IMPA JOURNAL

Published by the
Independent Medical Practitioners Association of Sri Lanka

December 2021 | Volume 15

Entrasol PLATINUM

SCIENCE BASED NUTRITION

Clinical, Nutritional and Functional benefits with High Protein Oral Nutrition Supplementation (ONS)

- Improved Hand Grip p<0.014
- Improved Body Weight p<0.001
- Increase in muscle mass (mid arm muscle circumference) p<0.05
- Increase in Protein and Energy intake with little reduction in normal food intake p<0.001

Significant overall reduction in complications including healing of surgical wounds and infection rates

12g Protein
Supports muscle health, immunity and healing

5g Fiber - Inulin and Betaglucan
Prebiotics supports gut health and immunity

Vitamin C, Vitamin E and Zinc
Supports Immune Function

Vitamins D and Calcium
Supports Bone Health

Nutrition Support for Aging & Convalescence

KALBE Nutritionals
Kalbe International (Pte) Ltd
No. 321 Galle Road, Colombo 04
Tel: 011 255 2000 / 076 062 1994
Email: info@kalbesrilanka.com

*Cawood AL, et al. Systematic review and meta-analysis of the effects of high protein oral nutritional supplements. Ageing Res Revs 2012;119:278-296.

KALBE

IMPA JOURNAL

Volume 15 | Number 01
December 2021

Published by the
Independent Medical Practitioners Association of Sri Lanka

275/75, Prof. Stanley Wijesundara Mawatha, Colombo 7.
Tel: 011 250 11 13 Fax: 011 250 08 18 E-mail: champa.impa@gmail.com
Web site: http://impasl.com

ISSN 2465-6135

INDEPENDENT MEDICAL PRACTITIONERS ASSOCIATION
OFFICE BEARERS 2020/2021

SEATED LEFT TO RIGHT

Dr. F.A. Rajakulendran, Dr. S.M. Samarage (Hony. Joint Secretary), Dr. Palitha Abeykoon (Vice President), Dr. S.A.P. Gnanissara (Vice President), Dr. Ananda Perera (President), Dr. S.M. Goonesekera (Vice President), Dr. D.W. Weerasooriya (Hon. Joint. Secretary), Prof. I. Joel Fernando (Past President), Dr. A.H.A. Hazari (Immediate Past President)

STANDING LEFT TO RIGHT

Dr. Sujatha Samarakoon, Dr. Lucian Jayasuriya, Dr. D.K.D. Mathew, Dr. K. Black, Dr. N.P.S. Gunaratne, Dr. B. Karunaratne, Mrs.Champa Silva (Administrative Officer), Dr. A.A.M. Haroon

INDEPENDENT MEDICAL PRACTITIONERS ASSOCIATION
OFFICE BEARERS 2020/2021

Patron	Dr Joe Fernando
President	Dr Ananda Perera
Immediate Past President	Dr A H A Hazari
Vice Presidents	Dr S M Goonesekera
	Dr Palitha Abeykoon
	Dr S A P Gnanissara
Hony. Joint Secretaries	Dr D W Weerasooriya
	Dr S M Samarage
Hony. Treasurer	Dr H L Pathirajamudali
Asst. Treasurer	Dr B Karunaratne
Editor	Dr A L P de S Seneviratne
Council Members	Dr (Mrs) I Abeywickrema
	Dr A K Black
	Dr Titus Fernando
	Dr N P S Gunaratne
	Dr A N Gooneratne
	Dr A A M Haroon
	Dr Sanath Hettige
	Dr Lucian Jayasuriya
	Dr S Jayatilleke
	Dr L D L P Liyanage
	Dr D K D Mathew
	Dr M S R Mihilar
	Dr M K Murugananthan
	Dr Sarath Paranavitane
	Dr F A Rajakulendran
	Dr Seneth Samaranayake
	Dr (Mrs) I S Samarakoon
	Dr Tilak Silva
	Dr Omala Wimalaratne
	Dr Hector Weerasianghe
Past Presidents	Prof I Joel Fernando
	Dr S L G Jayasuriya
	Dr B G D Bujawansa

Zincovit®

Tablets

Provides Zinc,
Essential Vitamins & Minerals

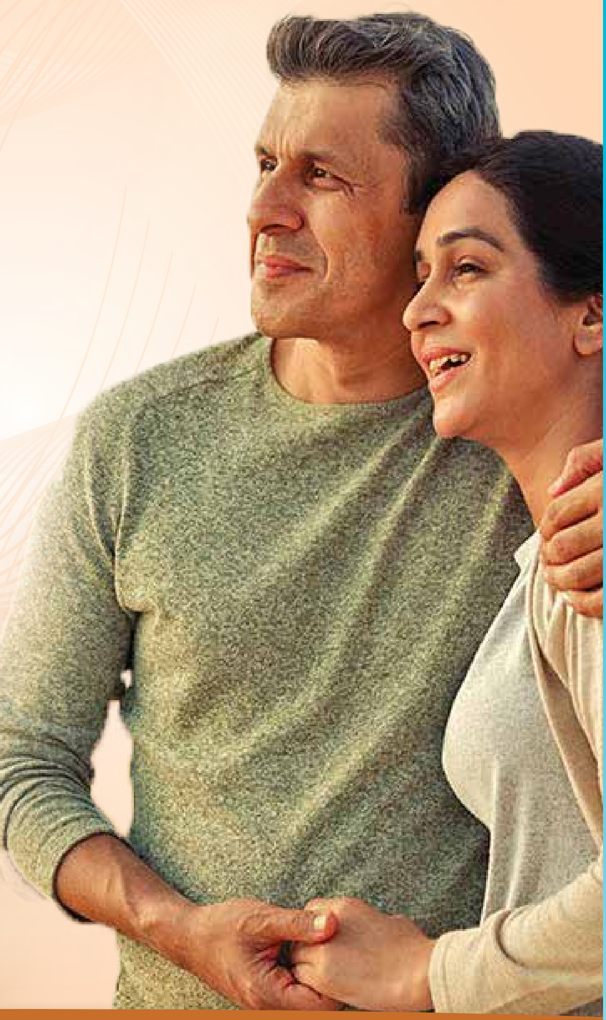
SPECIALLY FORMULATED
TO BOOST IMMUNITY

Baurs
Established 1897

apex
www.apexlab.com

IMPA JOURNAL

Volume 15 | Number 01
December 2021



President's Message for the Journal

It is with great pleasure I write this message to the membership. First and foremost last year was a very active and busy year for the IMPA despite the SARS-COV-2 pandemic. While pandemic paralyzed the country the country was reborn in a New Normal. IMPA of course had several projects initiated to mitigate the impact of the COVID -19. The main pandemic related services the IMPA initiated were:

1. Contribution to the development of the Primary Guidelines for the Home Management of the COVID - 19
2. Development of an android app with the Primary Care Physician Group of Sri Lanka called COVIDOM
3. Sharing of all the current and up to date research on COVID 19 as a series of COVID - 19 briefs which were sent regularly to all the membership
4. Finally the launch of a Digital Health Camp for the Long Corona patients

Our contribution is going to be a unique attempt on several key aspects. We will focus on what is now called LONG CORONA. The details of this will follow. We will focus on:-

- the scale and scope of the problem by way of providing a solution based on Information and Communication Technology (ICT).
- a long term solution for the problem of the LONG CORONA rather than a one off telephone call.
- a solution where the engagement of the person and the patient contacting us is more than what is available currently.
- the empowerment of the persons and the patient contacting us again definitely much more than what is currently provided.
- documentation of our progress.

Documentation is also of fundamental importance to achieve our project objectives which are mentioned below.

IMPA has also been engaged on many other activities during the course of last year other than COVID - 19 related activities.

Drug Index and Website are 2 other major projects we initiated

and are been carried out successfully now. IMPA website is now catering to the CPD activities of not only the membership but also other doctors who are not members. The main attraction of our website is the recordings of all the CPD meetings we conducted over the course of last 1 year. Our website now has more than 20 lectures delivered by eminent specialists in Sri Lanka on various medical and surgical topics. Many users have been grateful for the free availability of the high quality video recordings of all the lectures delivered at the IMPA / CPD sessions over the last year. Our website will continue to grow in popularity as more and more video recordings are uploaded in future. We also have plans to grant CPD credit hours for the CPD activity conducted by the users at our website in collaboration with the SLMA.

The other main attraction of our website is the Drug Index. Drug Index of IMPA can be accessed through our website ONLY. IMPA Drug Index has all the drugs registered in Sri Lanka as well as all the drugs in the WHO Model Formulary as well as the Essential Drug list of the Ministry of Health. We have also included the specialty specific essential drug list issued by the Ministry of Health. However, Drug Index is just an initial step towards a major work on a national formulary for Sri Lanka. IMPA is planning to institute these proceedings early 2022.

I want to thank all the membership for the support rendered to me in my entire tenure of presidency. Nothing of what I mentioned above would have been possible without this support. I also want to offer a special word of thanks to Dr A H A Hazari and Ms Champa Silva for their coorperation during my term of office.

Dr Ananda Perera
President
IMPA

Content

Mega Pharma
Dermatology Division

MINO 5
Scalp Solution 60ml
Minoxidil Topical Soution USP 5%

FEN 1
Finasteride Tablets USP 1mg

ACLIN Gel
Clindamycin Phosphate USP
1.0% w/w 15g

ERYN Gel
Erythromycin Gel USP 4% w/w 20g

ADIPIN Gel
Adapalene BP 0.1% w/w 15gm

BENOX Gel
Benzoyl Peroxide BP 2.5% / 5% w/w 20g

BETZE
Skin Ointment 15g & Lotion 15ml
Betamethasone dipropionate + Salicylic acid
BP 0.064% w/w USP 3.0% w/w

MOBIT
Cream & Ointment
Mometasone Furoate USP 20g 0.1% w/w

UNIZINK 50
Zink Aspartate 50mg

Mega Pharma (Pvt) Ltd.
A Mega Commitment to Medicine
93/5, Dutugemunu Street, Colombo 06. Sri Lanka.
Tel : 4 203596 - 7, 2 812398 - 1, Fax : 2 828481, 4 205804
Aruna - +94 77 748 4364

EAR INDIA

Manufactured in india by:
EAST AFRICAN (INDIA) OVERSEAS., 1, Pharmacity,
Selaqui, Dehradun-248011 (INDIA) (WHO-GMP Certified Company)

Reminiscence

Dr S R Ratnapala, Past President IMPA

Dr. S.R. Ratnapala was a person who contributed heavily to the IMPA activities in the last decade of last century. He joined the IMPA as a Consultant Obstetrician and Gynaecologist in the private sector in 1984. He realized the services of the private sector medical personnel were not adequately recognized or reciprocated by the State. The IMPA activities were very much subdued in late nineteen eighties due to Nationwide insurrection activities with death threats to a few senior members. It was when IMPA activities regained momentum in early nineteen nineties. I happened to meet Dr. Ratnapala, Ranjith to most of us ,who was holding the post of the Joint Secretary during IMPA meetings. I happened to discuss about many medico political issues dealt with by IMPA with him. When he wanted to consider the post of president, he requested me to join his team as a joint secretary. When he was President in 1994 and 1995 me and Dr. W.O. Wadugdapitiya (Wadu) were joint secretaries.

