

PERADENIYA MEDICAL SCHOOL ALUMNI ASSOCIATION *Newsletter*



DECEMBER 2023



Award winners and dignitaries at the PeMSAA-UK Academic Awards 2023 – a recently concluded PeMSAA activity

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Recent PeMSAA events: Joint Regional Academic Sessions of the Sri Lanka College of Paediatricians & PeMSAA

The PeMSAA collaborated with the Sri Lanka College of Paediatricians to organise a joint academic session for medical officers. The sessions were held on 5th and 6th October 2023. The inauguration was held on the evening of 5th October 2023, with the participation of members of both organizations. Dr Shanthi Rajapakse, a retired senior paediatrician and a former President of PeMSAA was invited to be the chief guest. Unfortunately, Dr Rajapakse was unable to be physically present at the occasion due to a family bereavement, but sent her well wishes as a message which was read out by Professor Thushara Kudagammana.



Many paediatricians from the Central Province joined the event, and the evening was a time for camaraderie and fellowship.

Joint Regional Academic Sessions of the Sri Lanka College of Paediatricians & PeMSAA



- Adolescent Friendly Health Services**
- To setup ideal Adolescent Friendly health facilities
 - To make existing ones more youth friendly
 - Deliver services and supply in various health settings, e.g. school health centres, market place clinics & etc.

The following day featured the Regional Academic Programme, which covered a wide range of topics very relevant for the day-to-day medical practice of grade medical officers and postgraduate trainees. The session was very well-attended, with nearly 150 registrants, and was much appreciated by the attendees.



We would like to thank Dr. Kosala Karunaratne, President of the SLCP and his Council for their initiative, all the resource persons who contributed for the programme, and the Council of PeMSAA for their support to make this event a success.



Article:

Remission of diabetes: Myth or a reality?

Diabetes has become an epidemic in the society with a prevalence of 537 million (1). In Sri Lanka, 27.6% of urban population were found to diabetes. Type 2 diabetes mellitus (T2D) is considered a chronic progressive disease with a significant mortality/morbidity due to associated macro- and microvascular complications. Treatment strategies are aimed at managing glycemic levels and minimizing the complications.

It is evident that pre-diabetes is reversible through targeted lifestyle modifications and/or medications like metformin, but until recently, reversal of diabetes once diagnosed was not a discussion on the table. With recent evidence, the chronic irreversible nature of T2D has been challenged by strategies targeting "Remission" of diabetes to achieve normoglycemia.

Definition of Remission of T2D

The American Diabetes Association defined remission of diabetes as glycated hemoglobin (HbA1c) < 6.5% (48 mmol/mol) or a fasting blood glucose (FPG) < 126 mg/dL (7 mmol/L), maintained for at least 3 months without any glucose-lowering pharmacotherapy (2). There are 3 types of remission; partial, complete, prolonged.

- Partial remission - HbA1c <6.5% without glucose-lowering medications for 1 year
- Complete remission - HbA1c <5.7% without glucose-lowering medications for 1 year
- Prolonged remission - Complete remission lasting more than 5 years

1. Low carbohydrate diet and Very low-calorie diet (VLCD)

The definition of low carbohydrate diet (LCDs) and very low-calorie diet (VLCD) is shown table 1. The focus in these diets is on macronutrient changes over calory restriction. Protein consumption is generally unchanged from a standard diet (around 20% of intake), with the remaining energy needs met by fat. Carbohydrate sources are primarily non-starchy vegetables, nuts, dairy, and limited fruits (3).

Table 1: Definition of low carbohydrate diets (4)

Definition	Carbohydrate (g/day)	Carbohydrate (% of energy)
LCD	20-50 g	6-10%
Very LCD	<130 g	<26%

Remission of diabetes: Myth or a reality

With LCD, 95% of patients could stop diabetic medications compared to 62% of the controls in large scale non-randomized studies. Some showed diabetes remission in 55% on very low carbohydrate diet compared to 0% in low fat diet (5). Additionally a weight loss of 10% was also noted.

