SRI LANKA COLLEGE OF SPECIALIST FAMILY PHYSICIANS

ANCHOR

THE PRIMARY CARE NEWSLETTER

VOLUME 01
ISSUE 04
DECEMBER 2024

COVER STORY

TRANSFORMING HEALTHCARE

THE SUCCESS OF KIRIBATHGODA FAMILY MEDICAL UNIT

SRI LANKA COLLEGE OF SPECIALIST FAMILY PHYSICIANS

JOIN AS MEMBERS OF THE COLLEGE

TRAINEES IN MD FAMILY MEDICINE - *FULL MEMBERS*

DFM HOLDERS,DFM TRAINEES,MCGP HOLDERS, MRCGP(UK / INT) HOLDERS - *ASSOCIATE MEMBERS*

- Free newsletter and publications
- Special concessionary rates for annual academic session and paid CPD activities.
- Free entry for academic zoom sessions twice a month
- Special rates for MCQ and OCSE sessions conducted by the college

FOR MORE INFO

- secretary.slcsfp@gmail.com
- https://slcsfp.lk/

SCAN OR CLICK TO JOIN

CONTENTS PAGE

EDITORIAL

Restoring Compassion in Family Medicine: A Call for Change in Sri Lanka

In his thought-provoking book Deep Medicine: How Artificial Intelligence Can Make Healthcare Human Again, American cardiologist and geneticist Eric Topol reflects on a fundamental issue in modern healthcare:

"What is wrong in healthcare today is that it's missing care. As doctors, we don't get to really care for patients enough. And patients don't feel they are cared for. The greatest opportunity offered by AI is not reducing errors or even curing cancer: it is the opportunity to restore the precious and time-honored connection and trust—the human touch—between patients and doctors.

What AI will do is to look at all of patient data and present to the doctor a summary so that the doctor and patient have more time together. Not only would we have more time to come together, enabling far deeper communication and compassion, but also, we would be able to revamp how we select and train doctors."

This observation resonates deeply in our healthcare system, where we strive to provide care amidst significant time constraints. The human touch—the essence of caring—can often feel like a luxury in settings where the average consultation time is anything between 5 to 15 minutes in the public and private sectors.

Caring and compassion are more than ideals; they are practical necessities for good healthcare. This editorial explores the critical role of caring in family medicine and the challenges in fostering compassion within the constraints of the Sri Lankan healthcare system.

Our healthcare system is praised for its universal coverage, free public healthcare, and impressive healthcare indicators. Yet, these strengths come with challenges, particularly in outpatient settings where patient loads are overwhelming.

In a study by Ranan Eliya comparing quality of care in outpatient settings in public and private sectors in Sri Lanka, both sectors were rated equally in technical competency. Patients in the private sector report better satisfaction with interpersonal quality, communication, and the time given to them by their doctor. These findings highlight a critical gap in the public healthcare system: the ability to build meaningful doctor-patient relationships.

The essence of family medicine lies in its holistic, patient-centered approach. Family physicians are not just diagnosticians; they are caregivers who address the physical, emotional, and social aspects of health. This aligns with Francis Peabody's timeless words from 1927:

"The secret of the care of the patient is in caring for the patient."

Caring goes beyond clinical competency; it is about listening, empathizing, and connecting with patients. In our country, where cultural values emphasize respect, kindness, and relationships, a lack of compassion can significantly impact patient satisfaction, trust, and outcomes.

Despite these challenges, there are steps that can help restore the human touch in Sri Lankan family medicine.

Caring is a skill that can and should be taught. As Eric Topol suggests, it is time to rethink how we select and train doctors. Incorporating empathy, communication skills, and patient-centered care into medical curricula can ensure that future physicians prioritize compassion alongside technical excellence.

Systemic adjustments are needed to ensure that public sector physicians have adequate time to spend with their patients.

This could involve restructuring patient scheduling and optimizing workflows. Patient education is a factor that should be focused on to educate them about when to obtain outpatient services in public hospitals.

Artificial intelligence (AI) and technological advancements such as Electronic Medical Record systems (which are available in selected OPDs) offer exciting possibilities to alleviate some of the systemic pressures in healthcare. For instance, AI could be used to analyze patient data and present physicians with concise summaries, allowing them to focus more on the human interaction during consultations. While such technologies are not yet widespread in Sri Lanka, even simple digital solutions like automated scheduling systems could free up valuable time for patient care.

The power of caring often becomes evident in small moments. A brief anecdote from clinical practice illustrates this:
A young woman once came to my clinic with vague symptoms of fatigue and headaches. During a rushed consultation, it would have been easy to prescribe a quick fix and move on to the next patient. Instead, I took a moment to ask about her life circumstances. She broke down, revealing deep anxiety about her husband's recent job loss. The conversation allowed us to address not just her physical symptoms but also her emotional distress. That extra time and attention made all the difference —not just for her, but for me as a physician, reminding me why I chose this profession.

As family physicians, we are entrusted with more than the task of diagnosing and treating illnesses. We are caregivers, healers, and often the first point of contact for patients navigating the complexities of life and health. In Sri Lanka, where time constraints are a reality, we must find creative ways to prioritize compassion

Caring is not a luxury; it is the cornerstone of healing. Whether through systemic changes, technological innovations, or a renewed focus on empathy in medical training, we have the opportunity—and the responsibility—to restore the human touch in family medicine.

Let us remember that at the heart of every consultation, behind every clinical decision, is a person seeking not just treatment, but care.

"Compassion is the most powerful tool we have as physicians. Let us use it wisely, even within the constraints we face."

Dr Kumara Mendis
Dr Aruni De Silva

PRESIDENT'S MESSAGE

Dear Colleagues,

As we step into another vibrant new year filled with many hopes and aspirations, I am delighted to connect with you through this last edition of our newsletter for 2024. The Sri Lanka College of Specialist Family Physicians continues to serve as a beacon of excellence in promoting comprehensive, personalized primary care, advancing clinical standards, and fostering professional growth within our community. I take this opportunity to reflect back on our path up to date and to share insights to our future endeavours.

A Special Note of Gratitude

At the outset, I wish to extend my heartfelt thanks to the editors and the editorial committee for their unwavering dedication and hard work in producing four outstanding publications this year. These newsletters have been an invaluable platform for knowledge sharing, collaboration, and engagement among our members locally and internationally. Your creativity and commitment are truly commendable, and I deeply appreciate your contributions.

A Call for Renewed Commitment

The landscape of healthcare in Sri Lanka is evolving, and primary care remains the cornerstone of a resilient health system. More than ever, it is crucial for us to stay motivated and committed to the primary care strengthening projects spearheaded by the Ministry of Health. These initiatives are vital in ensuring accessible, equitable, and high-quality healthcare for all Sri Lankans enroute to achieving Universal Health Coverage. As specialists in family medicine, we have a unique opportunity and responsibility to actively engage with these projects, bringing our expertise to the forefront and driving meaningful change within our communities. Let us all make it a priority and a new year's resolution to renew our commitment to the development of primary care in Sri Lanka through our practice as dedicated Family Physicians.

Achievements and Milestones

This year has been a remarkable journey of collaboration and resilience. Our professional development programs and academic collaborations have significantly advanced the practice and influence of family medicine in Sri Lanka. The success of our continuous professional development events and exam guidance programs reflects the dedication of our members and their commitment to continuous learning and improvement. The progressive improvement of the membership has been rewarding with a total membership of 145 to date.

Looking Ahead

As we plan for the months ahead, I encourage each of you to participate actively in the College's activities. Strengthening the curative sector in primary care in collaboration with the Ministry of Health can be a transformative initiative.

As an expert knowledge contributor, the SLCSFP could further facilitate creating sustainable, scalable, and evidence-based interventions. Together, we can strengthen the foundation of primary care in our country, build partnerships, and advocate for policy reforms that benefit both patients and providers.

Gratitude and Appreciation

I extend my sincere thanks to our executive committee, members, and volunteers for your valuable and tireless contributions. Your passion and dedication are the driving force behind our success as a college and as a professional community amongst many hurdles.

In closing, let us remain united in our mission to uphold the values of family medicine, adapt to new challenges, and inspire the next generation of healthcare professionals. Together, we can achieve greater heights in advancing primary care and improving health outcomes for all.

Thank you for your commitment to the SLCSPF and to the communities we serve. I wish you and all your loved ones a blessed 2025 New Year!

Dr. Malkanthi Galhena
President
Sri Lanka College of Specialist Family Physicians

Obesity Care in Sri Lankan Family Practice for Better Disease Prevention

Dr Achala Weerasinghe
MBBS(Colombo), DFM, MCGP, MRCGP(Int.), MD (Family Medicine)
General Practitioner/Acting Consultant Family Physician

Obesity has emerged as a global health crisis, contributing to a lot of chronic diseases and impacting overall healthcare costs. As Family Physicians, we are positioned at the forefront of primary care and are uniquely equipped to implement obesity management and prevention of complications. This article explores emerging strategies that integrate personalized care, multidisciplinary approaches, and community-based interventions to enhance obesity care within family medicine/General Practice in Sri Lanka.

Introduction

Obesity is a complex condition characterized by excessive body fat that significantly increases the risk of various health issues, including type 2 diabetes, cardiovascular disease, and certain cancers. According to the World Health Organization (WHO), obesity rates have tripled globally since 1975, with nearly 1.9 billion adults classified as overweight (World Health Organization, 2021). The rising prevalence necessitates a paradigm shift in obesity care, particularly in family medicine, where practitioners are often the first point of contact for patients.

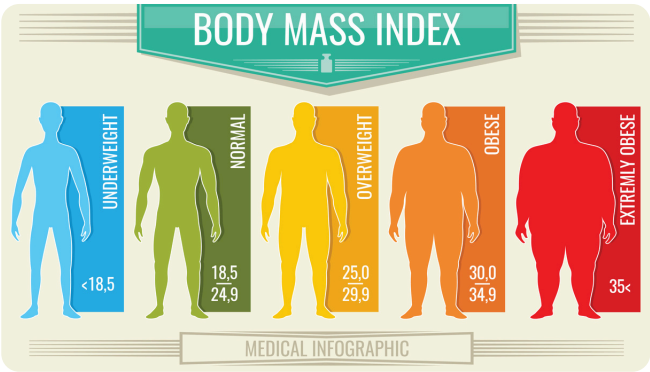
Traditional Approaches and Their Limitations

Historically, obesity management in primary care has focused on weight loss through dietary changes and increased physical activity. While these methods are essential, they often fail to address the multifaceted nature of obesity, which includes genetic, psychological, social, and environmental factors (Puhl & Latner, 2007). Traditional models can lead to patient frustration and disengagement, as they often emphasize short-term solutions rather than sustainable lifestyle changes.

Available Treatment Options for Obesity Based on BMI

Obesity is commonly classified using the Body Mass Index (BMI) scale, which categorizes individuals into different weight classes:

- Underweight: BMI < 18.5
- Normal weight: BMI 18.5 – 24.9
- Overweight: BMI 25 – 29.9
- Obesity Class I: BMI 30 – 34.9
- Obesity Class II: BMI 35 – 39.9
- Obesity Class III: BMI ≥ 40



Treatment Options by BMI Category

Overweight (BMI 25 – 29.9)

- Lifestyle Modifications:
  - Diet: Focus on a balanced, reduced-calorie diet rich in fruits, vegetables, whole grains, and lean proteins (Gudzune et al., 2015).
  - Physical Activity: Aim for at least 150 minutes of moderate-intensity aerobic exercise per week, combined with strength training.
  - Behavioral Strategies: Goal setting, self-monitoring, and cognitive behavioral techniques to promote healthy eating and physical activity.

Obesity Class I (BMI 30 – 34.9)

- Lifestyle Interventions: Enhanced dietary modifications and increased physical activity.
- Pharmacotherapy: FDA-approved medications such as orlistat, phentermine-topiramate, bupropion-naltrexone, and liraglutide can be considered, particularly for those who have not achieved significant weight loss with lifestyle changes alone (Apovian et al., 2015).