Ranjith had lot of plans for the IMPA. Some were accomplished some were not, but none were inappropriate. Despite monthly Council meetings few of us used to gang up in the IMPA office at least once a week in the afternoons and engage in fine tuning the decisions taken by the council. IMPA office was not a cozy place, what it is now. There was no air conditioning. We had a single manual type writer, a filing cupboard a few wall cupboards and a few plastic chairs. The only refreshment was a cup of plain tea from the OPA canteen.

Those who joined in included Dr. W.O. Wadugodapitiya (Wadu), Joint Secretary Dr. I.J. Fernando (Joel) Vice President Dr. S.A. Karunanayaka (Karu) editor and Dr. L.P.V. Jayaweera (Vernie) the Treasurer.

One of the first accomplishments was incorporating the IMPA under Companies Act giving it a favourable legal recognition. The newsletter was regularly published and the format was improved. Medical updates included in the newsletter. IMPA Journal was published after a lapse of several years. An IMPA diary was issued to all members. This included important data useful to active medical practitioners.

Monthly CME meetings were very elaborate. They were mostly held in five star hotels and were followed by cocktails and dinner. Resource personnel well recognized in their respective fields were invited. Some meetings had panels of resource personnel. The spouses of members were invited for the fellowship and dinner. The CME sessions was partly a social event and were well attended.

Biggest achievement, with Ranjith as President was, AIDS Distant Education program. It was sponsored by the WHO. The project proposal was drafted by Joel. It was an educational programme by the GPs for the GPs. Several educational modules drafted by the GPs. Each module had facts, a pretest and post test to assess the self learning. This was followed by outreach meetings where the learners could interact with the doctors who drafted the modules. The project involved much travelling, work and financial management. The WHO gave us a desk top computer (which replaced the old manual typewriter) and stationery. The project filled the IMPA coffers to a large extent and was highly admired by other medical bodies. During one of his visits to UK Ranjith handed over a set of modules to the Royal College of Obstetricians and Gynaeciolgists which was received with much gratitude and admiration.

He continued the outreach health camps which was a concept of Dr. Lakshman Weerasena, the immediate past president. Though transport was arranged in a bus he used to travel in his own vehicle because he wanted to reach the place early and leave late.

He was very keen in establishing branch associations of IMPA. He was much impressed by the active nature of the North Western Chapter. He attempted to establish branches in Kandy, Galle and Matara. I travelled with him for all these missions and travel back in late night or the early hours of the morning. Despite enormous efforts no branch association could be established.

As past president he remained active. He offered assistance to later presidents and he was in a position to do this with his long experience in medico political activities. He passed off after a brief illness on 6th of April 2021. He leaves behind his wife Ranjanie, who used to travel with Ranjith for outreach health camps and son Devaka a life member of IMPA. May the journey through samsara be brief for him!

Dr B G D Bujawansa MBBS (Cey.) FCGP (SL)
Past President, IMPA.

With Best Compliments from

abcpharma

ABC PHARMA SERVICES (PVT) LTD.
42, Jayantha Mallimarachchi Mawatha,
Colombo -14, Sri Lanka.
Tel : 011 5337648/9
Fax : 011 5337763
E-mail : abc@abcpharmasl.com
Web: **www.abcpharmasl.com**

WITH WARMEST WISHES FROM

Baurs
Established 1897

BAURS HEALTHCARE

A. Baur & Co. (Pvt.) Ltd
62, Jethawana Road,
Colombo 14
Sri Lanka

Coping during the covid 19 pandemic - Family physicians perspective

Dr A L P De S Seneviratne

Introduction

COVID-19 is the disease caused by a new coronavirus called SARS-CoV-2. World Health Organization (WHO) first learned of this new virus on 31 December 2019, following a report of a cluster of cases of 'viral pneumonia' in Wuhan, People's Republic of China.

The COVID 19 pandemic in Sri Lanka is part of the ongoing worldwide pandemic of coronavirus disease 2019 (COVID-19) caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus. The first case of the virus in Sri Lanka was confirmed on 27 January 2020, after a 44-year-old Chinese woman from Hubei, China, was admitted to the Infectious Disease Hospital in Angoda. As of 14th October 2021, a total of 529755 confirmed cases have been recorded in the country, 492958 patients have recovered from the disease, 24368 patients under medical care and 13429 patients have died from the pandemic.

The Family Physicians (FP)/General Practitioners (GP) of this country continued to function during this pandemic and even during the curfew and lockdown period. They continued to deliver patient care in spite of any supportive measures by the Ministry of Health. They were not in the priority list for vaccination against Covid. Most of the staff members working in these clinics are still not vaccinated.

This study was undertaken to show the stakeholders of this country, how the family physicians are much affected and the way they have been coping during the pandemic.

Materials and Methods

The information presented and reviewed in this paper has been obtained by a questionnaire. This was designed by the author and a pretest was conducted with senior general practitioners in Sri Lanka. Following this information, a focal group discussion was carried out and necessary changes were done.

The questionnaire consists of only 20 questions as I have the experience that most of the doctors do not answer long questionnaires due to lack of time.

The questions consist of:

1. Demographic data
2. Burden on the family physician
3. Staff issues
4. Effects on the patients and changes made to cope with the situation

This questionnaire was sent on Google form/ WhatsApp to the members of the College of General Practitioners of Sri Lanka, practicing doctors selected from the IMPA directory and to some of our colleagues who are not members of these two associations. The questionnaire was developed in Google forms. It was anonymous and confidential. The author cannot identify who responded or not. According to my experience most of

the doctors do not respond to online questionnaires, I gave them several reminders regarding the research questionnaire. This was conducted from May-June 2021.

Results

1. Demographic data of the responders

There were 101 GPs responded to the questionnaire. Eighty-six were males and only 15 were females.

Table 1. *Age Distribution (n-101)*

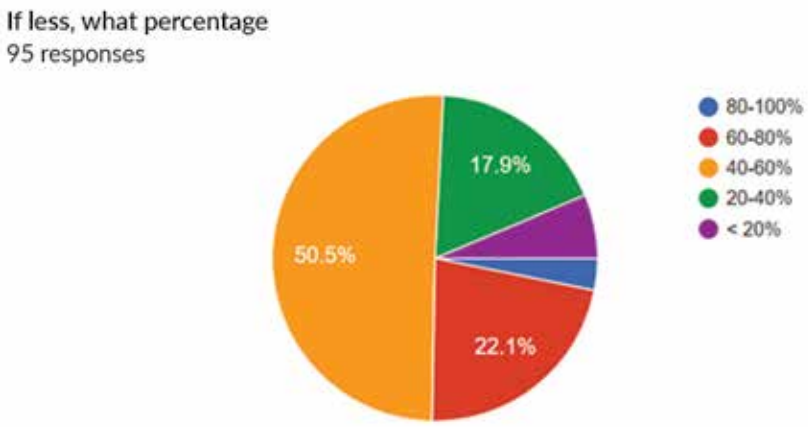
Age in years	Numbers	Percentage %
31-40	12	11.9
41-50	40	39.6
51-60	17	16.8
61-70	18	18.8
>70	13	12.9

50% of the GPs were below 50 years of age.
60% of the responders were part time GPs.
The distribution of the state sector to private sector were equal (50%)

2. Burden on the Family Physician

Majority of doctors 95 (93.1%) informed that there is a drastic effect on their income. Income was much less when compared to the pre Covid level.

Figure 1. *GP's Income*



72% of GPs stated that the income had reduced by more than 50%
The main reasons given were reduction in patient's load, less working hours and lockdown period.

Table 2. *When will your practice return to pre-covid level*

Duration in Years	Number	Percentage %
1-2	40	42.6
2-3	43	45.7
4-5	6	6.4
>5	2	2.1
Never	3	3.2

n-94 The GPs felt that the clinical practice will take some time to return to normal. 83 of them estimated a duration of over 2 years.

Distribution of working hours Figures 2 and 3

Figure 2.

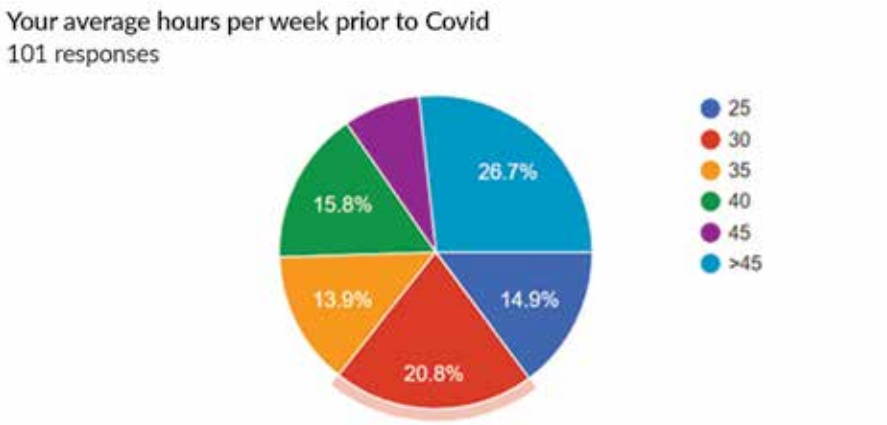
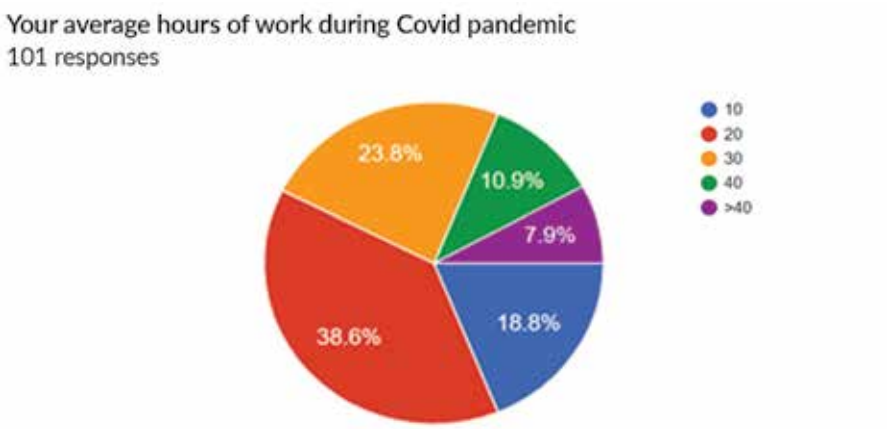


Figure 3.



Majority, almost 50% of GPs work over 40 hours a week, but during the pandemic the working hours had dropped to less than 20 hours per week.

Figure 4 and 5: *Number of doctor - patient consultations*

Figure 4.

