekera
18 March 2022	A workshop was carried out from 9 am to 12 noon fro employees in the Ministry of Health on “Mental Disorders and Stress” with Dr. Thilina Wanigasekera as the resource person. There were 50 participants. Activity coordinator: Dr Thilina Wanigasekera

Cont...	
18 & 19 March 2022	A dairy technology promotion programme was conducted from 8 am to 4 pm for dairy farmers in two veterinary ranges the Jaffna district in collaboration with the dairy corporation with Dr Samantha Iddamaldeniya as the resource person. There were 30 participants present. Activity coordinator: Dr Samantha Iddamaldeniya
23 March 2022	A medical camp was conducted for disabled army personnel from 8am to 4 pm in collaboration with the Institute of Indigenous Medicine. The resource persons were provided by the institute of Indigenous Medicine. There were 400 participants who participated in the camp. Activity coordinator: Dr Kaumadi Karunagoda
24 March 2022	A workshop was carried out from 9 am to 4 pm for employees in the Ministry of Health on “ Workplace Productivity” with Dr. Thilina Wanigasekera as the resource person. There were 80 participants. Activity coordinator: Dr Thilina Wanigasekera
2 nd March	Facilities were provided to upgrade 3 school libraries and 1 public library in the Ratnapura district in collaboration with the Ministry of Health. Activity coordinator: Dr Thilina Wanigasekera
1 st March	Two articles were submitted for the April newsletter. The article on “ COVID-19 and Mental Wellbeing was written by Dr Yamuna Ellawala from the Directorate of Mental Health, of the Ministry of Health. An article was also submitted on “Highlights from the Scientific brief – Mental Health and COVID 19 – World Health Organization.” Activity Coordinator: Dr Hemali Jayakodi



An inter school essay and reading competition

A TV program on Ayurveda for Endometriosis



HEALTH

Climate change and its impact on health

By Dr. NIRMALAN KATTARACHARI SRINIVASA
Much has been discussed regarding the effects of climate change in recent years. The World Health Organization (WHO) has identified it as the single biggest health threat facing humanity, and health professionals worldwide.

To understand its impact on health, The Healthy Living Group's spoke to the Ministry of Health Director - Organisation Development Dr. Thilina Wasingu. Climate change, as we know, encompasses a complex interconnected system which consists of the changes in the atmosphere, land surfaces, and sources of water such as the oceans, rivers, and all living things and is described as an average change of weather.

External factors influencing climate change are called forcings - these include volcanic eruptions, solar variations, and human-induced changes. These factors are specifically known as forcings because they drive the climate to change and it is important to note that these forcings exist outside of the existing climate system.

While solar radiation is one of the driving factors of the earth's temperature, there are human-induced changes that could be sustained. The earth receives nearly 1.779 watts of energy per square meter in each second in the daytime, 99% of it is reflected, mostly due to the atmosphere by clouds or aerosols. The rest is absorbed by the earth's surface (about 240 watts per square meter).

The earth also radiates energy into space by means of outgoing longwave

radiation. The main reason for the warmth in the greenhouse gases that act as a blanket, which blocks the long wave radiation going out of the surface of the earth. The most dramatic gases that originate and originate do not have much an effect. Additionally, climate change is a long-term process that will have slowly steady days and the weather then change the days, and Dr. Wasingu.

There has been a change in the earth's rotation axis due to natural causes, such as ocean currents and the contraction of the hot rocks in the deep earth, but after 1990, research shows that melting of ice in large quantities could change the rotation axis of the earth even faster, which can be measured by Multi-band Satellite Spectral Analysis (MSSA).



PHOTO COURTESY OF DR. NIRMALAN KATTARACHARI SRINIVASA
The decision of the polar shift has shifted southward to the north. Since 1990 it has shifted about four meters, according to the estimates.

When greenhouse gases increase the temperature, the ice layers will melt. This type of melting causes dark land areas and water spaces under the snow, which absorb more heat and cause more ice to melt. This cyclical phenomenon is referred to as ice-albedo feedback. Changes in the atmospheric composition due to multiple human-made changes the recent circulation, sea level, and biogeochemistry. Changes to the land contributed by the influence the land surface and the atmosphere. This will impact the cyclical process, snow, forests, and glaciers. Some of the infrared radiation that passes through the atmosphere is absorbed by greenhouse gases. It will warm the surface of the earth, and there are other greenhouse gases such as methane, nitrous oxide, ozone, and halocarbons that contribute to the greenhouse effect. Some of the infrared radiation that passes through the atmosphere is absorbed by greenhouse gases. It will warm the surface of the earth, and there are other greenhouse gases such as methane, nitrous oxide, ozone, and halocarbons that contribute to the greenhouse effect.

extreme precipitation as a line of each impact. These will lead to extreme heat, poor air quality, low quality of food and water, population displacement, and the change of the violence of the infectious agents.

Due to climate change, human may face an increased incidence of health issues such as heat-related diseases, vector-borne diseases, and consequences of mental stress. Out of all the issues, a more complex, incident arises due to air pollution. Carbon emissions in the leading cause of air pollution that directly impacts human health.

Air pollution may kill more than seven million people each year. According to WHO estimates, roughly over 90% of the urban population worldwide breathe polluted air that exceeds the safe limit recommended in the WHO guidelines.

Polluted air indoors and outdoors is the second leading cause of death from Non-Communicable Diseases (NCDs) according to the WHO estimates. This was further defined according to its contribution for each disease. Of that 26% of ischemic heart disease, 24% of stroke, 47% of chronic obstructive pulmonary disease, and 20% of lung cancer were attributed to air pollution.

What can we do to reduce global warming?

1. Reduce carbon dioxide
2. Methane emissions should be controlled
3. Reduce greenhouse gases from the air
4. Reduce greenhouse gases from the air
5. Plant more trees
6. Effective control of vehicles

ON HD

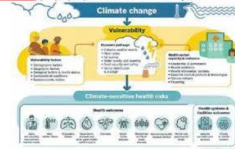
How can we reduce carbon dioxide?

1. Energy efficient buildings, changing vehicles into fuel-efficient vehicles, and use of electric
2. Energy conservation - reduce power energy use with more lights, air conditioners, and machinery. Use public transport whenever possible
3. Fuel switching - producing energy from renewable sources, using fuels with lower carbon content
4. Carbon capture and storage (CCS) - this is a new technology to reduce carbon dioxide by capturing carbon dioxide via pipelines and deep underground
5. Change in use of land and land management practices - Responsible waste management practices, bring in new laws, and improve technology

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A paper article on climate change and its impact on health





Seated (L to R): Dr. Nilantha Ratnayake (Past President), Dr. Thilina Wanigasekara (Vice President), Dr. Kaumadi Karunagoda (President), Dr. Dushyanthi Jayawardene (Secretary), Ms. Cinthuja Pathmanathan (Rapporteur)

Standing (L to R): Dr. Kasuni Akalanka, Dr. Jeewani Dahanayake, Dr. Hemali Jayakodi, Dr. Yasaswi Walpita, Dr. Samantha Iddamaldeniya

SLAAS, "Vidya Mandiraya", 120/10, Wijerama Road, Colombo 07, Sri Lanka.

+94-11-2688740 hqslaas@gmail.com