Obesity Class II (BMI 35 – 39.9)

- Lifestyle and Behavioral Interventions: Like Class I, but with a more intensive focus on behavioral strategies and support.
- Pharmacotherapy: Medications mentioned for Class I are also applicable here, often used in conjunction with lifestyle changes.
- Surgical Options: Bariatric surgery is considered for patients who have not achieved adequate weight loss through other means and have obesity-related comorbidities.
- Procedures include gastric bypass, sleeve gastrectomy, and adjustable gastric banding (Sadia et al., 2021).

Obesity Class III (BMI ≥ 40)

- Intensive Lifestyle Interventions: Focus on comprehensive weight loss programs, often involving a multidisciplinary team (dietitians, psychologists, exercise physiologists).
- Pharmacotherapy: As with Classes I and II, FDA-approved medications can be employed.
- Bariatric Surgery: Strongly recommended for individuals in this category, particularly if they have obesity-related health issues such as diabetes, hypertension, or sleep apnea.

Life Years Gained by Obesity Treatment - Based on BMI

Obesity is associated with significant morbidity and mortality, and effective treatment can lead to substantial improvements in life expectancy and the quality of life. The potential life years gained (LYG) from obesity treatment varies by BMI classification and the methods employed.

Overweight (BMI 25 – 29.9)

- Intervention Options: Lifestyle modifications, behavioral therapy, and pharmacotherapy.
- Life Years Gained: Studies suggest modest improvements, typically in the range of 1 to 3 years, especially with sustained lifestyle changes and early intervention (Flegal et al., 2013).

Obesity Class I (BMI 30 – 34.9)

- Intervention Options: Lifestyle changes, pharmacotherapy, and potential surgery for selected patients.
- Life Years Gained: Research indicates that effective interventions can lead to life expectancy improvements of approximately 3 to 6 years, particularly for individuals with obesity-related comorbidities (Naylor et al., 2018).

Obesity Class II (BMI 35 – 39.9)

- Intervention Options: Intensive lifestyle modifications, pharmacotherapy, and bariatric surgery.
- Life Years Gained: Evidence suggests that patients in this category can gain about 5 to 8 years of life with comprehensive treatment, particularly when obesity-related health issues are addressed (Dawes et al., 2018).

Obesity Class III (BMI ≥ 40)

- Intervention Options: Comprehensive lifestyle changes, pharmacotherapy, and bariatric surgery.
- Life Years Gained: Individuals with severe obesity can potentially gain 8 to 10 years or more through effective treatment, especially when combined with bariatric surgery, which has been shown to significantly reduce obesity-related mortality (Saxena et al., 2017).

Factors Influencing Life Years Gained

1. Age at Intervention: Younger individuals tend to gain more life years from treatment due to a longer life expectancy.

2. Comorbid Conditions: The presence of conditions like diabetes, hypertension, or cardiovascular disease can affect the potential benefits of treatment.

3. Sustained Weight Loss: Long-term maintenance of weight loss is crucial for maximizing life years gained.

4. Type of Intervention: Surgical options generally yield greater life expectancy benefits compared to non-surgical methods, particularly in severe obesity.

Conclusion

The rising prevalence of obesity requires innovative, multifaceted approaches that transcend traditional weight management strategies. By embracing personalized care, multidisciplinary collaboration, community engagement, behavioral science, and policy advocacy, Family Physicians can significantly enhance obesity care and disease prevention. As the healthcare landscape continues to evolve, Family Physicians must lead the charge in implementing these new paradigms, ultimately fostering healthier communities and improving patient outcomes.

References

1. Apovian, C. M., Aronne, L. J., Bessesen, D. H., et al. (2015). Pharmacological management of obesity: An Endocrine Society clinical practice guideline. Journal of Clinical Endocrinology & Metabolism, 100(2), 342-362.
2. Centers for Disease Control and Prevention. (2020). Adult Obesity Facts. Retrieved from [CDC] (https://www.cdc.gov/obesity/data/adult.html)
3. Dawes, J., et al. (2018). The impact of bariatric surgery on long-term health outcomes: A review of the evidence. Obesity Reviews, 19(2), 139-152.
4. Flegal, K. M., et al. (2013). Association of all-cause mortality with overweight and obesity using standard body mass index categories: a meta-analysis. Journal of the American Medical Association, 309(1), 71-82.
5. Gudzune, K. A., et al. (2015). Efficacy of commercial weight loss programs: An updated systematic review. Annals of Internal Medicine, 162(7), 501-512.
6. Naylor, L. A., et al. (2018). Weight loss and weight maintenance strategies for obesity treatment: An evidence-based review. Journal of Obesity, 2018, 1-12.
7. Puhl, R. M., & Latner, J. D. (2007). Stigma, obesity, and health: A psychological and sociocultural perspective. Obesity Reviews, 8(3), 213-219.
8. Saxena, A., et al. (2017). Long-term effects of bariatric surgery on obesity-related morbidity and mortality. Obesity Surgery, 27(5), 1295-1301.
9. Sadia, H., et al. (2021). The role of bariatric surgery in the management of obesity: A review. Current Obesity Reports, 10(3), 307-316.
10. World Health Organization. (2021). Obesity and Overweight. Retrieved from [WHO] (https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight)

"The family physician is one who: 1) serves as the physician of first contact with the patient and provides a means of entry into the health care system; 2) evaluates the patient's total health needs, provides personal medical care within one or more fields of medicine, and refers the patient when indicated to appropriate sources of care while preserving the continuity of his care; 3) assumes responsibility for the patient's comprehensive and continuous health care and acts as leader or coordinator of the team that provides health services; and 4) accepts responsibility for the patient's total health care within the context of his environment, including the community and the family or comparable social unit. The family physician is a personal physician, oriented to the whole patient..."

("Meeting the Challenge of Family Practice," The Report of the Ad Hoc Committee on Education for Family Practice of the Council on Medical Education, American Medical Association—also known as "the Willard Report")
September 1966

Unraveling the Puzzle: Recognizing Autism in Young Children

Dr. Halpe S.M.[1], **Dr. Jayaweera H**[2]

1. Registrar Family Medicine - Postgraduate Institute of Medicine, Sri Lanka
2. Consultant Paediatrician - District General Hospital, Gampaha

Imagine a world where social interactions are a complex puzzle, where communication is a foreign language, and where routines are an anchor in a sea of uncertainty. This is the world of a child with autism spectrum disorder (ASD). While it may seem daunting, understanding the signs of autism can be the first step towards early intervention and support.

The Unique Challenges of Autism

Autism Spectrum Disorder (ASD) is a complex neurodevelopmental condition that affects how people interact, communicate, and behave. Children with autism often struggle with social skills, communication, and sensory processing. They may have difficulty understanding social cues, maintaining eye contact, or engaging in back-and-forth conversations. They might also exhibit repetitive behaviors, such as lining up toys or flapping their hands.[1]

While the exact prevalence varies across studies and regions, it's estimated that approximately 1-2% of the global population is affected by autism spectrum disorder.[2,3]

It's important to note that the prevalence of autism is likely higher in many low- and middle-income countries where diagnosis and reporting systems may not be as robust.

The Role of the General Practitioner

While GPs aren't autism specialists, they play a critical role in early identification. By carefully listening to parents' concerns and observing the child's behavior, GPs can help identify potential signs of autism. It's important to take all parental concerns seriously, even if they seem minor or are not shared by others.

Remember, autism is a spectrum condition, and its manifestations can vary widely. A child may have good eye contact or engage in pretend play, yet still exhibit other signs of autism. Always trust your clinical judgment and listen to the parents' insights.

Features of ASD

Early signs of Autism Spectrum Disorder (ASD) often emerge within the first 12 months of life. Identifying these early signs is crucial for timely intervention and support. Some common prodromal features include:

0-6 Months

- Delayed motor development: Unusual movements or delays in reaching milestones like rolling over or sitting up.
- Atypical visual attention: Reduced interest in faces or objects, unusual eye contact.
- Parental concerns: Parents may notice unusual behaviors or developmental delays early on.

6-12 Months

- Reduced social communication: Less pointing, babbling, gesturing, or responding to their name.
- Impaired joint attention: Difficulty sharing focus on objects or activities with others.
- Atypical eye contact: Less frequent or unusual eye contact.
- Emotional reactivity: Unusual responses to emotions or social situations.

Key Signs to Watch For

The following are clear signs of ASD which are seen at 12 to 36 months.[4]

Communication

Children on the autistic spectrum might have:

- Language delay (in babble or words)
- Regression in, or loss of, use of speech
- Spoken language (if present) may include unusual:
  - Non-speech-like vocalizations
  - Odd or flat intonation
  - Frequent repetition of set words and phrases (“echolalia”)
  - Reference to self by name or 'you' or 'she/he' beyond 3 years
- Reduced and/or infrequent use of language for communication, for example use of single words although able to speak in sentences.

Reciprocal Social Interaction

Children on the autistic spectrum might have **reduced or absent**:

- Social eye contact (assuming adequate vision)
- Responsive social smiling
- Responsiveness to other people’s facial expression or feelings
- Social interest in others
- Enjoyment of situations that most children like, for example, birthday parties
- Sharing of enjoyment
- Awareness of personal space
- Imitation of other people’s actions
- Joint attention (eg lack of gaze switching, looking where another person points, pointing at/showing objects to share interest)
- Use of gestures and facial expressions to communicate.

They might: have a delayed response to their name being called (assuming adequate hearing) Refuse or avoid the requests of others
Reject cuddles initiated by a parent or care taker. (although they may initiate cuddles themselves)

- Be unusually intolerant of people entering their personal space
- Reject other people
- Approach others inappropriately, seeming to be aggressive or disruptive
- Prefer to play alone.

Restricted, Stereotyped and Repetitive Behaviors

- Children on the autistic spectrum might demonstrate:
- Repetitive "stereotypical" movements, for example, hand flapping, body rocking while standing, spinning, finger flicking
- Repetitive or stereotyped play, for example, opening and closing doors
- Over-focused or unusual interests
- Excessive insistence on following their own agenda
- Extremes of emotional reactivity to change or new situations, insistence on things being "the same"
- Reduced or absent imagination and variety of pretend play.

Taking a developmental history is an important part of assessing a child who may be on the autistic spectrum.
5

Be alert to the increased risk of co-occurring conditions in children on the autistic spectrum. Several conditions occur more frequently in children with autism than in the general population, including epilepsy, sleep disorders, anxiety, depression and other mood disorders, attention deficit hyperactivity disorder (ADHD), obsessive compulsive disorder (OCD), language disorders, sensory processing disorders, disorders of sleep, and feeding and gastrointestinal tract symptoms.

Recognise that girls on the autistic spectrum may present with a different symptom profile and level of impairment than boys. Research suggests that females are less likely than males to meet the diagnostic criteria for autism. Girls may show more of a desire to have friends and fit in with their peer group than boys; social interaction, communication, and play behavior may appear to be less impaired.[6,7]

The Importance of Early Intervention

Early diagnosis and intervention are crucial for optimizing the development and well-being of children with autism spectrum disorder (ASD). The earlier a child receives appropriate support, the greater the potential for positive outcomes.

The foundation for brain development is laid during infancy and early childhood. Early intervention services can help children with ASD develop essential skills, such as communication, social interaction, and self-care, which can significantly improve their quality of life.

The Path to Diagnosis

If you suspect a child may have autism, it's essential to refer them to a multidisciplinary team of specialists. This team typically includes pediatricians, developmental psychologists, occupational therapists and speech-language pathologists.

They will conduct a thorough assessment, including interviews, observations, and standardized tests, to confirm or rule out a diagnosis of autism.[8]

When to Refer

Consider referring a child to a specialist if they show any prodromal features of ASD at infancy or any signs of developmental regression, especially language regression or motor skill regression at any age.

Post-Diagnosis Support

Once a diagnosis is made, GPs continue to play a vital role in supporting families. By offering guidance, information, and referrals to specialized services, GPs can help families navigate the challenges of raising a child with autism.