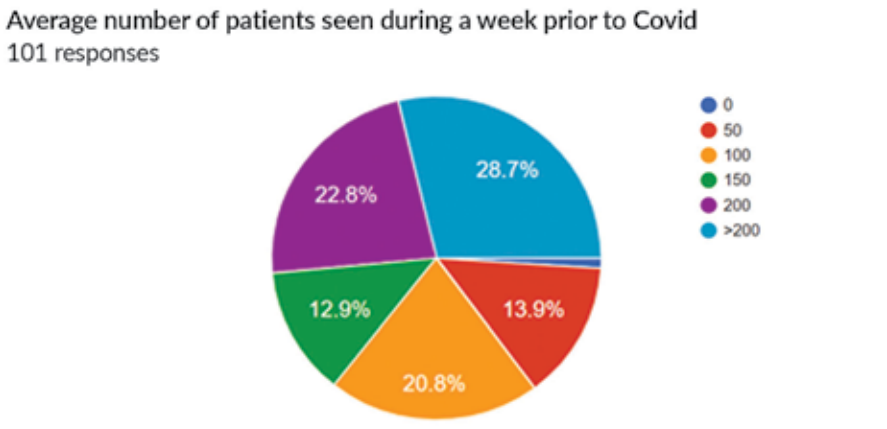
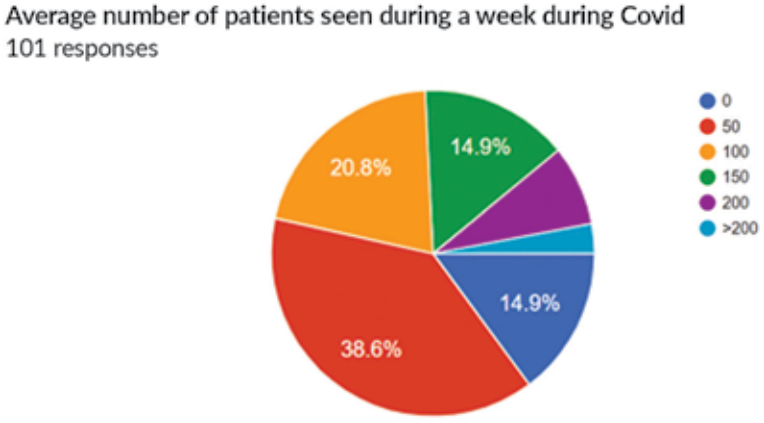
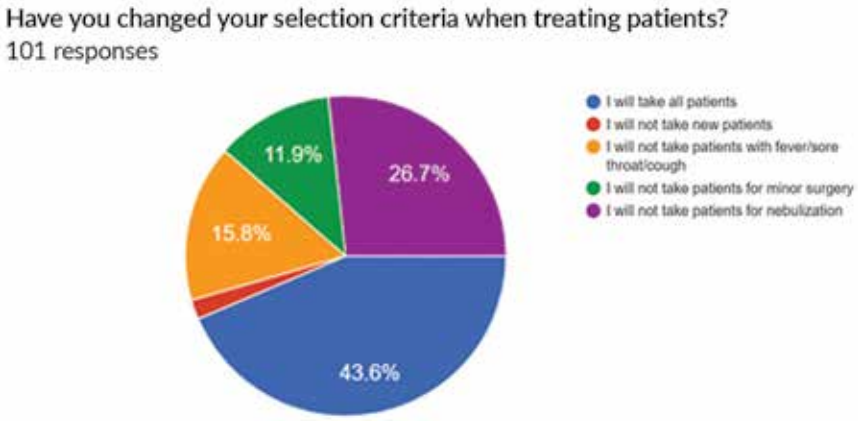


Figure 5.



More than 50% of GPs see more than 200 patients per week, but during the covid pandemic this had dropped to less than 100 patients per week.

Figure 6. *Selecting your patients for consultation and treatment*



In spite of the Covid cases most GPs (50%) did not refuse to treat patients with symptoms suggestive of Covid.

3. Staff Issues

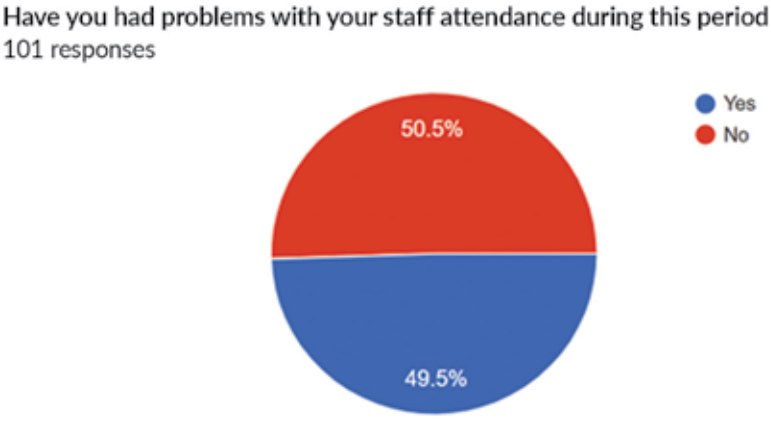
Figure 7. *Staff Salaries*

In spite of less income most of the doctors have paid the same salary to their staff as before.

Figure 8. *Staff numbers*

Though the number of working hours much less during the pandemic period, the GPs have maintained their staff numbers as same.

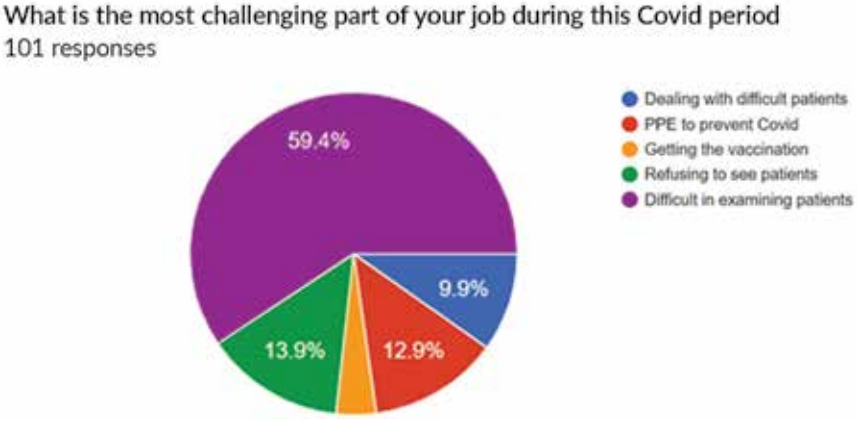
Figure 9. *Staff attendance*



These issues were settled by providing transport and altering their working hours.

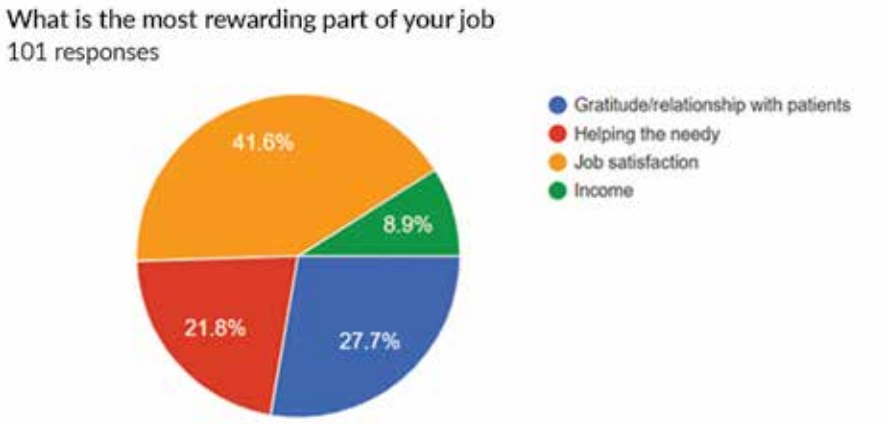
4. Patient issues and Changes done to cope up with the situation

Figure 10. *Challenges*



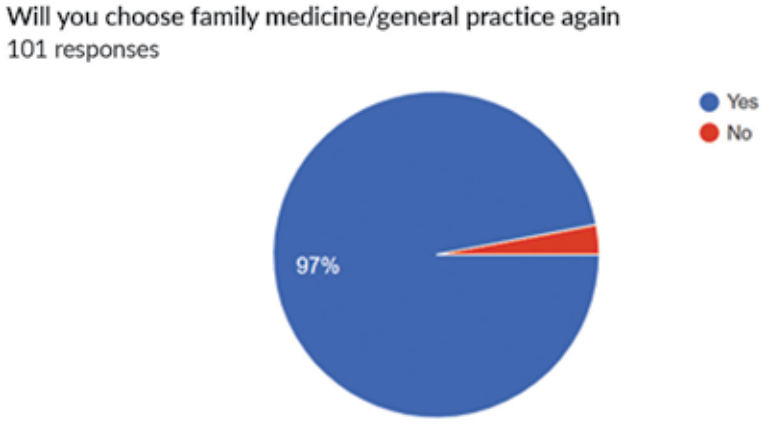
50% of the Doctors had difficulty in examining patients. This was due to maintaining 1-2 meter distance with the patient.

Figure 11. *Attitude towards patients*



Good therapeutic communication and good doctor - patient relationship was most valued by the doctors.

Figure 12. *GP motivation*



The GPs are very much motivated to deliver primary care. 97% responded that in spite of so many obstacles they will select general practice as their career.

Discussion

As far as we know this study is the first systematically analyzed GPs' experience and coping techniques during the Covid 19 pandemic in Sri Lanka. The results of this study showed that the GPs income was drastically reduced by 40-50% during this period, leading to financial constraints. They had estimated that this crisis will continue for another 2-3 years. The reduction in income was mainly due to reduced working hours from 40 hours per week prior to covid to 20 hours a week during the pandemic. 50% of patient turn over had dropped due to fear of leaving the houses due to exposure, and lack of public transport during lockdown period.

In spite of fear of Covid infection most of the GPs continued their practices, and 43% of them did not restrict seeing any patient. About 15-20% of doctors did not see fever patients, did not perform minor surgical procedures and refused to nebulize asthmatic patients.

General Practitioners also experienced staff problems. 80% of GPs mentioned that they

did not reduce their staff numbers, but they found difficulty in reporting for duty due transport problems. The most challenging part was to make a clear diagnosis of the patient problem. The GPs had to depend on a detailed history only. Examinations were restricted due to health reasons. (keeping a distance of 1-2 meters) and the staff not been vaccinated due to age gaps.

Is spite of all these issues, 42% of the GPs informed that they have job satisfaction with good therapeutic doctor-patient relationship. They were very much motivated to their job, as 97% responded that if they were given another opportunity to select their future career they will still opt for general practice.

On long term undertaking we should realize that GPs play a major role in delivering primary health care to patients. The GPs should be in the priority list and supported by the stakeholders during a pandemic to continue their practices and deliver health care to the patients.