Landmark trials, such as LOOK AHEAD and DiRECT have provided good evidence of diabetes remission through VLCD. In the Look AHEAD trial, at one year, 11.5% of the participants using VLCD achieved remission (partial or complete). In the Diabetes Remission Clinical Trial (DiRECT), significant reductions in body weight (15kg or more) was achieved through VLCD, and was highly predictive of remission in people with diabetes (6).



The advantage of LCD/VLCD is cost effectiveness, with additional savings from cut down of anti-diabetic medications. Improvements in glycemic control usually appear early and before significant weight loss. Taken together, evidence suggests that a LCD/VLCD is effective in reversing diabetes in the short term up to two years, and its effectiveness was predominantly demonstrated in those with shorter duration since diabetes diagnosis. However, long-term achievement of diabetes remission, adherence to the diet, and weight loss maintenance after the diet remain a challenge.

2. Pharmacotherapy

Sodium-glucose cotransporter 2 inhibitors (SGLT2i) are shown to induce remission of T2D in some studies, and postulated mechanism is glucosuria regardless of insulin resistance, together with calory loss causing reduction of visceral fat and weight loss.

Although randomized controlled trials are not available, GLP-1 receptor agonists (GLP-1a) show promising results in weight loss, and thus the potential of remission in T2D. Semaglutide showed an average weight reduction of 10 kg together with an average HbA1c of 6.4% with its use (7). Tirzepatide, a dual GIP/GLP-1 receptor co-agonist showed that 51.7% of the individuals treated achieved an HbA1c of 5.7% and an average weight loss of 9.5 kg (8).

3. Bariatric surgery

Bariatric surgery is aimed at modifying the gastrointestinal tract to reduce calory absorption, aiming at weight loss. Bariatric surgery is indicated in the following;

- For obese patients with a body mass index (BMI) ≥ 35 kg/m²
- For individuals with metabolic disease and BMI of 30–34.9 kg/m².
- BMI thresholds should be adjusted in the Asian population so that a BMI ≥ 25 kg/m² suggests clinical obesity, and individuals with BMI ≥ 27.5 kg/m² should be offered BS.

It was observed that bariatric surgery leads to remission of diabetes, where the exact mechanism is not fully understood to-date.

Remission of diabetes: Myth or a reality

In one long-term study, T2DM patients who had undergone bariatric surgery had a reversal rate of over 51% at 12 years, with an average of 35 kg weight loss, representing a reduction of 26.9% weight from baseline. Data suggested that gastric bypass is the most effective at inducing diabetes remission in T2DM patients, followed by sleeve gastrectomy, and then gastric banding (9).

Even after remission following surgical intervention, T2DM patients can still relapse. The prospective Swedish Obese Subjects study reported remission rates of T2DM at 2, 10 and 15 years of follow-up as 72.3%, 38.1% and 30.4%, respectively, indicating a proportion of patients relapsing after initial remission (10).

T2D remission in real world

Remission rates in community settings are low; the 7-year cumulative incidence (in the absence of bariatric surgery) of partial, complete or prolonged remission was found to be 1.47%, 0.14% and 0.007% respectively (11). This is due to several factors.

1. Challenge of maintaining long-term weight loss and lifestyle change.
2. Less awareness among medical community/ patients regarding possibility of T2D remission.
3. Lack of community-based support systems for education, motivation and follow-up of lifestyle interventions
4. Not getting due emphasis about achieving remission in T2D in local/ regional guidelines
5. Interventions targeting remission of T2D not being the first line of standard of care in management of T2D, in the available guidelines

Thus, a strategic approach at community level should be implemented to overcome the above challenges. Considering that remission has only recently emerged as a therapeutic goal in T2D, awareness among the medical community, empowering remission strategies through incorporation into standard care of T2D and conducting more research to review un-answered areas in remission of T2D, is a need of the hour.