Early identification and intervention are key to improving outcomes for children with autism. By being aware of the signs and referring appropriately, GPs can make a significant difference in the lives of children with autism and their families. [9]

Key Points

- Listen carefully to parents and carers
- Look for early signs of autism, but note that children on the autism spectrum may interact better with adults than their peers, so you might not see signs in a consultation
- You are not expected to diagnose autism: refer children with suspected autism to the autism team
- Provide post diagnosis support and signpost parents and carers to services and resources to support their child

References

1. National Institute for Health and Care Excellence (NICE). Autism spectrum disorder in under 19s: recognition, referral and diagnosis. Clinical guideline [CG128]. 2017.
2. Global prevalence of autism: A systematic review update. Zeidan J et al. Autism Research 2022 March.
3. Roman-Urrestarazu A, van Kessel R, Allison C, Matthews FE, Brayne C, Baron-Cohen S. Association of Race/Ethnicity and Social Disadvantage With Autism Prevalence in 7 Million School Children in England. JAMA Pediatr 2021;175(6):e210054.
4. World Health Organization. International statistical classification of diseases and related health problems 11th revision (ICD-11). 2022.
5. Bellman M, Byrne O, Sege R. Developmental assessment of children. BMJ 2013;346:e8687.
6. Scottish Intercollegiate Guidelines Network (SIGN). Assessment, diagnosis and interventions for autism spectrum disorders: A national clinical guideline. 2016.
7. Hyman SL, Levy SE, Myers SM; COUNCIL ON CHILDREN WITH DISABILITIES, SECTION ON DEVELOPMENTAL AND BEHAVIORAL PEDIATRICS. Identification, Evaluation, and Management of Children With Autism Spectrum Disorder. Pediatrics 2020;145(1):e20193447.
8. Fuentes J, Hervás A, Howlin P; (ESCAP ASD Working Party). ESCAP practice guidance for autism: a summary of evidence-based recommendations for diagnosis and treatment. Eur Child Adolesc Psychiatry 2021;30(6):961-84.

Telemedicine: Revolutionizing Primary Care by Family Physicians

Dr. Mrs. N. Shobana

Registrar Family Medicine, Lecturer,
Department of Primary Health Care,
Faculty of Health Care Sciences,
Eastern University, Sri Lanka

In recent years, healthcare has undergone a remarkable evolution, with telemedicine becoming a key innovation in advancing patient care. This technological shift is especially timely, given the growing elderly population and multiple long term conditions and the rising demand for more accessible, high-quality healthcare. In Sri Lanka, telemedicine and telehealth have been frequently used in healthcare delivery, particularly following the COVID-19 pandemic. As the Sri Lankan healthcare landscape continues to evolve, driven by technological advancements and shifting patient needs, telemedicine plays an increasingly important role. This article explores telemedicine's role in family medicine, focusing on its advantages, challenges, and potential to improve patient outcomes.

Telehealth refers to the delivery of healthcare services remotely using telecommunication technologies and includes both clinical and non-clinical aspects such as health education, promotion, research, and professional training. The clinical component, known as telemedicine, involves the process of exchanging medical information from one site to another via electronic communications to improve a patient's clinical health status [1]. This can include sharing information in medical records, lab results, radiological images, and physiological data like blood pressure or heart rate. The communication can be between the patient and healthcare providers or among providers, either in real-time or asynchronously, to manage patient care across distances. The article will focus on the clinical applications of telehealth, particularly telemedicine, where the emphasis is on individual patient care.

As family physicians, embracing telemedicine allows us to bridge gaps in access to healthcare, enhance patient engagement, and deliver more

efficient and personalized care. It allows physicians to remotely assess, diagnose, and treat patients through video conferencing, phone calls, and mobile health apps, which is especially valuable for managing acute and chronic conditions, and to serve patients across all ages, both sex and all disease entities[2].

Primary care serves as the first point of contact for the population within the health system, aiming to promote equitable access to health services. Telemedicine enhances this goal by extending healthcare to vulnerable populations, including the elderly, disabled, and those in remote or underserved areas.

By eliminating the need for travel, telemedicine ensures timely access to care, reducing both logistical and financial burdens associated with in-person appointments.[3]

Continuity of care, a cornerstone of family medicine, is significantly enhanced by telemedicine. Remote consultations facilitate regular monitoring of chronic conditions like diabetes and hypertension, allowing for timely adjustments in treatment plans. This ongoing oversight not only maintains health management but also improves care coordination, reducing the likelihood of hospital admissions and emergency visits.[4] Telemedicine's ability to streamline routine consultations, prescription refills, and follow-ups further supports convenience for both physicians and patients.

For family physicians, telemedicine complements traditional in-person visits by offering a flexible approach to maintaining ongoing patient interactions. This is especially valuable in areas with geographical barriers, transportation issues, or a shortage of healthcare providers[5]. By empowering patients to actively manage their health through telemonitoring and mobile health apps, telemedicine fosters stronger patient-physician relationships[6], and contributes to better health outcomes while minimizing infection risks, particularly during pandemics like COVID 19 .[1,7]

Challenges in Telemedicine for Family Physicians

The integration of telemedicine into family practice faces significant challenges, particularly in terms of technology access and limitations in physical examinations. In Sri Lanka, about 90% of the population owns mobile phones, with younger generations adept at using telemedicine for services like arranging medication deliveries. Despite 56.3% internet penetration and 32.49 million active mobile connections (148.2% of the population) as of early 2024, the growing elderly population often relies on younger family members for telemedicine access, and rural areas still face unreliable internet connectivity[8,9]. Additionally, the rollout of telemedicine in rural areas is often slower due to limited infrastructure, technical support, and financial resources.

Another major challenge is the inability to perform comprehensive physical examinations through telemedicine. While many conditions can be managed remotely, some diagnoses require in-person evaluations that virtual platforms cannot replicate. Additionally, some patients remain resistant[7] to telehealth, preferring face-to-face consultations and a doctor's touch in physical examination . Family physicians must balance telemedicine[8] and in-person care, using remote services to complement rather than replace traditional visits. Telemedicine also raises privacy and data security concerns, necessitating strict adherence to secure platforms and privacy regulations to protect patient confidentiality[10]. Moreover, reimbursement and licensing inconsistencies complicate telemedicine's broader adoption, with policies varying across regions. From a sustainability perspective, offering telemedicine for free is not viable long-term. In current setups, a single individual—often the primary care physician—handles multiple roles, from maintaining records and performing receptionist duties to dispensing medication. This o scalability and efficiency[8].

Challenges in Telemedicine for Family Physicians

Telemedicine offers versatile applications in primary care by utilizing a wide range of communication channels accessible to the public. By leveraging existing devices such as mobile phones for audio and text messaging, telemedicine can extend primary care services

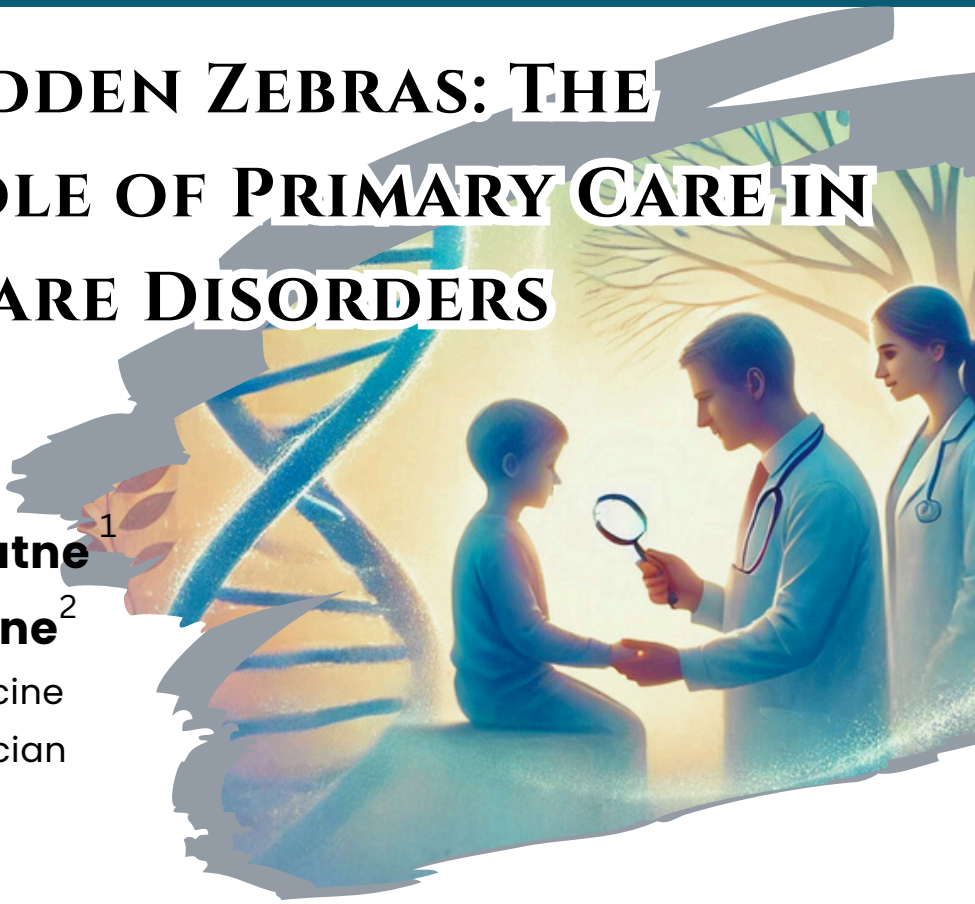
even to those without smartphones, facilitating tasks like appointment reminders and lab result notifications. However, the successful integration of telemedicine into primary care is not without challenges.Family physicians must ensure equitable access by advocating for improved technological infrastructure, especially in underserved areas. Addressing disparities in internet connectivity and e-health literacy is crucial to achieving digital equity. Patient education, including 30-minute sessions on using telehealth platforms, can empower users. Older patients can benefit from the support of tech-savvy younger family members, who are often willing to assist.Transforming policy frameworks and regulations is also essential if telehealth is to become a key part of health system agendas. Clear frameworks for reimbursement, licensing, and regulatory compliance are needed. Equally critical is safeguarding patient privacy and confidentiality to build trust in virtual care.

Telehealth enhances education and training for healthcare professionals by integrating with eLearning platforms, providing remote access to specialized training and consultations, especially in rural areas. This supports continuing medical education in regions with limited specialist access. Educational institutions must adapt by creating telehealth-focused curricula and assessment tools to prepare future healthcare professionals for the digital transformation in patient care, ensuring the continued growth of family medicine in a digital era.