E-mail: seneviratnealpdes@gmail.com

References

1. General Practitioners' Experiences During the First Phase of the COVID-19 Pandemic in Italy: Public Health, 03 February 2021 | https://doi.org/10.3389/fpubh.2021.623904

2. Primary care networks: the impact of covid-19 and the challenges ahead BMJ 2020; 370 doi: https://doi.org/10.1136/bmj.m3353

3. Epidemiology Unit Ministry of Health 15th October 2021

4. World Health Organization,Corona Virus Disease (Covid 19) Pandemic

5. Studies of Novel Coronavirus Disease 19 (COVID-19) Pandemic: A Global Analysis of Literature,Bach Xuan Tran et.an Open Access Article.

Dr A L P De S Seneviratne MB.BS; DFM; FCGP; MRCGP[Int.] MD
Consultant Family Physician

Skin is not just the largest sense organ but the most sensitive part of life .....

Needs care and protection ...

Presenting the versatile skin care range ...

Olamin
Ciclopirox Olamine 1% Cream

Microdox DT
Doxycycline 100mg dispersible Tablets

Herperax
Aciclovir 200 mg /800 mg Tablets / Acyclovir 5 % w/w Ointment

Fungitop
Miconazole Nitrate 2% Gel

Betagel-G
Betamethasone 0.05% w/w + Gentamicin 0.1% w/w Topical Gel

Sterisone
Clobetasone Butyrate 0.05% Cream

Secalia
Glycerin IP 15% w/w Cream

Fexico 180
Fexofenadine 180mg

Lorinol
Loratidine 10mg Tablets

Fungicon
Fluconazole 150 mg Capsules

Aziderm
Azelaic Acid 20% w/w Cream

Steriderm-S
Clobestasol Propionate 0.05% Cream

Mupirax
Mupirocin 2% w/w Ointment

Predace
Methylprednisolone 8/16 mg

Minolin 100
Minocyclin Hidrocloride 100mg

MEGA PHARMA

MegaPharma (Pvt) Ltd.
A Mega Commitment to Medicine
93/5, Dutugemunu Street, Colombo 06.
Tel: 4 203596-7, 2 812390-1, Fax: 2 828481, 4 205804
E-mail: megasam@sltnet.lk

Covid 19 and our children's eyes

Dr Amila De Alwis

With the pandemic refusing to go away and the associated school closure, online or digital learning has become the norm, where the facilities exist. In addition, a good number of children use screens for leisure purposes due to previous habits or purely because of the lack of anything else to do. Online learning, both school and extra classes, definitely keep our children safe from Covid-19, but will take its toll on the eyes of our little ones, if not approached correctly.

The general recommendations of no screen time below two years of age, 1 hour of screen usage up to 5 years of age and a limit of 2 hours daily for school going children have been well surpassed during this pandemic and no one can predict how much longer it will be, before schools and extracurricular activities resume.

Effects of prolonged screen usage on growing eyes -

- Dryness: due to reduced blink rates
- Tiredness (eye strain): due to over usage of focusing muscles for near focus.
  Eye pain, tearing and headache ensue, due to the combination of the above 2 effects
- Myopia (nearsightedness) development or progression: due to less time outdoors and long hours of near focus.
  This results in blurred distance vision and will result in the need for glasses.

Recommendations -

- **Take breaks during academic screen time** (as it may not be practical to reduce these times), every 30 minutes or between classes, the break should involve looking at a distant (more than 20 feet away) object, with a soft focus, while blinking slowly for 1-2 minutes. Or easier still, keeping the eyes closed for the same period of time.
- These breaks should apply to reading, writing or other activities involving times of prolonged near focused activities.
- **Non-academic screen time should be limited to less than a total of one hour of all screens** combined (TV, tablets, computers and phones). The bigger the screen and further away the screen is, the better it is for the eyes.
- Trying to make blinking more often, a habit during screen usage will also help.
- **Spend at least an hour outside (in the sun)** engaged in physical activity to compensate for the lack of such activities during this time. The sunlight and distance gazing are both very beneficial to the eyes.
- Get adequate sleep and drink enough water to encourage an adequate tear

layer.

- Hot fermenting and washing the eyes with warm water, when feeling uncomfortable will provide temporary relief.

Dr Amila De Alwis
Consultant Eye Surgeon
Child Eye Clinic, Rajagiriya

85 YEARS OF CARING FOR LIFE

Cipla

For further information, please contact:
Cipla Pharma Lanka Pvt Ltd.| No. 422, 4/2, R A De Mel Mawatha, Colombo -03
www. srilanka.cipla.com

USV Private Limited

Glycomet® S.R.

Metformin Hydrochoride 500mg Sustained Release Tablets

The Gold Standard Metformin

GP-1 | GP-2

Glimepiride Tablets | Glimepiride Tablets

The SMARTER... Sulphonylurea

Tazloc®-20 40 80

Telmisartan Tablets 20/40/80 mg

Ensures Superior BP control

EcOrin

Enteric coated Aspirin 75/150 mg

Aspirin with a difference

Grovit* Syrup

Ensures

Healthy & Strong Growth

The doctors role in educating patients on proper drug use

Prof I Joel Fernando

Report of the drug information committee, IMPA workshop on Better Prescribing: the Doctor's Responsibility and Patients' Right.

Preamble

The committee reviewed the sources of drug information available to a practicing doctor, especially a general practitioner. Among the sources discussed were scientific journals, colleagues, lecturers, drug advertisements and medical detailmen. It was realized that drug advertisements were a potent influence. However the quality of the advertisements reviewed in two leading Sri Lankan medical journals were inadequate and at times the information was misleading.

The committee decided that pharma companies had an obligation to provide accurate and adequate information on the medicines they market. There is a code of practice for drug advertisement formulated by the International Federation of Pharmaceutical Manufacturers (IFPMA). The Pharmaceutical Manufacturers Association of Sri Lanka is a member of IFPMA. Many advertisements in the medical journals, reviewed by the committee were in breach of the IFPMA code in spirit. However due to the last clause (which allows repeat advertisements to contain no information) they are within the letter of the code. The committee decided this last clause will not be taken into account in their deliberations.

The committee reviewed the types of drug advertising and decided to make recommendations on the following types of advertisements: Journal advertisements, Printed promotional material, Banners, Displays, Note pads and small items such as ball point pens, license holders. The recommendations are for the minimum of scientific information that should be present in an advertisement.

Drug companies are encouraged to provide more than this minimum information as it would help in better prescribing: the responsibility for the accuracy of all the information in a drug advertisement remains with the drug companies.

Recommendations

1. All drug advertisements should mention the generic name of the product advertised. The pharmaceutical firms naturally would like it to contain the brand name and the name of the firm. This should be the only information present with the exceptions of 2 and 3. This (brand, generic and company name) is mainly meant for short advertisements like banners and ball points.
2. If a drug advertisement is to contain any wording other than those specified in 1. The following minimum information should be present.
   a. At least two or three main indications of the drug.

b. Recommended dosage.
c. Succinct statement of adverse effects, drug interaction, precautions and contraindication.

3. Journal advertisements should contain the minimum scientific information specified in 1 and 2. i.e. Generic name, recommended dosage, two or three main indications, succinct statement of adverse effects, drug interaction precautions and contraindications.
4. The information specified in 1,2 and 3 should be given irrespective of whether the advertisement is a repeat or for a new drug. These guidelines do not relieve the advertisers of the responsibility of seeing that any other information provided is accurate.
5. Medical practitioners could and should play a part in seeing that these regulations are observed as "Professions gets the advertising they deserve".

Journal Editors should request the pharma companies to include in their advertisements the information specified, it is hoped they will decline any advertising that does not conform.

Organizers of medical meetings should request that pharmaceutical companies follow these guidelines.

Individual doctors should bring to the notice of the medical representatives breaches of these guidelines. If there is no satisfactory response from the company, refusing to see the representative could be effective.

Prof I Joel Fernando MBBS, DFM, FCGP
General Practitioner
Past President, IMPA

In your Type II diabetic patients suffering from multivitamin & mineral deficiency

Rx Diamin

Aides blood sugar control...Improves insulin sensitivity

- Reduces of Homocysteine levels... .reduces the risk of atherosclerosis
- Reduces Number of infections... boosts immunity
- Improves Blood glucose. glycosylated hemoglobin & lipid profile... better health
- Improves C-reactive proteins. HDL Cholesterol. Triglycerides & Hypertension....better heart health
- Good Glucose metabolism... better glycemic levels
- Reduces Neuropathy & retinopathy... better quality of life
- Improves Overall well-being.

MEGA We care
Human Wellness

Indicated for the treatment of moderate to severe acne related to androgen-sensitivity (with or without seborrhea) and/or hirsutism, in women of reproductive age[3]

References: 1. Aydinlik S, et al. Clinical Trials Journal 1990;27:392–402. 2. Aydinlik, S, Lachnit-Fixson U, Lehnert J. Fortschr Med 1986;104:547–50. 3. Diane-35® Current Product Information Leaflet.

DIANE 35 Abridged prescribing information:

COMPOSITION: Each coated tablet contains 0.035 mg ethinylestradiol, 2.0 mg cyproterone acetate **INDICATIONS:**Treatment of moderate to severe acne related to androgen-sensitivity (with or without seborrhoea) and/or hirsutism in women of reproductive age. This includes patients with polycystic ovary syndrome requiring treatment of these symptoms. For the treatment of acne, Diane-35 should be used when topical therapy or systemic antibiotic treatments are not considered appropriate. Since Diane-35 is also a hormonal contraceptive, it should not be used in combination with other hormonal contraceptives **DOSAGE & ADMINISTRATION:**Tablets must be taken in the order directed on the package every day at about the same time with some liquid as needed. One tablet is to be taken daily for 21 consecutive days. Each subsequent pack is started after a 7–day tablet-free interval, during which time a withdrawal bleed usually occurs. This usually starts on day 2-3 after the last coated tablet and may not have finished before the next pack is started. How to start Diane-35 No preceding hormonal contraceptive use (in the past month) Tablet-taking has to start on day 1 of the woman's natural cycle (i.e. the first day of her menstrual bleeding). Starting on days 2-5 is allowed, but during the first cycle a barrier method is recommended in addition for the first 7 days of tablet-taking. Changing from a combined hormonal contraceptive (combined oral contraceptive /COC), vaginal ring, or transdermal patch The woman should start with Diane-35 preferably on the day after the last hormone-containing tablet of her previous COC, but at the latest on the day following the usual tablet-free or hormone-free tablet interval of her previous COC. In case a vaginal ring or transdermal patch has been used, the woman should start using Diane-35 preferably on the day of removal of the last ring or patch of a cycle pack, but at the latest when the next application would have been due. Changing from a progestogen-only-method (minipill, injection, implant) or from a progestogen-releasing intrauterine system (IUS) The woman may switch any day from the minipill (from an implant or the IUS on the day of its removal, from an injectable when the next injection would be due), but should in all of these cases be advised to additionally use a barrier method for the first 7 days of tablet-taking. Following first-trimester abortion The woman may start immediately. When doing so, she does not need additional contraceptive measures. Women should be advised to start at day 21 to 28 after delivery or second-trimester abortion. When starting later, the woman should be advised to additionally use a barrier method for the first 7 days of tablet-taking. However, if intercourse has already occurred, pregnancy should be excluded before the actual start of Diane-35 use or the woman has to wait for her first menstrual period. Management of missed tablets If the user is less than 12 hours late in taking any tablet, contraceptive protection is not reduced. The woman should take the tablet as soon as she remembers and should take further tablets at the usual time. If she is more than 12 hours late in taking any tablet, contraceptive protection may be reduced. The management of missed tablets can be guided by the following two basic rules: 1. tablet-taking must never be discontinued for longer than 7 days. 2. 7 days of uninterrupted tablet-taking are required to attain adequate suppression of the hypothalamic-pituitary-ovarian-axis. **CONTRAINDICATIONS:** Presence or a history of venous or arterial thrombotic/thromboembolic events (e.g. deep venous thrombosis, pulmonary embolism, myocardial infarction) or of a cerebrovascular accident., Presence or a history of prodromi of a thrombosis (e.g. transient ischaemic attack, angina pectoris). A high risk of venous or arterial,History of migraine with focal neurological symptoms, Diabetes mellitus with vascular involvement. Severe hepatic disease as long as liver function values have not returned to normal, Presence or history of liver tumors (benign or malignant), Known or suspected sex-steroid influenced malignancies (e.g. of the genital organs or the breasts), Undiagnosed vaginal bleeding, Concomitant use with another hormonal contraceptive, , Hypersensitivity to the active substances or to any of the excipients. Diane-35 is not for use in men **PRECAUTIONS:** The risk of venous or arterial thrombotic/thromboembolic events or of a cerebrovascular accident,The user group of Diane-35 is likely to include patients that may have an inherently increased cardiovascular risk such as that associated with polycystic ovary syndrome,An increase in frequency or severity of migraine during Diane-35 use, In women with hereditary angioedema exogenous estrogens may induce or exacerbate symptoms of angioedema, Crohn's disease and ulcerative colitis have been associated with COC use. Chloasma may occasionally occur, especially in women with a history of chloasma gravidarum. Women with a tendency to chloasma should avoid exposure to the sun or ultraviolet radiation whilst taking COCs. With estrogen/progestogen combinations, irregular bleeding (spotting or breakthrough bleeding) may occur, especially during the first months of use. **INTERACTIONS:** Some Substances increase the clearance of Diane-35 (diminished efficacy of Diane-35 by enzyme-induction), e.g.: Phenytoin, barbiturates, primidone, carbamazepine, rifampicin, and possibly also oxcarbazepine, topiramate, felbamate, griseofulvin and products containing St. John's wort. Some Substances have variable effects on the clearance of Diane-35, e.g.: when co-administered with Diane-35, many HIV/HCV protease inhibitors and nonnucleoside reverse transcriptase inhibitors can increase or decrease plasma concentrations of estrogen or progestin. Estrogen/progestogen combinations like Diane-35 may affect the metabolism of certain other drugs. Accordingly, plasma and tissue concentrations may either increase (e.g. cyclosporin) or decrease (e.g. lamotrigine). **PREGNANCY AND LACTATION:** Use of Diane 35 is contraindicated in pregnancy and lactation ADVERSE EFFECTS: In rare cases, headaches, gastric upsets, nausea, feeling of tension in the breasts, changes in body weight and libido or depressive moods can occur. Long term use of tablets can cause brownish patches of face which can be made worse by long exposure to sun. Poor tolerance of contact lenses has been reported. **PRESENTATIONS:** Memo pack of 21 tablets

DIN API v2, 04 February 2014 (CCDS version 16- 7 Oct 2013)

For complete prescribing information please contact:
Hemas Pharmaceuticals (Pvt) Ltd.
Distributor of Bayer Pharmaceuticals Products No. 12, Glen Aber Place, Colombo 03, Sri Lanka. [t] : +94 11 476 6666, +94 11 4514974

Approval ID: PP-DIA-LK-0019-1

Study on Drug information Provided to Mothers Seeking Treatment for Their Children's Illnesses

Prof I Joel Fernando

Study Purposes

The purposes of this study were to determine

1. What information mother's received when medicines were recommended for their children's use;
2. Whether the given information was adequate to ensure proper drug use.

The study was carried out by Gamisawiya in collaboration with six mother's organisations (Table 1).

Table 1. Mothers' Organisations and their locations

Organisation	Location
Janabodaya Kendraya, Negombo	Urban
Maria Service Centre, Colombo	Urban
Gamisawiya, Hanwella	Rural
Sathosa, Colombo	Workplace
Bloomendhal Eksath Kantha Samithiya, Colombo	Urban
Dehiwela Mothers' Union	Urban

A participatory research approach was used for this study. Participatory research is an alternative approach to conducting research on human populations where the population studied conducts the research themselves. It is the process of continuing education generated within the population studying itself and not a static one time study. This report covers activities during the period of 1st June to 31st July 1998 of an ongoing education action process set in motion within the mothers organisations.

Method

Each mothers organisation had an initial meeting at which they discussed how they had used medicines for children's illnesses. The discussions were facilitated by Gamisaviya research cordinator. Discussions ended by the mothers identifying questions for study and choosing representatives to carry out he study on their behalf. Representatives with assistance from the co-ordinator prepared a simple questionnaire and learnt how to use it for data gathering by interview. Data was collected from mothers who had taken their children to a treatment facility dispensing Western medicines within the week immediately past.

Analysis

Data was analysed and discussed at workshops organised by mothers. At these workshops mothers identified their further learning needs, drew up action plans. Gamisaviya research co-ordinator facilitated these workshop programs.

Activities conducted by each organisation and the number of mothers participating in such activities are summarised in Table 2.

Table 2. Activities and numbers of mothers participating in each activity

Organisation	Initial Meeting	Interviews Training	Interviewer	Data Analysis
Janabodaya Kendraya, Negombo	5	1	13	17
Maria Service Centre, Colombo	13	1	14	21
Gamisawiya, Hanwella	7	1	11	23
Sathosa, Colombo	0	0	8	0
Bloomendhal Eksath Kantha Samithiya, Colombo	40	0	6	0
Dehiwela Mothers' Union	34	0	0	0

Janabodaya Kendraya, Maria Service Centre and Gamisawiya completed all four sets of activities. The research coordinator interviewed and maintained follow up contacts with Sathosa Mothers at their workplace. Therefore, for the purpose of this report data from these four organisations are presented together in the subsequent analysis. Bloomendhal Eksath Kantha Samithiya and Dehiwala Mothers Union had to be excluded from further analysis because the two organisations had not progressed beyond the initial pre-tests meeting held.

Results

A total of 46 mothers were interviewed from the four organisations. The age, educational level and occupational status of mothers are given in Table 3. Over two thirds of the mothers interviewed were housewives.

Table 3. Mothers by age, educational levels and occupational status

Socio-economic status	Number of Mothers
Age	
Under 20 years	2
20 to 30 years	17
Over 30 years	27
Educational Level	
Below grade 5	11
Grades 5 to 10	19
Above grade 10	16
Occupational status	
Housewife	31
Paid employment	15

Table 4 gives the age sex distribution of the ill children. 48% of the ill children were in the age group 5 to 9 years.

Table 4. Number of ill children by age and sex

Characteristic	Number of Children
Age	
Under 1 year	5
1 - 4 years	11
5 - 9 years	22
10 - 12 years	8
Sex	
Male	23
Female	23

Fever and respiratory illness accounted for three quarters of illnesses reported (Table 5).

Table 5. Illness reported in children

Illnesses	Number
Fever	18
Respiratory Illness	16
Diarrhoea	4
Skin Disorder	3
Worms	2
Constipation	1
Headache	1
Chest Pain	1
Total	46

Half the children were ill for over three days before they were taken to a treatment centre (Table 6).

Table 6. Duration of illness

Duration	Number of Children
One day	0
Two days	11
Three days	9
Over three days	26
Total	46

Fifty Four percent of children were prescribed four or more kinds of drugs (Table 7).

Table 7. Number of drugs prescribed

Number of Drugs	Number of Children
One	0
Two	7
Three	14
Four	17
Five or more	8
Total	46

Sixty five percent of the mother's obtained drugs from a private dispensary (Table 8).

Table 8. Source of drugs

Source of drugs	Number of Children
Private Dispensary	30
Government dispensary	16
Private Pharmacy	11
Total	57

Some children obtained drugs from two sources.

Thirty five percent of the mothers received free drugs from the government dispensary. 38% spent less than rupees 30 for drugs (Table 9).

Table 9. Cost of drugs received

Cost	Number of Mothers
Free	16
Less than Rs 30/=	17
Rs 30/= to Rs 60/=	10
Rs 60/= to Rs 90/=	1
More than Rs 90/=	2
Total	46

78% of mothers admitted that they give drugs to their children according to instructions given by the doctor (Table 10).

Table 10. Source of drug information for mothers

Source of drug information	Number of Mothers
Doctor	36
Dispenser	15
Pharmacist	2
Total	46

Table 11 gives the verbal and written drug information received and used by mothers.

Table 11. Drug information received and used by mothers

Mode of Information	Received		Used
	Number	Percentage	Number
Verbal	40	87	36
Written	27	58	25

11 mothers were told the names of the drugs prescribed. Two mothers were aware of written names. 87% of mothers acted on verbal information relating to drug appearance to quantity and frequency of administration. 45% of mothers followed written instructions on quantity and frequency of drugs administered.

Table 12. Details of drug information known to mothers

Type of Information	Number of Mothers	Percentage
Verbal Information		
Name	11	24
Appearance	40	87
Quantity	40	87
Frequency	40	87
Written Information		
Name	02	04
Quantity	21	45
Frequency	21	45
Storage	01	02
Expiry	01	02

Table 13. Drug names known to mothers including generic names and any trade names

Generic names	Trade names
Ampicillin	Antepar
Aspirin	Ceporex
Calcium	Chricof
Paracetamol	Lamoxy
Tetracycline	Luminal
Vitamin B co	Panadol
	Piriton
	Ventolin

The names of drugs obtained by seven Sathosa working mothers were confirmed by the interviewer (Table 14).

Table 14. Drug names confirmed by interviewer from Sathosa Working mothers

Mother	Drug Name
1	Ampicillin, paracetamol
2	Lamoxy, Panadol
3	Lamoxy
4	Penbritin
5	Ampilin
6	Selexid, Jeewani
7	Wintomylon
8	-

Action

The results were discussed at a meeting of mothers organisation. Each organisation conducted its own meeting and the mother's attending decided:

1. An immediate course of action - Table 15
2. Questions for further study - Table 16

Table 15. Organisation mother attending and actions

Organisation	Number of Mothers attending	Action
Janabodaya Kendraya	17	Collect information on drugs used for worm treatment Organise meeting to discuss drugs and worm treatment
Maria Service Centre	21	Organise meeting to discuss prevention and treatment of bowel diseases
Gamisawiya	25	Organise teaching session on home nursing.