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Recent PeMSAA Events:

PeMSAA-UK Academic Awards 2023



The 7th of December 2023 marked a special day for the undergraduates of the Faculty of Medicine, University of Peradeniya. It was on this day that PeMSAA organized the ceremony for undergraduate research awards.



We are thankful to the PeMSAA UK for having initiated these awards for undergraduate research in the faculty, and to recognise those who have excelled, which will further encourage them to pursue research in the future.



PeMSAA-UK Academic Awards 2023

The selection of winners for these awards happen after much scrutiny in a very transparent and fair manner.

This year's presentation was presided over by Dr. Ashan Gunaratne, President of the PeMSAA-UK chapter, and many other distinguished guests attended the award ceremony. The event was held at the Faculty Board Room of the Faculty of Medicine, University of Peradeniya.

The winners and runners up of the Academic Awards for Research (undergraduate category), and their supervisors, were recognized for their innovativeness and commitment. The winning team was supervised by Dr. Samidi Navaratne, Senior Lecturer, Department of Community Medicine and the lead investigator of the student group was Mr. T. D. Ratnayake.



Senior Professor Tharaka Dassanayake from the Department of Physiology was the supervisor of the runners up group of students, and Mr. K.S.U. Keragala was its lead investigator.

PeMSAA-UK Academic Awards 2023



Addressing the gathering, the President of the PeMSAA UK Chapter expressed his satisfaction with regards to the projects that had been undertaken, and was hopeful that the awardees will make an attempt publish their work. He also assured that their organisation will continue to support and foster research in the faculty.



During the ceremony those who were selected from the 2019/20 and 2020/21 batches for the PeMSAA UK Studentships, namely the Professor Panabokke Studentship and Professor Panabokke Student Stethoscope Fund Prize, also received their awards. These awards are donated by the UK chapter on a yearly basis for three financially vulnerable students with very good academic performance. Such students are carefully selected by the faculty scholarship committee based on stipulated criteria.

The ceremony concluded with a small tea party at the senior common room for all those present.

News from overseas PeMSAA Chapters: PeMSAA – UK

PeMSAA-UK successfully conducted the 2023 International Academic Conference on the 11th of November 2023, at the Oxford University Examination Halls. This was followed by the Annual Ball, held on the same day.



A tribute to late Professor Chandra Abeysekera



It is with a profound sense of sorrow that PeMSAA records the demise of Professor Chandra Kumari Abeysekera, a distinguished alumnus of Peradeniya who passed away nearly two months ago, following a brief illness. She was an active member of PeMSAA and presided as the Congress Chairperson of the 11th International Medical Congress in 2012, and later steered PeMSAA as its President. She continued to support PeMSAA and served on the advisory panel of many subsequent councils prior to her untimely death.

Prof. Chandra Abeysekera had her primary and secondary education at Mahamaya Girls College Kandy. She was selected as the best student of Mahamaya in 1968 and entered the Faculty of Medicine Peradeniya in 1969. She obtained her MBBS with Second Class honours and a distinction in Medicine. She completed her internship and served at the Base Hospital Kegalle for a short while, before she embarked on postgraduate training in paediatrics. She secured a Diploma in Child Health in 1983 and was elected as a member of the Royal College of Physicians the same year.

A tribute to late Professor Chandra Abeysekera

Upon her return to Sri Lanka she was appointed as the Consultant Paediatrician to General Hospital Anuradhapura in 1985. Her tenure at Anuradhapura was a very challenging one, as she had to face many epidemics, as well as brutality during times of the LTTE and JVP. She later moved to Kurunegala and served for two years before she assumed duties as a Senior Lecturer at the Faculty of Medicine, University of Peradeniya.

Prof. Abeysekera served the Department of Paediatrics with distinction for twenty five years. She was conferred a fellowship of the Sri Lanka College of Paediatricians in 2004 and the Royal College of Physicians in 2007, and was promoted as a Professor in Paediatrics in 2007. Over the years she developed her skills as a teacher, an academic, a clinician and a researcher and very willingly shared her experience with colleagues, students and patients. As many of her students would testify Professor Abeysekera was regarded as a very committed teacher who encouraged critical thinking and instilled a passion for learning. She was loved by all who had the privilege of knowing her, both personally and professionally. Her warmth, compassion, and humility endeared her to students, colleagues, and patients alike. Her teaching went beyond the boundaries of paediatrics. She served as the Head of the Department from 2002 to 2008 and this period saw much progress in the department activities. Professor Abeysekera was instrumental in nurturing a department which remains united.