References

1. Health Information Unit, Ministry of Health, Sri Lanka. Telemedicine Guidelines for Sri Lanka version 1.0 [Internet]. Colombo: Ministry of Health; 2024. [cited 2024 Sep 18]. Available from: https://www.health.gov.lk/wp-content/uploads/2023/11/Telemedicine-Guidelines-Final-9.05.2024-for-MoH-Web-site.pdf
2. Beheshti L, Kalankesh LR, Doshmangir L, Farahbakhsh M. Telehealth in primary health care: a scoping review of the literature. Perspectives in health information management. 2022;19(1).
3. Knight P, Bonney A, Teuss G, Guppy M, Lafferre D, Mullan J, Barnett S. Positive clinical outcomes are synergistic with positive educational outcomes when using telehealth consulting in general practice: a mixed-methods study. Journal of medical Internet research. 2016 Feb 8;18(2):e31.
4. Kobb R, Hoffman N, Lodge R, Kline S. Enhancing elder chronic care through technology and care coordination: report from a pilot. Telemedicine Journal and e-HEALTH. 2003 Jun 1;9(2):189-95.
5. Dario C, Toffanin R, Calcaterra F, Saccavini C, Stafylas P, Mancin S, Vio E. Telemonitoring of type 2 diabetes mellitus in Italy. Telemedicine and e-Health. 2017 Feb 1;23(2):143-52.
6. Pratt SI, Bartels SJ, Mueser KT, Naslund JA, Wolfe R, Pixley HS, Josephson L. Feasibility and effectiveness of an automated telehealth intervention to improve illness self-management in people with serious psychiatric and medical disorders. Psychiatric rehabilitation journal. 2013 Dec;36(4):297.
7. Bokolo AJ. Application of telemedicine and eHealth technology for clinical services in response to COVID19 pandemic. Health and technology. 2021 Mar;11(2):359-66.
8. Primary Health Care Performance Initiative. Ensuring access to routine and essential services during disruptions in Sri Lanka [Internet]. Washington, D.C.: Exemplars in Global Health; 2023. [cited 2024 Nov 10]. Available from: https://www.exemplars.health/-/media/files/egh/narrative-pdfs/sri-lanka/how-did-sl-respond/133-primary-health-care-performance-initiative--ensuring-access-to-routine-and-essential-services-du.pdf.
9. Datareportal. Digital 2024: Sri Lanka [Internet]. 2024. [cited 2024 Nov 10]. Available from: https://datareportal.com/reports/digital-2024-sri-lanka?rq=sri%20lanka.
10. El Majdoubi D, El Bakkali H, Sadki S, Maqour Z, Leghmid A. The Systematic Literature Review of Privacy-Preserving Solutions in Smart Healthcare Environment. Security and Communication Networks. 2022;2022(1):564202

Spotting Hidden Zebras: The Essential Role of Primary Care in Revealing Rare Disorders



Dr. Tharindra Pathiratne[1]

Dr. Lalantha Senaratne[2]

1. Registrar in Family Medicine
2. Consultant Family Physician

Primary care physicians are often the first to encounter patients whose symptoms do not fit easily into common patterns. Rare diseases often present as diagnostic challenges due to their low prevalence, affecting fewer than 1 in 2,000 people. The initial path to diagnosis for rare diseases is often long and complex, with patients commonly experiencing what is known as a "diagnostic odyssey," involving multiple referrals, fragmented care, and uncertainty . An accurate diagnosis can provide a profound relief for patients, offering not only validation but also access to specialized management and support networks. Although treatment options for rare diseases may be limited, accurate diagnosis enables patients to access relevant care pathways, support groups, and emerging therapies that improve quality of life.

The International Rare Diseases Research Consortium (IRDiRC) has three objectives for 2027: to enhance and speed up rare disease detection; to help develop 1000 new treatments, with a focus on rare diseases that do not yet have approved therapy; and to create statistics for assessing how diagnoses and treatments affect patients with rare diseases. To address the role of primary care, the IRDiRC convened the Primary Care Task Force, which identified four priorities:Training and education on rare diseases, Streamlined referral pathways and improved care coordination, Leveraging data sharing and digital health technologies, Enhancing access to diagnosis, treatments, and awareness of rare diseases.

As family physicians we should have knowledge on warning signs of rare diseases, which include neurodevelopmental delay or degeneration, congenital defects, family history, and extreme or unique presentations of common ailments. So that we could improve the identification and referral of uncommon diseases.

Unveiling the rare amidst the routine

A 63-year-old male presented to OPD- Base Hospital , Homagama with increased sleepiness lasting for one month and with visible facial spasms for few months duration. He had recently been hospitalized after a fall while gardening, initially attributed to acute gastroenteritis leading to postural hypotension.

Therefore he was discharged with a presumptive diagnosis of gastroenteritis, but the visible facial spasms and a neurological assessment were overlooked since the patient was worried only about his acute medical issue and the signs are very much subtle.

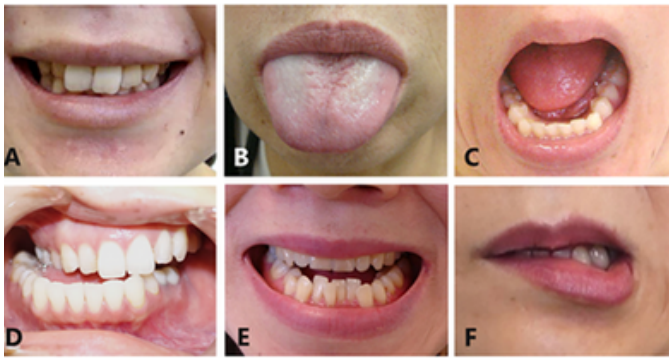
Upon presenting to the OPD, we performed a thorough assessment and discovered additional findings: blepharospasms, facial spasms, uni directional nystagmus, dysdiadochokinesia, exaggerated reflexes, unsteady gait.
These signs raised concerns about a neurological disorder
Differential diagnoses included progressive supranuclear palsy, cerebellar stroke, tic disorder, or a space-occupying lesion potentially linked to his fall. Recognizing the significance of these unusual features, we arranged a referral for a neurologist's assessment.

This case emphasizes the value of our approach in recognizing patterns that might go unnoticed in brief hospital encounters. It is important to identify the functional impairments that interfere with daily life activities of people, their mental health , social withdrawal and disability, which is integral to family medicine and ensure comprehensive patient care.

Refocusing on our patient; He was subsequently diagnosed with Meige's syndrome, a rare dystonia characterized by ; Blepharospasm: Involuntary blinking,
Oromandibular Dystonia: Muscle contractions in the lower face and jaw, often resulting in grimacing, jaw clenching, or forced mouth opening.

The condition can extend to muscles of the neck, creating social and functional impairments that complicate daily tasks like speaking, eating, and even maintaining eye contact.

Epidemiologically, Meige's syndrome is rare and typically affects middle-aged or elderly adults, with a slight female predominance. European studies have indicated 36 individuals per million. The underlying cause is not well understood, but basal ganglia dysfunction, involving dopamine and cholinergic hyperactivity along with reduced GABA neurotransmission, is thought to play a role. Although genetic factors have been suggested, no markers have yet been identified.
Our patient is currently awaiting brain imaging results. Meanwhile, he has been started on muscle relaxants to manage symptoms.



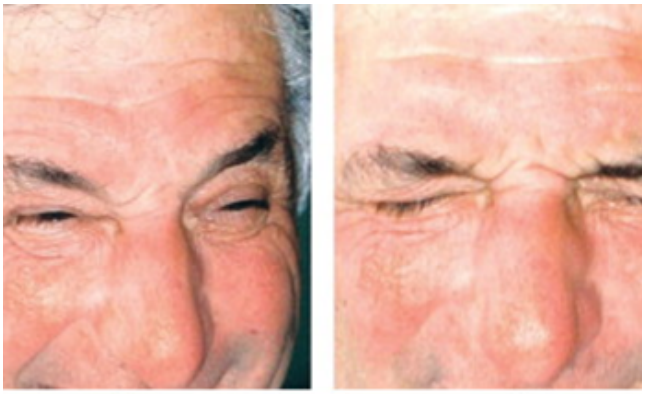
The Role of family physicians

Our patient is currently awaiting brain imaging results. Meanwhile, he has been started on muscle relaxants to manage symptoms.

Diagnosing rare conditions is just one part of the journey. Family physicians play a crucial role in bridging gaps in care by coordinating with specialists, addressing patients' psychosocial needs, and managing comorbidities such as depression or nutritional deficiencies. These efforts significantly impact the overall health and quality of life for patients with complex conditions.

With advancements in genetics and digital tools, the role of family physicians in rare disease detection is expanding. Future developments in genetic testing will require clinicians to interpret results, counsel patients, and integrate findings into personalized care plans.

The case of Meige's syndrome serves as a reminder of the profound impact that we can have in recognizing rare diseases. By maintaining a high index of suspicion, connecting unusual symptoms, and pursuing investigations when needed, family physicians are essential in transforming diagnostic challenges into opportunities for improved patient care.



(a) (b)

"The health needs of the American family are changing, and so must the physician who services these needs . . . the physician of the future will greatly differ from that of the present. His concern will extend throughout the medical life of a person. The emphasis will be on health maintenance and disease prevention, and, as such, the family physician will be a cross between the private practitioner and the public health doctor. His primary interest will not be the individual, but the basic sociological unit of our society, the family. His discipline will be family medicine . . . Family medicine will require specially trained physicians, not physicians half trained in a number of specialties."

(Lynn P. Carmichael, MD, "Teaching Family Medicine," JAMA, vol. 191, no. 1, p. 133.)
January 4, 1965

Transforming Healthcare: The Success of Kiribathgoda's Family Medical Unit

Dr. Hasara Kulatunga

Registrar Family Medicine

Postgraduate Institute of Medicine, Sri Lanka

Kiribathgoda Base Hospital, a recently upgraded facility transitioning from a divisional type A to a type B Base Hospital, stands as a beacon of exemplary healthcare delivery in Sri Lanka. At the heart of this transformation is Dr. Priyantha Halambarachchige, a visionary Consultant Family Physician whose leadership has not only enhanced the quality of care at Kiribathgoda but has also instilled a culture of teamwork and excellence among the medical professionals in the region. Through his guidance, Kiribathgoda Hospital has become a shining example of the power of collaboration, efficient management, and compassionate patient care.

The Role of the Consultant Family Physcian

Dr. Priyantha Halambarachchige, a distinguished family physician with 30 plus years of experience, serves as the backbone of the Family Medical Unit at Kiribathgoda Base Hospital. Under his leadership, the unit has flourished and achieved impressive outcomes despite the challenging workload and limited resources. His approach to healthcare is not only clinical but also compassionate, fostering a nurturing environment for both patients and staff.

One of Dr. Halambarachchige's most remarkable qualities is his ability to guide and mentor his team. He ensures that all medical staff, from senior registrars to medical officers, are well-equipped with the knowledge and skills they need to provide optimal care. A key component of this mentorship is the regular case-based discussions and training sessions he organizes. These sessions encourage team members, including family medicine registrars, OPD doctors, and medical officers of the family medical clinic, to come together and share insights, enhancing their collective understanding of patient management.

This knowledge-sharing culture has had a profound impact on the overall competence of the team, leading to better patient outcomes.The consultant's patient-centered approach to healthcare is evident in the Family Medical Unit's operations.

He believes in empowering patients to take charge of their own health by providing them with the information and tools they needHis open-door policy, where patients are encouraged to meet with him personally to discuss their ailments, fosters a strong sense of trust and satisfaction among the community. It is this personal touch that has earned Dr. halmbarachchi the respect and admiration of both his patients and colleagues.

The Family Medical Unit: A Hub of Compassionate Care

he Family Medical Unit comprises a dedicated team, including Acting Consultant Dr. Sanath Keerthi, Senior Registrar, Registrars, Medical Officers, a dedicated Nursing Officer, and an Attendant.

Each member of this team plays a vital role in the delivery of healthcare services, and the close-knit nature of the unit ensures seamless coordination.The services comprise of managing acute infections, screening and managing non communicable diseases, focusing on opportunistic women's and men's health, providing counselling and mental health awareness and performing minor surgeries.

In addition to providing routine consultations, the Family Medical Unit plays a critical role in the management of chronic and long-term conditions. Patients in need of ongoing care are often referred to the Family Medical Clinic, where they receive comprehensive and consistent treatment.

The fact that Dr. Priyantha and his team prioritize continuous training, both within the Family Medical Unit and across the hospital, further strengthens this collaborative environment.

The Apex Hospital and the Cluster System

Kiribathgoda Base Hospital serves as the central hub of healthcare within a comprehensive network of regional medical facilities, which include the Divisional Hospitals of Biyagama and Udupila, alongside four Primary Medical Care Units (PMCUs) located in Sinhalamulla, Paliyagoda, Hunipitiya, and Kadawatha. This well-organized hierarchy has proven to be a vital framework in ensuring equitable access to quality healthcare across the region.

To maintain the highest standards of medical care, a registrar or senior registrar from Kiribathgoda Base Hospital is assigned on a daily basis to visit and oversee the operations of these divisional hospitals and PMCUs, offering expert guidance and ensuring that clinical protocols and patient care standards are rigorously upheld. In a bid to enhance communication and coordination, a dedicated WhatsApp group has been established, uniting the medical officers in charge of each facility with the consultants, thereby facilitating seamless exchange of information and the swift dissemination of important messages.