Table 16. Organisations and questions identified for further study

Organisation	Questions
Janabodaya Kendraya	How to use medicines for common illnesses How to find out how drug names are generic or trade names How to determine correct cost of medications purchased
Maria Service Centre	How to treat illness without medicine How to prevent asthma, diarrhoea, toothache, and headache and use medications correctly in treating these ailments
Gamisawiya	How to nurse sick children at home What mothers must know about common illnesses How to use medicines to treat worm infections

Dialogue

Researching mothers discussions with Coordinator

"When a child is sick you may visit a doctor and obtain medicines. You are responsible for giving medicines to your children according to information you get at the time of obtaining medicines. Medicines are powerful they could harm your child if not properly used. You must give medicines to your child with great care ensuring that you carry out the instructions given. Carrying out instructions only does not guarantee that you are doing your best for the child. The instructions you received must be adequate, factually correct and in a form that you can understand and use easily in the best interest of your child. Therefore, let us try to find out whether you received adequate information and instructions when you obtain medicine for your child.

You may say that the problem you have when giving medicines is not a question of whether you get enough information or not. What troubles you most are such things as the high cost of medicines, having to make repeated visits to doctors because medicines do not give permanent cure or at times the lack of interest shown by doctors and other health workers about your child's illness. You should study these problems as well if you are start finding out information you receive - how you use it and how relevant it is for proper use of medicines.

Let us try to collect some information from those among you who have obtained medicines for your children and try to find answers to your questions. Volunteers from among you that have been collecting this information with assistance from your facilitators. At the next meeting we can discuss your findings."

Data Analysis Workshop

Discussion is based on three questions.

1. What information mothers' received when medications are recommended for use by their children?
2. Is the given information adequate for proper drug use?
3. Are the drugs recommended for the proper management of the illnesses that are being treated?

Data collected on mothers tabulated and put up on the board. Most mothers rely on verbal information on drug appearance, quantity, and frequency when administering drugs to children. If only a few drugs of standard appearance are used, drug appearance based verbal information may be adequate for proper drug use. Most often mothers received 3, 4, 5 or more kinds of drugs for their sick children.

The Research Coordinator demonstrates

1. The tablet paracetamol in different colours, in different packing with different names marked on the packing
2. The capsule ampicillin in different colours, identified by different names and sold at different prices.

Drug appearance based verbal information alone is not sufficient to ensure correct drug use. It is necessary to have written instructions giving details of how to use drugs separately written out for each drug prescribed. Government dispensaries give only verbal information and different kinds of drugs are all wrapped together in one paper. This practice exposes the sick child more easily to receiving the wrong medicine in the wrong amounts at the wrong time. This doctor is not aware of the medicines already given to the child. He prescribes the same or other drugs which may interact

with drugs given earlier causing serious harm to the child. Therefore, it is important for mothers to know the names of drugs that are being given to their children. This study shows that very few mothers know drug names.

The research coordinator writes on a board drug names mentioned by mothers. examples cited are used to explain the meanings of generic and trade names. Why are there so many kinds of drugs with different names sold at different prices? The research coordinator demonstrates vitamin tonics, tablets, antibiotics and pain relieving drugs, which he receives as free samples from the drug industry. The drug industry produces many kinds of drugs that are promoted to doctors under trade names and sold at exorbitant prices. Some of these drugs are useful, others are useless and at times harmful. This situation confuses the doctor and harms the patient.

Children's illnesses for which mothers obtained medicines are written on a board. Are so many kinds of drugs needed to treat these illnesses? What must be done if mothers are to know more about the drugs that are prescribed for their children's illnesses. How do mothers propose to find answers to these questions. Mothers discuss and formulate plans for action.

Comment

Research findings suggest possible actions that may be considered for inclusion in a programme to promote better drug use in the community. These actions are as follows:

1. Most mothers act on verbal communications relating to drug appearance to quantity and frequency of administration. Having fewer drugs of standard appearance will strengthen the value of this type of verbal communication.
2. How mothers use written communication. More mothers should be encouraged to read instructions before administering drugs. Government dispensaries must provide written instructions when dispensing medications.
3. Very few mothers know drug names. Community education programmes must be organised to help mothers learn to identify drugs by name. The widespread practise of dispensing anonymous drugs is specially dangerous as children are at risk of wrong medications / overmedication. Private dispensary should be encouraged to write the names of the drugs prescribed.
4. Most mothers receive advice from doctors on drug use. Doctors skills for communicating rational and appropriate information on drug use to mothers should be enhanced by continuing education programs.

Limitations of this study

Opting for a participatory research approach had the following limitations:

1. Number of mothers interviewed was restricted as interviews were conducted only among mothers who had a group membership or affiliation
2. The research base was set by mothers. This restricted the volume of data that could be collected within a specified time. One mothers group was not yet ready to accept the research effort, another accepted the effort but was not prepared to select their own interviewers.
3. Interviewers were laypersons except

in one location where the research coordinator functioned as the interviewer. Therefore a precise picture of the illnesses in relation to drugs prescribed was not possible.

4. Findings of the research applicable to the reference group only and cannot be generalised to the community at large.

Despite above limitations the strength of this research exercise lies in the fact that it has set in motion a process of continuing education on proper drug use among the mothers concerned.

Prof I Joel Fernando
Gamisawiya Research Coordinator

At Durdans Hospital, we have been taking care of lifetimes for generations

Taking care of you during the most special nine months of your life with our experienced maternity care team, we ensure that your pregnancy, labour and birth go smoothly.

- Caesarean Section
- Private Labour Rooms
- Neonatal Intensive Care Unit
- Normal Delivery
- 24hr Nursing & Medical Attention
- State-of-the-Art Operating Theatre

070 6 488 455

to find out about our facilities and delivery packages

Over 75 Years of Trusted Healthcare

DURDANS HOSPITAL

Why did doctors evade treating heroin addicts?

Dr H L Pathirajamudali

Heroin surfaced in Colombo in the early seventies. It has spread rapidly after 1983. In 1983 a pack of heroin was Rs. 10/-. By 1990 a pack of heroin became Rs. 50/-. After the tolerance has developed, an addict needed at least 3 packs for a day.

War camouflaged the trafficking and distribution of heroin. War and political tension in the country diminished the ability of the law enforcement to roundup drug trafficking adequately.

Balloon effect - When one area was raided by the Police, the heroin addicts moved to neighbouring areas in search of heroin. Thereby, a pack of heroin that was Rs. 50/- in 1990 rose to Rs. 100/- by the year 2000. It became Rs. 500/- in 2010. By 2014 it went up to Rs. 1,000/- per pack. A gram of heroin was sold at Rs. 12,000/- in 2014.

By the year 2000 there were 45,000 regular users of heroin **(Reid and Constgan 2002)**

In 2000 a heroin addict had to spend Rs. 300/- on heroin for a day. In 2010 to buy heroin, an addict had to spend Rs. 1,500/- for a day. Many heroin addicts did not have that amount of money. Robberies, burglaries, pickpocketing, cheating, prostitution, various underworld activities, selling of properties and camouflaged businesses increased.

Many found a safer and an easier way by becoming drug peddlers. Each addict introduced heroin to 10-15 people. It was an easy task to introduce it to cannabis users. They introduced it to schoolchildren, problem children, young men, old men and most anyone, including women. Facebook and easy-cash were helpful in spreading heroin. There were more than 30,000 such heroin peddlers and part-time dealers. Many people including three-wheeler drivers were involved in the heroin business.

Each peddler had more than 10-15 new heroin users to buy heroin from him. These peddlers come to Colombo, buy 1 or 2 bundles and go back. For example, at Dambulla bus stand, 10 to 15 new heroin users wait in the evening for the drug peddler's arrival. These 30,000 peddlers caused a rapid increase in the number of heroin addicts all over the country. That was one of the main reasons for there to be more than 450,000 heroin addicts. Many new heroin addicts, when they get bankrupt, end up as peddlers.

In 1990 Methadone 5mg tablets, Methadone syrup, Buprenorphine (Temgesic), Naltrexone, Clonidine, Dilaudid, Lofexidine and Nalaxone were available in Sri Lanka to treat heroin addicts. Methadone was available until May 2021. None of the other medicines were available for a long time. It was also reported that Methadone was used in the 1970s to detoxify the opium addicts in this country.

In 1988 there were 15 doctors who purchased Methadone and Dilaudid from the Civil Medical Stores (CMS) of the Ministry of Health. Other Medicines were available in the private sector.

By 2009, there were only 8 doctors who purchased Methadone from the Medical Supplies Division of the Ministry of Health. The clinics of the doctors were inspected by the Food and Drugs inspectors. DPDHS made the recommendations. All the doctors received the quotas of medicines approved by the Director General of Health Services (DGHS) every month.

In 1993 WHO/HEDIP funded by an Italian co-operation, conducted a training programme for 15 doctors. Treatment given by the doctors saved the lives of many heroin addicts and their families. If the doctors continued to treat the heroin addicts, then there would have been absolutely no reason for 30,000 addicts to become peddlers and each of them would not have motivated 10-15 people to become heroin addicts. Therefore the number of heroin addicts in the country would not have increased to this extent. If the 15 doctors were comfortable and contented when treating the addicts, then the number of doctors treating heroin addicts would have increased to at least 50 doctors by 2010.

Out of the 8 doctors who treated heroin addicts in 2009, many of them gave up because these doctors were humiliated, threatened and were not respected.

For example - On 1st April, 2009 The Director General of Health Services (DGHS) wrote, **"Director/MSD was requested to inform Chairman/SPC to supply the indented quantities of the above drug (Methadone) as early as possible."**

Again on 22nd July, 2009 DGHS wrote, **"It would be greatly appreciated if you could ensure that Methadone is being imported on a priority basis to treat heroin addicts, as this could be imported only by the MSD. If there is any issue about the importation, please discuss with me with the relevant file. Please treat this as urgent."**

When the DGHS was striving hard to get Methadone, an informant instigated another higher-up, and that person wrote on 22nd July, 2009 ***"We are informed that you have obtained/purchase 51,000 and 7,768 Methadone tablets in 2008 and 2009 respectively, which is a controlled substance, which has to be used only for approved medical use. In terms of the law and international conventions, it is a narcotic substance, hence its use is illicit. Please let us know the names and addresses of persons on whom you had administered that narcotic substance."*** (NB - There were over 9,000 names and addresses, and it was necessary to safeguard professional secrecy).

These vicious persons discouraged the doctors. Some doctors had their quotas slashed or cut off.

During the past 34 years there were 4 occasions when Methadone 5mg tablets were out of stock at the MSD.

1. ***From March 2009 to October 2010***
2. ***During the whole of 2014***
3. ***From March 2017 to November 2017***
4. ***Again from May 2021 Methadone has not been available at the MSD.***

On May 2021 NMRA issued the quota approval letter (With part of the slashed

quota restored) for the next 5 years. But, the quota approval letter had not taken any effect as yet.

Police announced that during the first six months of 2021 Rs. 9 billion worth of heroin was seized. Using the rule of the thumb by the law enforcement community, they assume that the seized quantity represents only 10% of the total trafficking.

Sri Lanka is situated close to the Golden Crescent on the left and Golden Triangle on the right. Therefore heroin filters into this country with ease. In 2001 Afghanistan produced 185 tons of heroin. In 2011 it produced a staggering 5,800 tons. Indian or Sri Lankan authorities do not possess any evidence to say that heroin is being smuggled out of Sri Lanka.