Her contribution to postgraduate education was immense. She has been a postgraduate trainer since 1992 and many of her trainees are now board certified consultants, serving sick children in their chosen fields. She was a member of the Board of Study in Paediatrics and an examiner of the Postgraduate Institute of Medicine from 1993. She served the Professional Paediatric Unit with much devotion. Under her watchful eye her juniors have cared and treated many thousands of sick children. She coordinated the establishment of the first Paediatric renal transplant programme in Sri Lanka in 2004, and continued to support and nurture it and on many occasions used her personal finances to care for needy transplanted patients. Moreover she played a pivotal role in designing, planning and obtaining ministry approval to establish a haemodialysis unit at the Professorial Paediatric unit.

A tribute to late Professor Chandra Abeysekera

She served as a council member of the Sri Lanka College of Paediatricians from 2003–2005 and was elected President of the Sri Lanka College of Paediatricians in 2007/2008. During her tenure in office she conducted many satellite programmes in all parts of Sri Lanka to enhance knowledge and skill of the medical officers to provide better child care. Her kindness extended to her interactions with colleagues as well. She was known for her collaborative spirit and willingness to help others and created a positive environment where ever she went enabling people to work together in harmony.



Prof Chandra Abeysekera's research interests were on paediatric nephrology, urinary tract infection, childhood meningitis and diarrhoeal diseases. She delivered the prestigious Prof. C.C.de Silva oration at the Annual Sessions of SLCP in 2004. She published and presented her work in both locally and internationally and was the recipient of presidential awards as well. She was a life member of the Kandy Society of Medicine, and the Sri Lanka Medical Association, and contributed in their activities.

Prof Chandra Abeysekera retired from the Faculty in 2016 but continued to be engaged in the welfare of patients with chronic renal disease. She remained actively involved with the Department of Paediatrics which was her second home, and with PeMSAA, until her untimely illness. Her dedication, devotion, duty consciousness, integrity and generosity is worthy of emulation. She will remain a legend in the field of Paediatrics and an alumnus par excellence of 'Pera'

Donations to the PeMSAA Students' Crisis Fund

The PeMSAA Student Crisis Fund was established to help undergraduate students at the Faculty of Medicine, Peradeniya, in the event of an acute personal crisis such as serious personal health problems, serious health problems of parents or guardians including sudden death or permanent disability or loss of houses due to natural disasters, and other similar situations. We welcome donations, either as one-off donations or as regular monthly sums to the fund. We sincerely hope our alumni will generously donate to this cause, remembering how difficult life could sometimes be during undergraduate years. The details of the fund are as follows.

Name of account: 'PeMSAA Student Crisis Fund',

Account number: 87997354, Bank name: Bank of Ceylon

Bank branch: Super Grade Branch Peradeniya, Swift code: BCEYLK LX.

Men's Tie

Rs. Rs. 2000

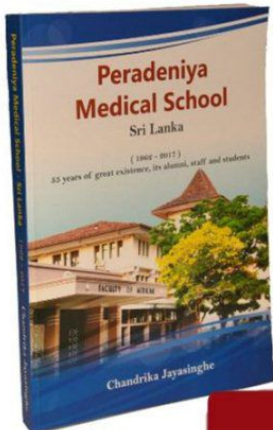
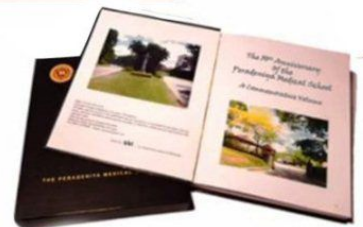
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