This system not only helps maintain a high standard of healthcare across multiple facilities but also fosters a strong network of medical professionals. The central role of the Family Medical Unit at Kiribathgoda is pivotal in this system, as it acts as the main hub for the cluster, offering guidance and support to the satellite clinics. The registrars and medical officers stationed at these outlying facilities can rely on the expertise of the consultant and his team for case discussions, advice on complex cases, and continuous professional development.Dr. Halambarachchi's leadership and the strength of the Family Medical Unit's operations have been crucial in ensuring the success of this cluster system. He encourages a culture of teamwork, where even the smallest clinics feel connected to the larger medical community. This cohesion has resulted in better patient care and increased efficiency in managing healthcare services across the entire cluster.

Building a Positive Work Culture

The atmosphere at the Family Medical Clinic is calm and friendly. The soft, mellow music playing in the background, combined with ample seating space, creates a soothing environment for both patients and staff. This tranquility is an important aspect of the hospital's ethos, as it helps reduce stress levels and promotes a more pleasant experience for all who visit.

The success of Kiribathgoda's Family Medical Unit can also be attributed to the strong bond between the staff and their consultant where he places great emphasis on team-building and creating a positive work environment. Monthly gatherings are organized where the entire team comes together to discuss cases, share experiences, and strengthen their professional relationships.

These get-togethers have become an integral part of the team's success, fostering a sense of camaraderie and mutual respect.

The dedication of the team, coupled with the collaborative and supportive work environment, has made Kiribathgoda Base Hospital a place where staff feel valued and patients receive exceptional care. The sense of unity within the hospital creates a ripple effect that positively impacts patient satisfaction. The "happy customers" — the patients — continue to return not only because of the high-quality care but also because of the respect and empathy shown to them by the entire medical team. Undoubtedly, the Kiribathgoda Family Medical Unit is poised to continue its mission of achieving excellence and fulfilling its goals in the years ahead.

Prescribing in elderly in Primary care setting

Dr.R.P.M Vibhashine,[1]
Dr Malkanthi Galhena[2]

1. MO - Family Medicine
2. Consultant Family Physician

Sri Lanka, a Southeast Asian country, is currently undergoing a demographic transition. While the country is enjoying its highest workforce at present, it will face the consequences of an aging population in the future(1) . Frailty, a high disease burden, and disability are some of the challenges associated with the elderly. The health sector will inevitably struggle to provide quality healthcare to this growing elderly population.

Primary care units, in particular, will encounter an increasing number of elderly patients. However, in Sri Lanka, the provision of primary healthcare is often carried out by individuals who lack formal training. Delivering high-quality healthcare to the elderly requires evidence-based, comprehensive management, the ability to detect red flag symptoms and signs, rational referral practices, and appropriate prescribing. Unfortunately, there are instances where medical officers lack the necessary competency to provide such quality care in primary settings.

Given these challenges, it is imperative to discuss appropriate prescribing practices for elderly patients among primary healthcare providers.

Case History 1

An 80-year-old lady presented to the Family Medical Clinic (FMC) at Base Hospital Panadura due to recurrent falls. She could not recall the incidents, which lasted only 2 to 3 minutes. When regaining consciousness, she found herself on the ground. An eyewitness reported that she did not exhibit jerky movements or urinary or bowel incontinence. However, she experienced post-ictal drowsiness.

She did not complain of chest pain or palpitations and did not experience sudden onset unilateral weakness at the time of the falls. She had been diagnosed with hypertension and epilepsy for 5 years and was being followed up at a private neurology clinic under a neurologist. She had experienced several episodes of these attacks over the past years. Her medications included sodium valproate 300 mg twice daily, propranolol 60 mg three times daily, and atorvastatin 20 mg at night.

During this episode, she did not have fever or lack of sleep. However, on further probing, she admitted she had not been taking sodium valproate 300 mg as prescribed, instead taking 100 mg in the morning and 200 mg at night due to tremors. Initially, she had been prescribed levetiracetam for her epilepsy but had transitioned to a government hospital for treatment due to financial constraints.

Additionally, she complained of forgetfulness, such as misplacing money and forgetting addresses. Her past surgical and allergy histories were unremarkable. She had a brother diagnosed with Alzheimer's disease. Her gynecological and obstetric histories were unremarkable.

On social history, she was a widow; her husband had passed away 10 years ago. She had a daughter living in New Zealand. She was economically stable, retired as a music teacher, and lived with a trustworthy male helper.
On examination, findings were unremarkable, except for a GPCOG assessment score of 7 out of 9.

Management

Investigations were ordered, with the following results:

- FBS: 80.1 mg/dL
- FBC: No abnormalities detected
- Serum creatinine and electrolytes: Normal
- Lipid profile: Total cholesterol 196 mg/dL, LDL 107 mg/dL, Total cholesterol/HDL ratio 2
- ECG: Sinus rhythm
- 2D Echocardiogram: Ejection fraction >60%, with mild MR and mild AR
- Liver function tests and TSH: Normal

Further investigations, including 24-hour Holter monitoring and EEG, were planned.
Problem List

- Poorly controlled epilepsy
- Lack of compliance with medication

Plan

We discussed her condition and emphasized the importance of taking medication despite side effects.

An agreement was made to adjust her sodium valproate dosage to 200 mg twice daily. She was advised to set specific times for taking her medication. A follow-up visit was scheduled after two weeks, and safety netting was provided. As the patient was tired, a detailed cognitive assessment was deferred to the next visit. It was noted that the partial treatment of her condition might have prevented full disease control.At the two-week follow-up, the patient reported no further attacks.

Case History 2

A 76-year-old lady presented to the Family Medical Clinic (FMC) at Base Hospital Panadura for routine continuation of care. She was a diagnosed patient with hypertension, right-sided sensory cerebrovascular accident (CVA), and dyslipidemia. She complained about forgetfulness and, more seriously, forgetting to take her medication. During this visit, her blood pressure was high, and she mentioned forgetting to take her medication. However, her sister stated that the caregiver had administered the medication.

Her past medical history includes the above conditions. Her surgical history is unremarkable, and she has no known allergies to food or medication. She has no family history of Alzheimer's disease, but there is a history of diabetes and hypertension in her family.

In her social history, she is unmarried and resides in an elderly care home. She is a retired government worker, and her sister visits her regularly. She was not found to be depressed. She cannot walk independently and requires support. Her appetite is normal, and she receives a balanced diet from the elderly care home.

On examination, her blood pressure was 160/95 mmHg, and her GPCOG assessment score was 4/9. Other findings on examination were unremarkable.

Management

Investigations:

- Full Blood Count (FBC)
- Serum Electrolytes (SE)
- Electrocardiogram (ECG)
- Fasting Blood Sugar (FBS)
- Lipid Profile

We discussed her condition and frailty status with her and her sister. We emphasized the importance of optimizing her hypertension and dyslipidemia management. Importantly, we advised arranging a designated person to administer her medication and maintain a medication chart.

Discussion

Appropriate prescribing in the elderly is a significant challenge. Prescribing a medication is a complex process that involves several key steps: determining the necessity of the medication, selecting the best evidence-based medication for the condition, tailoring the dose and schedule to the individual patient, monitoring the efficacy and safety of the treatment, and providing education and safety netting regarding potential side effects.

Beyond these steps, there are additional challenges specific to prescribing for elderly patients due to changes in pharmacokinetics and pharmacodynamics that occur with aging. Older adults are often excluded from pre-marketing clinical trials, leading to a lack of robust evidence regarding these variations.

When considering pharmacokinetic changes in the elderly, decreased drug clearance is a notable issue, primarily due to reduced renal function with aging, even in the absence of established renal disease.

Additionally, the increased proportion of body fat in older adults may lead to an increased volume of distribution for lipophilic drugs, resulting in a longer half-life for these medications. Consequently, careful consideration is required when determining dosing regimens.

Elderly patients also present unique challenges such as frailty, anxiety, depression, memory loss, hearing and vision impairments, falls, economic instability, arthritis, and the presence of multiple chronic diseases, often leading to polypharmacy.

Considering the two patients described, both demonstrated memory impairment. To address this, we recommended using a pillbox and appointing someone to assist with administering medications. Further counseling regarding their diseases and medications was also provided to improve compliance.

Polypharmacy is a particularly significant issue in older adults. Problematic polypharmacy is defined as the use of multiple medications in a manner that is not considered appropriate. It is associated with adverse drug reactions, increased drug interactions, and prescribing cascades.

Measures to Address These Challenges

- Practice appropriate prescribing: Carefully evaluate the necessity and choice of medications.
- Avoid inappropriate prescribing: Regularly review and rationalize medications.
- Enhance compliance: Employ strategies like pill organizers, caregiver support, and counseling.
- Monitor efficacy and safety: Conduct regular follow-ups to assess treatment outcomes and side effects.

Through these strategies, healthcare providers can improve the quality of care and minimize the risks associated with prescribing for elderly patients.

Practicing appropriate prescribing

1. Is there an indication for the drug?
2. Is the medication effective for the condition?
3. Is the dosage correct?
4. Are the directions correct?
5. Are the directions practical?
6. Are there clinically significant drug-drug interactions?
7. Are there clinically significant drug-disease/condition interactions?
8. Is there unnecessary duplication with other drugs?
9. Is the duration of therapy acceptable?
10. Is this drug the least expensive alternative compared with others of equal usefulness?

Reproduced from: Hanlon JT, Schmader KE, Samsa GP, et al. A method for assessing drug therapy appropriateness. J Clin Epidemiol 1992; 45:1045. Illustration used with the permission of Elsevier Inc. All rights reserved.

UpToDate

The patient with epilepsy in the first case requires an appropriate antiepileptic medication. She is experiencing generalized seizures, which necessitate the use of a broad-spectrum antiepileptic. While levetiracetam is considered a first-line option, its cost makes it unaffordable for her. Therefore, valproate is a suitable alternative.

Although her prescribed dosage regimen was correct, her compliance was poor. Rather than increasing the dosage further, it is crucial to first assess her compliance and identify the reasons for not adhering to the regimen.

In this case, she was not taking the medication as prescribed due to side effects, specifically tremors, which are a common adverse effect of valproate.

The patient must be educated on the importance of controlling seizures to reduce mortality and morbidity. Emphasizing the significance of seizure control can encourage better adherence despite side effects. Additionally, valproate is an enzyme inhibitor, so caution is needed to avoid potential drug interactions, especially in patients on multiple medications.

Avoiding inappropriate prescribing

There are various criteria to assess prescribing in the elderly, including the Beers Criteria and the STOP/START Criteria. These tools help guide practitioners in identifying potentially inappropriate prescribing and ensuring that medications are optimally tailored to the needs of older adults.

As practitioners in family medicine, we play a vital role in coordinating care and conducting medication reviews for older adults. This proactive approach can help prevent inappropriate prescribing and improve patient outcomes.

A common example of inappropriate prescribing is the frequent prescription of antibiotics for the common cold in Sri Lanka. This practice not only fails to address the viral nature of the condition but also contributes to the growing problem of antibiotic resistance, which poses a significant threat to global health.

Taking measures to improve medication compliance.

- Avoiding complex dosage regimen.
- Avoiding polypharmacy.
- Using medication with least adverse effects.
- Using suitable dosage forms for elderly patients who are having swallowing difficulties, such as gel forms or syrups.

Spending adequate time with patient to explain the dosing regimen.
Fixing specific time to take medication.
Arranging a pill box.
Arranging DOT therapy for disabled patients.