Heroin that was brought into the country was not meant to make wedding cakes. That heroin was for the consumption of 450,000 heroin addicts of our country. Gradually it will destroy all the heroin addicts and their families. But, there was no Methadone and other indicated medicines to treat them. To prevent treatment or to make treatment ineffective was to discourage the doctors who treated the heroin addicts, push the addicts towards heroin and make them criminals. There are many heroin addicts who want to quit taking heroin. But, that is being prevented because there are no medicines.

Those who decided to prevent giving Methadone and other medicines to heroin addicts have done a colossal and a catastrophic mistake.

Methadone is the most effective drug in treating heroin addicts.

1. It needs only once a day treatment, because it is effective for 24 hours.
2. It prevents the use of illicit heroin, criminal activity, and the spread of diseases like HIV, Herpes Simplex and Hepatitis C.
3. It is cost effective. The amount of money a heroin addict has to spend for a day's supply of Heroin is adequate to get medicines for 10-14 days.
4. It improves social health and productivity. Heroin addicts can go to work and earn money while taking treatment.
5. Methadone also reduces suicide and helps to retain them in treatment programmes.
6. When heroin addicts go to prisons and other isolations they mix up with seasoned heroin addicts and get rid of any fear of the Police and Prisons. For some heroin addicts Prisons are like their homes. Methadone reduces imprisonment. 17 September 2020 - Out of Sri Lanka's 30,000 inmates who are in prisons 60% are for drug related offences. It is alleged that Justice Minister Ali Sabry had said that 553,000 people (about 2.5 percent of the population) are addicted, which means one in every 40 people in this country is a drug addict.
7. Many European countries keep heroin addicts in Methadone programmes, thereby preventing drug cartels raking in billions of dollars. Drug cartels are well organized, efficient and ruthless. When you get rid of one cartel there are ten more waiting to take their place. Drug cartels use billions of dollars earned from heroin in construction industry, multi-national corporations, food chains

etc. Methadone helps to prevent drug cartels running parallel governments or forming governments within governments.

Criminalisation of heroin addiction, which is a disease, is a blunder. Heroin use of long duration causes permanent changes in the brain and brain functions. That means many altered brains. Heroin affects the Mesolimbic Dopaminergic pathway (Reward pathway). The mesolimbic pathway is heavily implicated in neurological functions of 1) Heroin addiction 2) Schizophrenia and 3) Depression. **Heroin addiction, Schizophrenia and Depression have similar changes in the brain.** ***Patients with Schizophrenia and Depression are treated by doctors and the necessary medicines are available.*** Heroin addiction is a similar disease. There are more than 450,000 heroin addicts in the country. They are mainly youth. Yet, there are no doctors and no medicines available to treat them.

Heroin addiction of long duration causes slurring of speech and difficulty in walking, partial blindness, loss of hearing, headaches, loss of memory and various types of convulsions. Some heroin addicts get early clinical features of Alzheimer's disease such as forgetfulness, personality changes and changes in sleep patterns.

Long term use of heroin can affect the user's immune system, making them prone to get Tuberculosis, Pneumonia, Acute Bronchitis, Chronic Bronchitis, Bronchial Asthma, Bronchiectasis, Chronic Obstructive Pulmonary Disease (COPD), lung abscesses and Emphysema. Many heroin addicts over the age of 50 years have multiple organ diseases. Incurable sexually transmitted diseases such as AIDS, Hepatitis C and Herpes Simplex have spread among inmates of overcrowded prisons and other isolations. We could have prevented so many of our youth becoming mentally retarded and physically disabled, if from the year 1988 the 15 doctors that pioneered to treat heroin addicts were allowed to continue their work, without any hindrance and undue interference.

Abstinence will not cure heroin addiction

Heroin residue that remains in the fatty tissues for over six years can cause relapses even after long periods of abstinence. For example, a person who had taken heroin for three years, does not take any treatment and goes to Saudi Arabia to work, will not get any heroin while he is in Saudi Arabia. Yet, when he returns after two years, at the Katunayake Airport he starts to yawn, tears appear, sweating, shaking, nervousness and agitation will occur. All the involuntary withdrawal symptoms appear and he is forced to take heroin again. If he went to Saudi Arabia after he was cured by taking treatment and detoxification, then the withdrawal symptoms do not appear when he returns.

Heroin addicts who are in prisons and other isolations, when they are released, they come out yawning. They will get all the withdrawal symptoms again. If detoxification is done during the first five years of addiction, then we can cure them almost completely.

Detoxification is made possible by 1) Methadone and other symptomatic treatment. 2) Medicines and excess liquids are given to remove the heroin residue

that is there in the fatty tissues along with urine. 3) Heroin residue is removed with the faeces using detoxifiers. 4) 3-4 litres of medicated fluids are given orally and they are kept in steam baths for 1 ½ to 2 hours. A lot of heroin residue is removed along with urine and sweat.

In 1996 there were 1,816 heroin addicts admitted for rehabilitation. In 2000 the number had increased to 3,500 (NDDCB). There is only a very limited capacity for rehabilitation. Reid and Costigan said there were 45,000 regular heroin addicts in 2000. (Reid and Costigan,2002)

By 2018 there were more than 450,000 heroin addicts in the country. There should be mass treatment to save many of these heroin addicts, before brain damage occurs. There should be doctors and there should be necessary medicines to treat heroin addiction. Methadone is the drug of choice that is used to treat heroin addicts all over the world. When medicines were not available, many heroin addicts used to phone me and I could overhear the chaos and agony in their homes. For every heroin addict one family is completely destroyed. Because there was no Methadone and no doctors to treat heroin addicts, many quacks and some pharmacies gave heroin addicts drugs such as Tramadol, Gabapentin and Pregabalin which are not indicated to treat heroin addiction. Heroin addicts take very high doses of these harmful medicines and end up with brain damage and damage to vital organs. Many have died following convulsions.

The high cost of heroin and the unavailability of treatment in Russia has led to the use of cheap but much dangerous drugs such as DESOMORPHINE which has the street name of **KROKODIL**. Krokodil is an example of the havoc that bad drug policies can wreak on communities. The use of Methadone to treat heroin addicts has been increased annually by all the countries where there is heroin.

USA - 20,000 Kg per year [1 Kg = 200,000 Methadone 5 mg tablets]

UK - 1,833 Kg per year

Australia - 100 Kg per year Australia's population 25.8 million in August 2021 74,000 heroin dependents in Australia (i.e. 6.9 per 1,000)

Sri Lanka - Methadone 0.135 Kg per year since 2014 Sri Lankan population 21.8 million in 2019 There are more than 450,000 heroin addicts in the country. Yet, there are no Methadone tablets available at the MSD for the past **four** months.

According to the British National Formulary (BNF) the usual daily dose of Methadone is 6 to 12 tablets. But, the quota allocated for a month was so inadequate, a patient was given ½ to 1 tablet for a day and to compensate for the very low dose used, several symptomatic treatments were given.

It was a wrong professional move by the 15 doctors who pioneered in treating heroin addicts in 1988, to have given up due to interference, unavailability of medicines and numerous other difficulties. Many of these doctors failed to realize that they could have saved thousands of young people and their families and more than that they could

have prevented the spreading of heroin that destroyed this country.

Due to their discontinuation of treating heroin addicts, other doctors who would have endured treating heroin addicts also kept off. Now every town has many beggars, homeless people, psychopaths, street prostitutes, pick pockets, robbers etc., who are all heroin addicts. There should be many mental asylums in the country to accommodate longstanding heroin addicts with extensive brain damage. They are more like vegetables. The real picture of the heroin epidemic in this country is much more darker and gruesome.

Proper involvement of the medical profession in the heroin epidemic is 2-3 decades overdue. All know that heroin addiction is a medical problem. Since there are no medical professionals to address the problem, it has ended up as a criminal problem, and many of our youth are being criminalized. They go to police stations and prisons without going to medical clinics.

"IT IS TIME TO SAVE LIVES"

"Save lives" is the theme of 2021 International Day against Drug Abuse and Illicit Trafficking.

Other articles on the same subject by the writer are:

1) **Heroin addiction – *IMPA Journal December 2015.***
2) **Heroin addicts should go to medical clinics - Not to Police stations and Prisons** - ***Sunday Island, 24th June 2018***

Dr H L Pathirajamudali MBBS(Cey)
General Practitioner
Treasurer, IMPA

T3™ Pimple Solution

COMBINATION THERAPY.
EFFECTIVENESS COUNTS

T3 Mycin LOTION
Clindamycin 1% w/v

T3 Mycin GEL
Clindamycin 1% w/w

DAY & NIGHT Treatment

NIGHT Treatment

T3 Ada Gel
Adapalene 0.1% w/w

FOR HEALTHCARE PROFESSIONALS ONLY

T3 ACNE BODY WASH/ CLEANSING BAR
Triclosan / Natural Australian Tea Tree Oil

- Anti-bacterial activity[5].
- Gentle, non-irritating and non-comedogenic.

T3 Acne Cleansing Bar 100g

For Daily Cleansing of Pimple Prone Skin

TAISHO

HOE EST 1979

TAISHO PHARMACEUTICAL GROUP
HOE Pharmaceuticals Sdn. Bhd. (45064-A)
B-3A-07, Dataran 32, No.2, Jalan 19/1,
46300 Petaling Jaya, Selangor, Malaysia.
Email: enquiry@hoepharma.com.my
Tel: 603-7958 1077 Fax: 603-7960 7530

Distributed by
Indoscan (Pvt) Ltd.
441/2A, 2nd Lane Kotte Road,
Rajagiriya, Sri Lanka.
E-mail : info@indoscan.lk
Tel : +94 112886034 / 6 Fax : +94 112886035

KEEP YOUR SPINE STRAIGHT WITH SCOLIOSIS TREATMENT

Introducing Scoliosis Diagnosis and Management which includes specialised physiotherapy, bracing and corrective surgery.

Now at Lanka Hospitals you can diagnose and plan non-surgical & surgical treatment to monitor the progress of your curve. With Scoliosis treatment you can have an uncompromised posture to live life fully.

TYPES OF SCOLIOSIS OF SPINE

Contact for Appointments

070 353 1141

Email: neurosurgery@lankahospitals.com

LANKA HOSPITALS ACCREDITED BY JOINT COMMISSION INTERNATIONAL

MTQUA CERTIFIED

CAP ACCREDITED COLLEGE of AMERICAN PATHOLOGISTS

SLAB ACCREDITED ISO 15189 ML 295-01

The Lanka Hospitals Corporation PLC (PQ 180)
578, Elvitigala Mawatha, Narahenpita, Colombo 5, Sri Lanka.
General: +94 (0) 11 5430000, +94 (0) 11 5530000 | Web: www.lankahospitals.com

LHD Lanka Hospitals Laboratories
Accurate, Reliable and Fast

LANKA HOSPITALS
සුවෙන් සැපෙන් • CARING CURING • பராமரித்தல் குணமாக்கல்

Assessment of a patient with heroin use

Dr Mahesh Rajasuriya

Consumption and procurement of heroin is an acute sociocultural problem in present Sri Lankan society (1). Identifying and assessing the patients in this category experiencing heroin use disorders and helping them to come out of the heroin use and related behaviour is the main challenge faced by the medical staffs in the stage of secondary prevention. On this ground, doctors, counsellors, psychiatrists and medical students should have a practical knowledge and understanding on initial assessment, which will pave the way for an effective management plan. The aim of this paper is to elaborate a framework and the method for an initial, and then a comprehensive, assessment of a patient with heroin use.