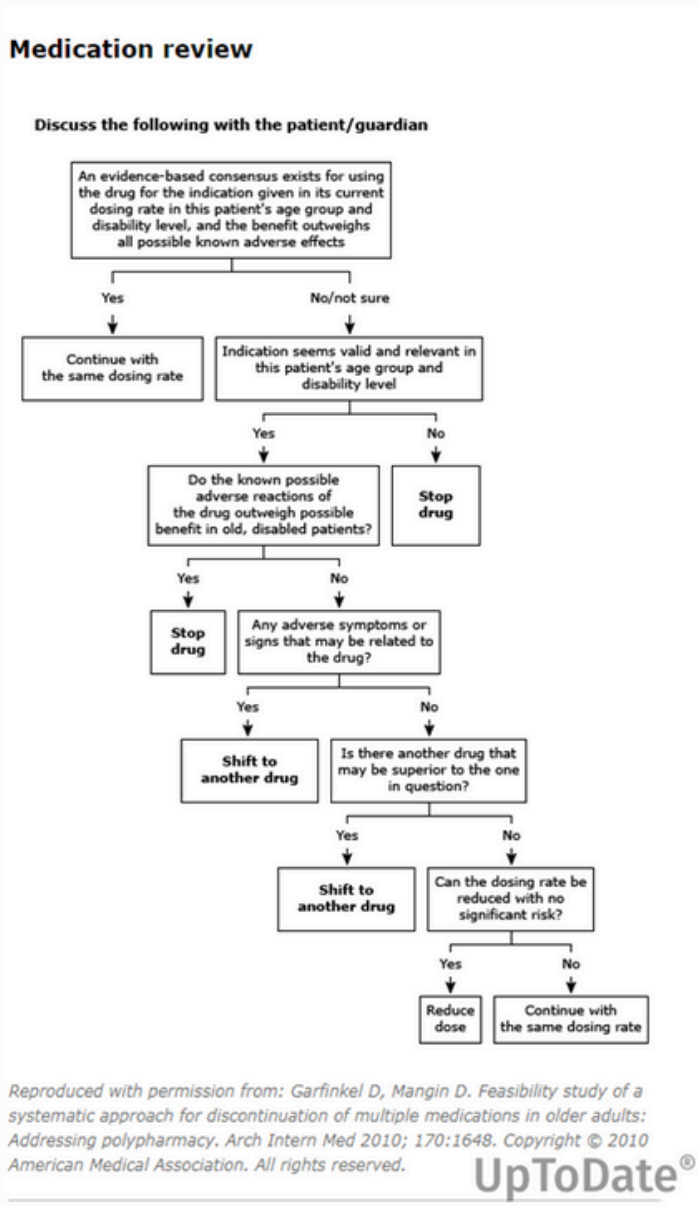
Taking measures to monitor efficacy and safety

The efficacy of the medication can be evaluated by clinical response, investigations etc. However, to monitor and improve the safety we can do medication review. As family doctors we consider patients as the continuum and episode as the disease, further as a coordinator we receive all the prescriptions that patient is on from different clinic. Therefore, it is important to do medication review by using all the medications the patient is currently using.

It is important to avoid prescribing cascade, in which patient gets a adverse drug event and clinician misunderstands it as a symptom and prescribe another medication. Hence it is important to see each new symptom as an ADR.

So in conclusion we would like to highlight important practical tips.

- Consider whether new additions are worth of it.
- Do medication review often.
- As we are practicing in our clinic rewrite and recheck prescription in each visit.
- Consider discontinuation of inappropriate medication
- Be cautious with newer medications when prescribing in elderly.
- Consider OTC medications.
- Use limited range of medications.



Reproduced with permission from: Garfinkel D, Mangin D. Feasibility study of a systematic approach for discontinuation of multiple medications in older adults: Addressing polypharmacy. Arch Intern Med 2010; 170:1648. Copyright © 2010 American Medical Association. All rights reserved.

UpToDate®

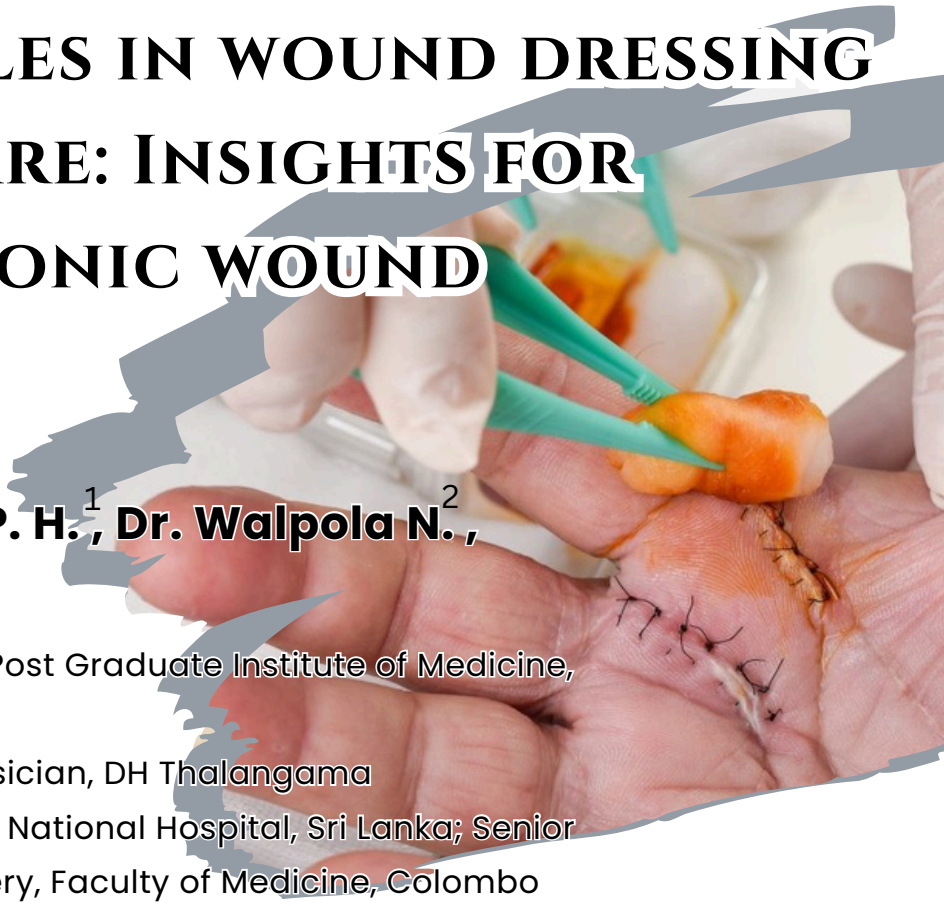
References

1. Sri Lanka must increase its efforts to protect and promote the human capital of the elderly [Internet]. [cited 2024 Nov 3]. Available from: https://blogs.worldbank.org/en/endpovertyinsouthasia/sri-lanka-must-increase-its-efforts-protect-and-promote-human-capital-elderly
2. GPCOG Screening Test Step 1: Patient Examinatio.
3. Mangoni AA, Jackson SHD. Age-related changes in pharmacokinetics and pharmacodynamics: basic principles and practical applications. Br J Clin Pharmacol [Internet]. 2004 Jan [cited 2024 Nov 4];57(1):6. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC1884408/
4. Cho S, Johnny Lau SW, Tandon V, Kumi K, Pfuma E, Abernethy DR. Geriatric drug evaluation: where are we now and where should we be in the future? Arch Intern Med [Internet]. 2011 May 23 [cited 2024 Nov 4];171(10):937–40. Available from: https://pubmed.ncbi.nlm.nih.gov/21606098/
5. Rochon Paula MD MPH FRCPC. Drug prescribing in older adults. UPTODATE. 2024 Apr 1;
6. Field TS, Gurwitz JH, Avorn J, McCormick D, Jain S, Eckler M, et al. Risk factors for adverse drug events among nursing home residents. Arch Intern Med [Internet]. 2001 [cited 2024 Nov 4];161(13):1629–34. Available from: https://pubmed.ncbi.nlm.nih.gov/11434795/
7. Beers MH. Explicit criteria for determining potentially inappropriate medication use by the elderly an update. Arch Intern Med. 1997 Jul 28;157(14):1531–6.

"In American life the family doctor, the general practitioner, performs a service which we rely upon and which we trust as a nation."

(President Franklin D. Roosevelt at dedication of National Institute of Health building October 31, 1940

Basic principles in wound dressing in Primary Care: Insights for effective chronic wound management.



Dr. Nanayakkara G. L. P. H.[1], **Dr. Walpola N.**[2], **Dr. Gooneratne T.**[3]

1. Registrar in Family Medicine, Post Graduate Institute of Medicine, Colombo
2. Acting Consultant Family Physician, DH Thalangama
3. Consultant Vascular Surgeon, National Hospital, Sri Lanka; Senior Lecturer, Department of Surgery, Faculty of Medicine, Colombo

Chronic wounds pose a significant challenge in primary care settings, especially in Sri Lanka where healthcare access may be limited, and self-care practices vary across communities. The cost of chronic wound care, impact on life, as well as caregiver burden are unthinkable in some scenarios. This article is the first in a series on chronic wound management designed to provide a comprehensive framework for primary care providers.

Definition of a Chronic Wound

A chronic wound is defined as a wound that does not progress through the typical phases of healing—hemostasis, inflammation, proliferation, and remodeling—within a predictable time frame [1]. According to most sources, wounds lasting longer than three months are considered chronic[2,3]. However, definitions may vary, with some considering durations ranging from 2-4 weeks[4].

These wounds often become trapped in the inflammatory phase, leading to delayed or incomplete healing. But failure to progress with time as well as with an order of stages considered pathologically as chronic wounds [5].

In primary care, the most common types of chronic wounds include:

- Venous ulcers: Usually found on the lower legs, caused by venous insufficiency.
- Diabetic foot ulcers: Common in diabetic patients, usually affecting the feet and often due to neuropathy and ischemia.
- Pressure ulcers: Develop over bony prominences due to prolonged pressure, frequently seen in immobilized or bedridden patients.
- Arterial ulcers: Result from poor circulation, often on the lower legs and feet.

Non-healing post-surgical wounds: Result from surgical sites that do not heal within the expected time frame due to infection, poor blood flow, or patient factors like immunosuppression.

- Mixed pathology ulcers – More than one factor affects the wound healing process.

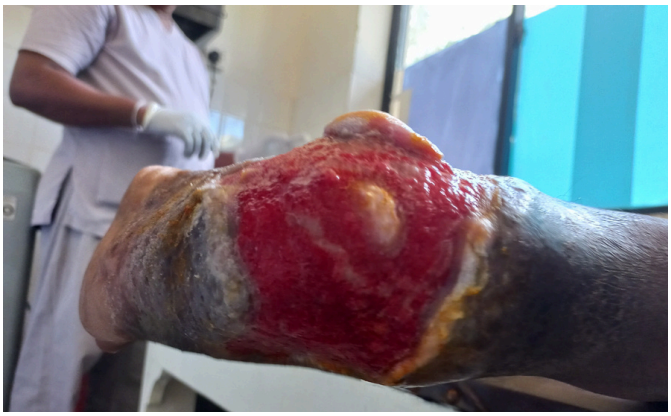
Understanding the type of chronic wound helps direct appropriate management strategies tailored to the underlying cause.

Pathology of Chronic Wounds

Chronic wounds are often characterized by prolonged inflammation, an imbalance of proteases and growth factors, and persistent bacterial presence or biofilm formation. In many cases, a complex interplay between infection, impaired blood flow, and patient-specific factors like diabetes or malnutrition disrupts the normal healing process. Early identification and targeted intervention in primary care can prevent complications and facilitate better wound healing.

Factors Affecting Wound Healing

Several local, systemic and socioeconomic factors can impede wound healing. By recognizing these factors, primary care providers can develop tailored interventions to improve healing rates and patient outcomes.



Local factors	Systemic factors	Socio economic factors
Infection	Age	Low socio-economic status
Inflammation	Diabetes (Microangiopathy, Neuropathy, Hyperglycemia)	Beliefs and traditional healing practices
Oxygenation	Anaemia	Access to health care
Moisture balance	Uremia	Educational level
Blood supply	Drugs like steroids	Hygiene
Temperature	Nutrition	
	Neuropathy	

Management of chronic wounds in Primary Care

Managing chronic wounds in primary care requires a structured approach, focusing on wound assessment, addressing factors that impede healing, and maintaining a consistent routine of cleaning and dressing. Effective wound care supports healing by removing barriers, such as infection or poor circulation, while creating a suitable healing environment. Central to this approach is patient-centered care, where the patient's knowledge, goals, and the social or psychological impact of the wound on both patient and caregiver are integrated into a personalized plan.

Routine cleaning and dressing are the foundation of wound care in primary settings. Using suitable cleansing agents, ensuring a moist environment, and selecting dressings that protect against infection while managing exudate levels are essential to this process. For more complex cases requiring surgical debridement or vascular procedures, timely referrals and a shared-care approach with specialists are key to effective outcomes.

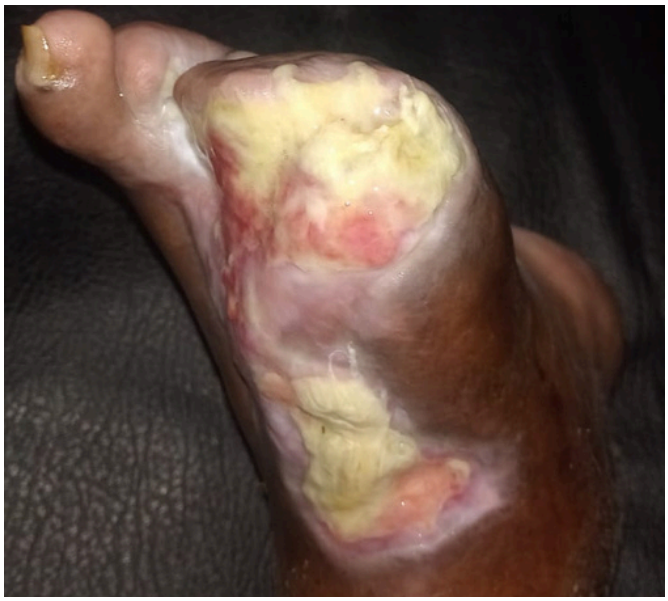
This summary emphasizes core wound management steps in primary care. A subsequent article will provide an in-depth look at wound assessment and management, addressing factors that contribute to chronicity and discussing advanced care interventions, equipping practitioners with a comprehensive understanding of chronic wound care. Protocol based Management of wound dressing in primary care

In the current primary care setting in Sri Lanka, wound dressing is generally handled by nurses or support staff, under the supervision of medical officers or registered medical officers. A positive observation is their enthusiasm and openness to acquiring new knowledge, which is frequently experienced by the authors.

Cleaning and Dressing

Cleaning and dressing are foundational steps in chronic wound care that prevent infection and support optimal healing.

- Cleaning: Each wound requires careful cleaning to remove debris and reduce the risk of infection.
- Dressing: The choice of dressing depends on wound type, location, level of exudate, and presence of infection. Inadequate dressings can lead to maceration or infection, while appropriate dressings provide a moist environment, protect the wound, and encourage healing.



Types of Cleaning Solutions and When to Use Them

Selecting the right cleaning solution is vital:

- Saline solution: The primary choice for most wounds, as it effectively cleans without irritating healthy tissue.
- 3% Hypertonic saline solution – Can be used specially for slough containing wounds.
- Antiseptic solutions: Such as povidone-iodine or chlorhexidine, are typically reserved for infected wounds due to their potential cytotoxicity to healing cells.

- Hydrogen Peroxide – The use of this method is discouraged due to the risk of tissue damage, despite in-vivo evidence suggesting it promotes granulation through oxygen free radicals.

Wound cleaning is as crucial in the management of chronic wounds as it is for acute wounds, as it helps reduce bacterial levels to a point that the body's natural defenses can handle. Ideally, topical cleansing should achieve periodic reduction of bacterial contamination, remove soluble debris, and avoid any adverse effects on the wound itself. Two primary techniques for wound cleansing are irrigation and scrubbing. While irrigation is broadly applicable, scrubbing is used sparingly and only for sloughy wounds, as it may harm already formed granulation tissue.

Wound Debridement and the TIME Principle

Debridement, or the removal of dead tissue, is essential for chronic wound healing as it reduces infection risk and enhances the effectiveness of topical therapies. In primary care, autolytic or mechanical debridement is often used.

The TIME principle is a helpful guideline in wound management:

- **Tissue management (T)**: Removal of non-viable tissue.
- **Infection control (I)**: Use of appropriate antibiotics or antiseptics to manage infection.
- **Moisture balance (M):** Ensuring the wound environment is neither too wet nor too dry.
- **Edge of wound (E):** Promoting wound edge advancement and re-epithelialization.

Applying the TIME principle helps create a favorable healing environment, addressing the specific needs of each wound.

Tissue Management – Simple protocol based on wound colour

Colour	Type of tissue	Categories	Action
Black	Necrotic	Wet & Infected	Excision– May need referral/ admission
		Dry & non-infected	Interval excision
Yellow	Sloughy	Acutely inflamed	Debride
		Chronic inflamed	Staged debridement or slough reducing method (eg – Papain containing cream)
Red	Granulation		Preserve & protect
Pink	Epithelilization		Provide thorough care & avoid maceration

Dressing

The choice of dressing depends on wound type, location, level of exudate, and presence of infection. Inadequate dressings can lead to maceration or infection, while appropriate dressings provide a moist environment, protect the wound, and encourage healing.

Features of an ideal dressing

- Keeps adequate humidity to the wound while removing excess exudate.
- Protects wound from further trauma.
- Impermeable to bacteria
- Thermally insulating
- Allowing gaseous exchange
- Comfortable
- Non toxic & non allergenic
- Require only infrequent change
- Can be removed without trauma to the wound
- Cost effective

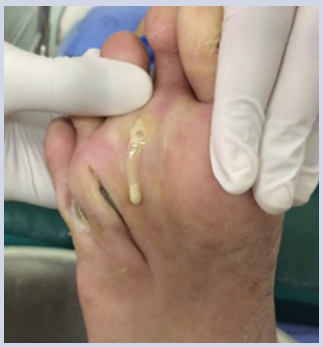
Classification of Wounds for Selecting Ideal Dressing.

Classifying wounds helps in selecting appropriate dressing options based on the characteristics of the wound:

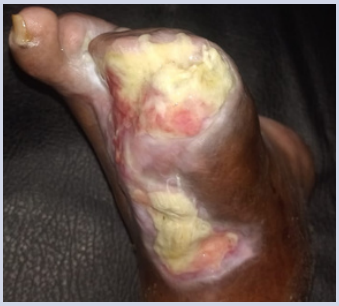
- Draining: Alginates. Collagen, Composite, Foam, Hydrocolloid (only for mild draining wounds)
- Infected/ Inflamed: Cadexomer iodine, Polyhexamethylene biguanide, Silver impregnated
- Necrotic wounds: Collagenase, Honey impregnated, Hydrocolloid, Maggots
- Non-draining/ dry: Collagen gel, Composite, Hydrocolloid, Hydrogel, transparent films.

(Individual discussion about the different dressings, available in Sri Lankan market will be included in a future article)

Draining Wounds



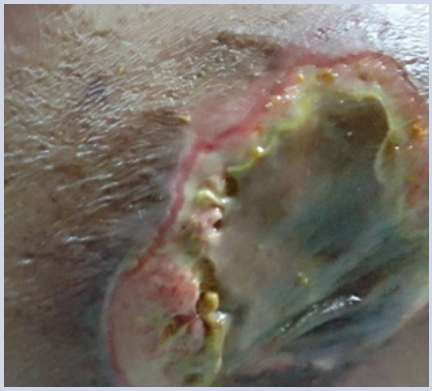
Infected Wounds



Silver impregnated

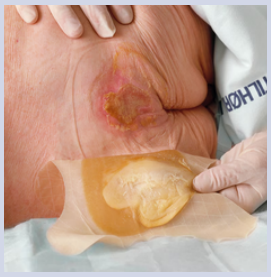
Cadexomer iodine

Necrotic Wounds



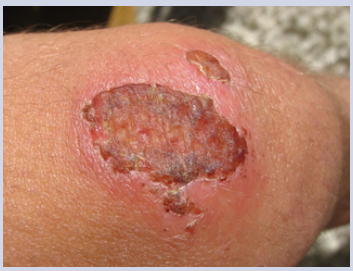
Maggots

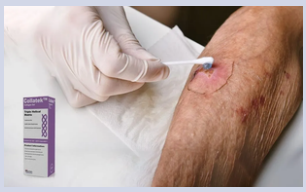
Honey impregnated



Hydrocolloid

Dry Wounds





Collagen gel

Composite

Hydrocolloid

	Granulating	Necrotic/ with slough
Wet/ Draining	Goal – to protect granulation tissue and peri-wound area	Goal – to debride the wound area, absorb drainage, protect surrounding tissue & monitor/ prevent infection
	Absorptive dressings, gauze, alginates, hydrofibres, semipermeable foams, hydrocolloids	Gauze & alginate/ hydrofibres, less commonly foam or hydrocolloids
Dry/ Non draining	Goal – To continue proper wound healing, select a dressing that can balance the right moisture & occlusiveness	Goal – to debride carefully, soften eschar and balance appropriate moisture
	Impregnated gauze films & hydrogels	Impregnated gauze, films, hydrogels, hydrocolloids

Proper classification of wounds is essential for optimizing dressing choices, which can help reduce costs and minimize unnecessary dressing changes. Accurate wound assessment involves checking for the presence of necrosis, slough, or granulation tissue. Additionally, observing the previous wound dressing to see if it is fully soaked provides insight into the wound's exudate level over the dressing interval. If the previous dressing is saturated, or if there is maceration of the peri-wound skin, several precautionary actions can be taken. These include adding a few extra absorptive cotton layers to the dressing and shortening the dressing interval to better manage exudate and protect the surrounding skin.

Practice Tips for Chronic Wound Dressing in Primary Care

To ensure quality care and reduce infection risk, primary care providers should adhere to best practices, including:

- Maintaining sterility: Use clean gloves, gauze, and instruments during dressing changes.
- Proper disposal of infected waste: Dispose of wound care materials following local health regulations to prevent cross-contamination.
- Patient education: Teach patients and caregivers about wound care practices, signs of infection, and when to seek further medical attention.
- Documentation: Keep detailed records of wound progression, dressing changes, and any signs of infection to guide ongoing management.

Future Articles in the Series

This article provides an overview of chronic wound management principles in primary care. Future articles in this series will cover each topic in detail, including:

- Advanced Dressing Techniques: A guide to selecting and applying advanced dressings for complex wounds.
- Management of Specific Wound Types: Evidence-based management for diabetic foot ulcers, venous ulcers, and pressure ulcers.
- Patient-Centered Wound Care: Addressing the socioeconomic and cultural aspects influencing chronic wound management in Sri Lanka.
- Preventing Wound Infection: An in-depth look at infection control measures, recognizing early signs of infection, and managing wound infections.
- The Role of Nutrition in Wound Healing: Nutritional interventions to support immune response and tissue repair.
- Protocol based chronic wound management in primary care: How protocols can be developed and effectively implemented in primary care hospitals.

References

1. Bowers S., Franco E., Chronic wounds: Evaluation and Management, AFP 2020; 101(3): 239 – 48
2. Yang H. J., Kang S. Y., The clinical uses of Collagen-based matrices in treatment of chronic wounds, JWMR (2019): 15(2); 103-8
3. Frykberg R.G., Banks J., Challenges in the treatment of chronic wounds, Advances in wound care (2015): 4 (9); 560-82
4. Kyaw BM, Jarbrink K, et al, Need for improved definition if chronic wounds in clinical studies, Acta derm venerol (2018): 98; 157-158
5. Kujath P., Michelsen A., Wounds – From physiology to wound dressing, Dtsch Arztebl int 2008; 105 (13): 239-48
6. Atiyeh BS, Dibo SA, Hayek SN, Wound cleansing, topical antiseptics & wound healing, Int wound J 2009; 6: 420- 430
7. Obagi Z et al, Principles of wound dressings: A review, Surg Tech Int 2009; 35: 1- 8
8. Harding K, Wound dressing, BMJ 2006; 332: 777- 780

CPD programme and Learning Activities

Monthly CPD Event with Experts

This monthly CPD event was initiated to maintain a collaboration with experts of other disciplines and to update the knowledge of primary care physicians. This event obtains the approval of the National CPD Committee of the Ministry of Health and each CPD event is entitled to one CPD point.

An update on STIs and HIV - 26 Jun 2024

Dr. Piyumi Perera (MBBS, MD), Consultant Venereologist from the STD Clinic, Puttalam, delivered a lecture on the latest updates in the diagnosis, management, and prevention of sexually transmitted infections (STIs) and HIV. Conducted via Zoom, the session had the participation of 160 attendees, highlighting the significance of the topic. Dr. Perera emphasized current trends, advancements, and practical approaches to improving patient care in this critical area of public health. The interactive session concluded with a lively Q&A, leaving participants well-informed and equipped with updated knowledge.

Bleeding per Rectum ; A Case Based Discussion - 21 Aug 2024

Prof. Dakshitha Wickramasinghe (MBBS, MD, DM, MRCSEd, PGCertMedEdu, FIAGES, FMAS, FRCS), Consultant Surgeon at the University Surgical Unit, National Hospital of Sri Lanka, and Professor in Surgery at the Faculty of Medicine, University of Colombo, led an engaging case-based discussion on "Bleeding per Rectum." The session consisted of the clinical presentations, diagnostic challenges, and management strategies for rectal bleeding, providing participants with practical insights rooted in evidence-based practice. Prof. Wickramasinghe's vast expertise and interactive approach enriched the learning experience, offering valuable knowledge to healthcare professionals.

Common Neonatal Presentations in Primary Care - 29 Aug 2024

A comprehensive session on "Common Neonatal Presentations in Primary Care" was conducted by **Dr Nimesha Gamhewa, Consultant Neonatologist** and Senior Lecturer in Paediatrics from the University of Sri Jayawardenapura. The lecture focused on identifying and managing common neonatal conditions encountered in primary care settings. Emphasis was placed on early diagnosis, timely interventions, and the importance of follow-up care to ensure optimal neonatal health outcomes. The expert's academic and clinical insights provided practical strategies for primary care practitioners, enhancing their capacity to deliver quality neonatal care.

Let's Talk About Sex ; Sexual Health in Primary Care - 10 Sept 2024

Dr. Prageeth Premadasa (MBBS, Dip. & MD in Venereology, DFSRH [UK], Psychosexual Medicine [UK], CSM) delivered a session on "Sexual Health in Primary Care." The discussion highlighted the importance of addressing sexual health with sensitivity and professionalism, covering topics such as STI prevention, contraceptive counseling, and psychosexual issues. Dr. Premadasa provided practical advice for primary care physicians to create a safe and nonjudgmental environment for patients. The session emphasized the need for holistic and inclusive approaches to managing sexual health concerns in primary care.

Dyslipidemia in Primary Care ; Updated Management Strategies - 10 Oct 2024

Dr. Solith Senanayake (MBBS, MD, MRCP), Consultant Cardiologist and Lecturer in Pharmacology at the University of Sri Jayewardenepura, conducted a detailed session on "Dyslipidemia in Primary Care." The lecture focused on the latest guidelines and evidence-based strategies for diagnosing and managing dyslipidemia, emphasizing its role in cardiovascular risk reduction. Dr. Senanayake provided practical insights into lifestyle interventions, pharmacological options, and individualized patient care. The session was highly informative, equipping primary care physicians with updated tools to optimize lipid management in their practice.

Colorectal Carcinoma;Unmasking the Silent Enemy - 4 Dec 2024

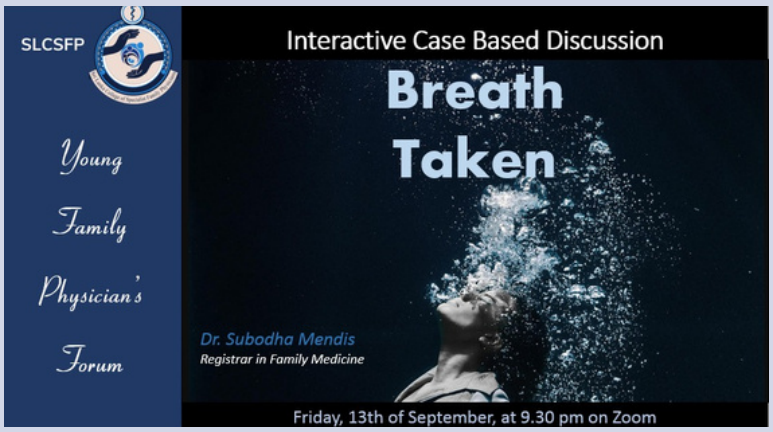
Dr. Buddhika Thilakarathna (MD Surgery, MRCS [Glasg]), Consultant Oncological Surgeon at Teaching Hospital, Batticaloa, delivered an impactful lecture on "Colorectal Carcinoma: Unmasking the Silent Enemy." The session highlighted the importance of early detection, risk factors, and advancements in diagnostic and surgical management of colorectal cancer. Dr. Thilakarathna provided valuable insights into screening programs, patient education, and multidisciplinary approaches to enhance outcomes. The lecture underscored the critical role of primary care in identifying and addressing this often-silent yet potentially life-threatening condition.

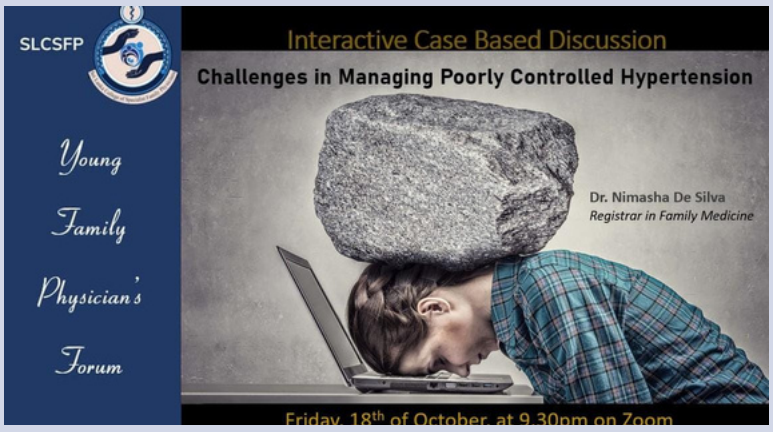
Management of chronic kidney disease in primary care setting

Dr. Buddhika Illeperuma (MBBS [Col], MD [Medicine], ESE Neph [UK]), Consultant Nephrologist at District General Hospital Matara, conducted a comprehensive session on "Management of Chronic Kidney Disease (CKD) in Primary Care." The lecture focused on early identification, risk stratification, and evidence-based management of CKD in primary care settings. Dr. Illeperuma emphasized lifestyle modifications, optimizing comorbid conditions, and timely referral to nephrology services to prevent progression and improve patient outcomes. The session provided practical guidance for primary care practitioners to enhance their role in CKD management effectively.

Young Family Physicians Forum

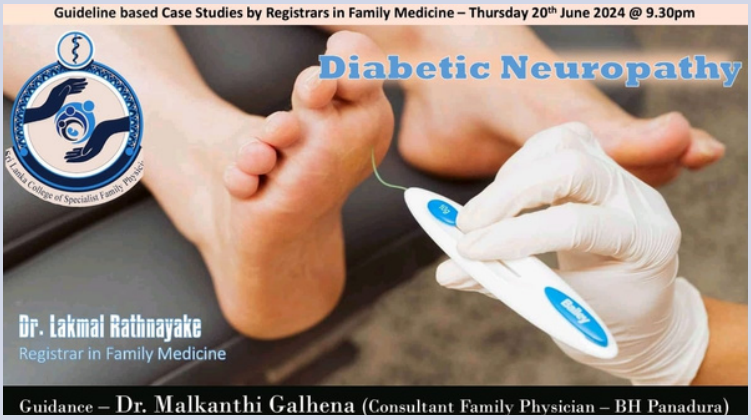
This CPD event which is held every fortnight is conducted by the MD trainees in Family Medicine under the supervision of Dr Lalantha Senaratne, Consultant Family physician. Most of these case discussions are based on the patients who present to the Family Medical clinics.

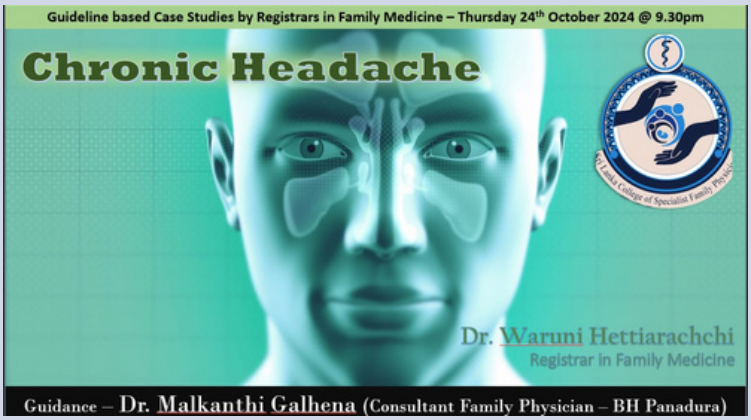


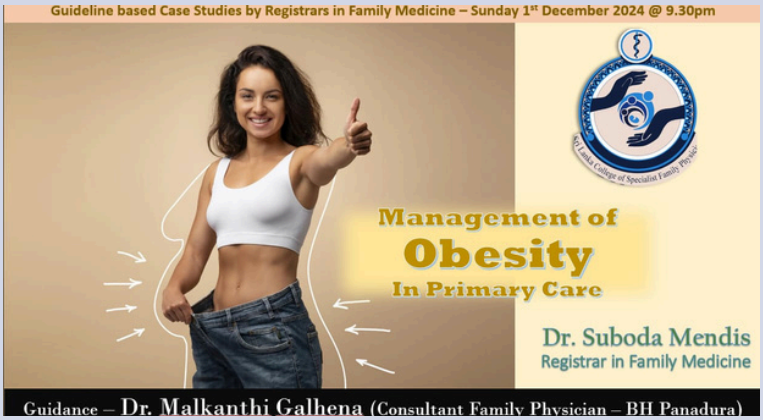


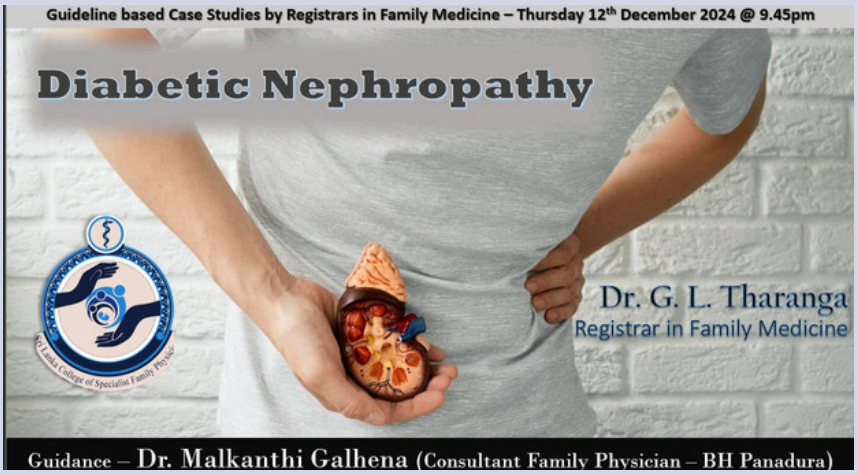
Guideline Based Case Studies

This CPD event which is held every fortnight is also conducted by the MD trainees in Family Medicine under the supervision of Dr Malkanthi Galhena, Consultant Family physician. These case discussions are based on the patients who present to the Family Medical clinics in related to the management principles and guidelines.









www.slcsfp.lk info@slcsfp.lk f@slcsfp.lk youtube .com/@SLCSFP