Assessment of heroin users is done in two stages:

1. Recognising, quantifying and qualifying the heroin use in the patient.
2. Identifying the other issues in the patient. Other than heroin use, there can be, and there are, other issues such as tobacco smoking, depression or non-communicable diseases.

1. Recognising the heroin use in the patient

In psychiatry, 'heroin addiction' or 'heroin use' is included in the category of substance use disorders, under which the pathological use of any substance such as alcohol, tobacco or other drug including heroin is categorised.

There may be a person who drinks a sip of alcohol or a small glass of wine every Sunday. Is this person's alcohol use pathological, and to be categorised as an alcohol use disorder, which necessitates behaviour modification? Everybody who takes alcohol, or heroin for that matter, does not have a disordered behaviour of alcohol/ heroin use, or alcohol/ heroin use disorder. Having an alcohol use disorder means that the concerned person, not only uses alcohol, but he does so in a pathological manner that qualifies to be recognised as a disorder or a psychiatric condition. Everybody who uses alcohol does not meet the criteria of Alcohol Use Disorder (AUD). Only certain alcohol users meet the criteria of having an AUD. This same scenario is applicable in heroin use, too. Everybody that uses a substance does not meet the criteria of Substance Use Disorder (SUD).

Whatever the substance there are only two kinds of disorders in its use. In other words, there are only two kinds of Substance Use Disorders, SUDs.

a. Harmful Use - The less severe disorder
b. Dependence - The more severe disorder

Another important fact is that there can be certain people who use the substance without having either of these disorders. Furthermore, there are a large number of people who do not use the substance at all. When a medical practitioner is required to assess a person she needs to identify

which of the following categories, ranging from non-pathological to pathological, the person belongs to:

- A person who does not use heroin at all (or at least for the past 12 months; perhaps ever in his life time) - The vast majority (>99%) of the population.
- A person who has used heroin in the past 12 months, but does not qualify for any of the heroin user disorders (HUDs), mentioned above. However, unlike in alcohol use, there are not many who use heroin rarely, such as once a month. Hypothetically, there can be a person who uses heroin once a month or once in several months when he meets a particular group of people. This person has some heroin usage, but may not qualify for any of the Heroin Use Disorders.
- A person who uses heroin and meets the criteria for harmful use of heroin. This is a psychiatric condition or a mental illness according to psychiatric classifications of mental illnesses such as the International Classification of Diseases (ICD-10), a WHO publication (2), and the Diagnostic and Statistical Manual of Mental Illnesses (DSM-IV), a publication by the American Psychiatric Association (3).
- A person who uses heroin and meets the criteria for the more severe form of heroin use disorder, heroin dependence (2)(3).

The first two categories are not considered in this paper, as the last two categories are the ones needing treatment or secondary prevention.

Before the less severe form of harmful use of heroin is conceptualised, it is easier to learn about the more severe form of heroin use disorder, heroin dependence.

Heroin dependence consists of 6 criteria according to classifications and at least 3 of these criteria need to be fulfilled to earn this diagnostic label.

Box 1. Six criteria of heroin dependence (2)

(A) Criteria related to heroin use behaviour:
  (1) A compulsion to take heroin.
  (2) Inability to control heroin use.
  (3) Preoccupation with heroin use
  (4) Using heroin despite harm

(B) Criteria related to physiological changes following repeated use of heroin:
  (5) Tolerance to heroin
  (6) A withdrawal state when heroin use is reduced or ceased

Meeting any 3 or more criteria including criterion 1, qualifies the person to receive a diagnosis of heroin dependence. However, that is not how practically, therapists, psychiatrists and doctors recognise Heroin Dependence. The most practical way of recognising that the patient has heroin dependence is as follows:

Step 1: Establish the current pattern of use

- The duration of current heroin use: Especially, heroin use during the last 12 months.
- The frequency of heroin use: Daily or occasionally or several days per week.
- If used daily/ nearly daily, then the frequency of heroin use in a typical day: How many times in a day and the amount; practically the amount of money spent for heroin is considered.
- With whom and in what context.
- Predominant, usual and current method of use: Inhalation (very common) or intravenous injection (extremely rare).

Step 2: Verify daily use and the frequency of use

Once the current pattern of use is established, check, if not done so already, whether he uses it daily or not. If the current pattern of use does not include daily use, it is very unlikely this person has heroin dependence. If it is a pattern of daily usage, still it may or may not be heroin dependence. A person who is dependent on heroin, uses heroin at least two to three times a day, and more likely, four times day.

Step 3: Establish development of tolerance

Once the entire pattern of use is elicited and established it will be evident whether the person uses a fairly large amount of heroin per day or occasionally. Nobody starts heroin use by taking it several times a day. People start with small amounts of heroin once a day or, more likely, once in a while, and then it becomes regular, followed by an increase in the dose. When someone starts taking any substance, even certain medications, and increases its dosage without experiencing much difficulty, it is known as developing 'tolerance'.

Step 4: Establish experience of current or past withdrawal symptoms.

Heroin stays in the system for a short period of time compared to alcohol. Alcohol stays in the system for 24 hours or more and it takes at least 6 to12 hours for blood alcohol levels to diminish significantly (4). Within this period of time the blood alcohol levels are fairly significant. When it starts to diminish the body, especially the brain, of the person who is addicted /dependent starts to feel that alcohol level is diminishing, which is when the person experiences certain symptoms. Those symptoms are called withdrawal symptoms. Heroin stays in the blood for a much shorter period of time, i.e. it has a short half-life. 'Half-life' is the time period, which takes the blood heroin (or alcohol or any such chemical) level in blood to reduce by half. Please see box 2 on calculation of half-life.

Box 2. Calculation of half-life

Substance A: When blood level of A= x at any given time; and the blood level drops to ½ x in 30 minutes, the half-life of substance A is 30 minutes.

Substance B: When blood level of B= y at any given time; and the blood level drops to ½ y in 24 hours, the half-life of substance B is 24 hours.

Compared to heroin, alcohol has a long half-life. Generally, heroin has a half-life of 6 hours (5). Every 6 hours the blood heroin level is halved and the person feels the drop as he gets the withdrawal symptoms after about 6 hours since last use. This sometimes may happen a little earlier or later. This is why the dependent heroin users uses it 3 or 4 times a day.

If this is the pattern of use in a person with current or past experience/s of having withdrawal symptoms, then he is very likely to have heroin dependence.

Tolerance, withdrawal and ways to elicit them further elaborated

Once the current pattern of use is established including the time/ age of onset of use, the medical practitioner will be privy to a rich amount of useful information obtained over a relatively short period of time, such as in the case given in Box 3:

Box 3. Case scenario

Mr. W, a 30-year old construction work skilled labourer, started using heroin following being introduced to the substance by a fellow worker, as he migrated to Colombo and started his current job two

years back. For the last eight to twelve months, he uses heroin at least three times a day, if not four, worth of about Rs. 2,500, his entire day's earnings. If he misses a dose by a few hours, he develops intense muscle pains, which are relieved by heroin use.

Sometimes, once the current pattern of use is established, it can be seen that the substance is not used every day, unlike Mr. W in above example, but time to time or once a day, and certain days he does not use. Also, certain people use heroin only when they have money.

Once the current pattern of use is recognised and if it is known that the person uses fairly significant amounts of heroin, which a novice cannot use, it is determined that the heroin use has gradually increased overtime. In this way, it is recognised that the person has tolerance without spending time on asking the entire history of initiation and progress of use over time.

Tolerance will only develop if the person uses the substance regularly for a sustainable period of time. Occasional users may develop tolerance but majority of people who develop tolerance are regular users. Withdrawal symptoms will occur in regular users, who have high tolerance, once they delay the next dose by one to two times of the duration of the half-life of the substance.

The withdrawal symptoms of Heroin are different from any other substance.

Box 4. Withdrawal Symptoms of Heroin.

1. Muscle pain and body aches
2. Nasal discharge and tearing
3. Goose bumps
4. Dilated pupils
5. Diarrhoea
6. Inability to sleep at night
7. Yawning

These symptoms occur after 6 hours or more of last use of heroin use. However, there is a contrasting difference to alcohol users. Only some alcohol users report that they have alcohol withdrawal symptoms, while the majority of them report that they do not have any withdrawal symptoms when they do not use alcohol. Strangely, almost all the heroin users report that they do experience heroin withdrawal symptoms, colloquially known as 'The Sick', when they do not use heroin, which is a ubiquitous observation. Therefore, just by noting their reporting of withdrawal symptoms the medical practitioner will not be able to conclude that they have withdrawal symptoms. It has become a norm among heroin users to state that they have withdrawal symptoms irrespective of the fact that they actually have them or not.

In this context, carefully eliciting the accurate pattern of current use is of critical importance. Then, the medical practitioner will know whether they use the substance three or four times a day or not. If that is the case, and the person claims to get withdrawal symptoms after 6 hours or so after last use, the heroin use disorder in this person is most likely to be the more severe form, the heroin dependence. However, since self-reported withdrawal symptoms lack reliability as described above, the medical practitioner may attempt to verify the genuineness of the withdrawal state as follows:

Method 1:
The medical practitioner may verify, without suggesting and mostly by asking open-ended questions, the timing of onset of withdrawal symptoms following last use. The timing of onset is around 6 hours and is fairly consistent. For example, reporting of development of withdrawal symptoms everyday around lunchtime following

morning use has the qualities of consistency and the characteristic onset timing. However, if the patient reports that he gets these symptoms, 'The Sick', only on days he is at his workplace, not on the weekends he visits his family, serious doubts arise as if the reported withdrawal symptoms occur in a consistent and a characteristic manner.

Method 2:
The medical practitioner can also check with her own observations if the patient does have symptoms of heroin withdrawal when he reports that he is having them at the time of assessment. Below are the visible signs of opioid withdrawal (i.e. objectively verifiable features) found on examination of the patient;

- Dilated pupils
- Goosebumps
- Lacrimation (Tearing)
- Rhinorrhoea (Runny nose)
- The person is cringing in severe pain
- The person uses the toilet frequently (diarrhoea) if observed for a prolonged period of time

In summary, considering the pattern of usage, reported symptoms and visible signs of withdrawal state, a decision can be made, most of the time, whether the person has genuine heroin withdrawal symptoms and heroin dependence.

Some users use heroin, not daily, certainly not three times a day. In such cases, a diagnosis of heroin dependence cannot be made. However, it is understood that this person's heroin use is not occasional and it is harmful to him and his loved ones. Technically, Harmful Use of heroin is diagnosed when out of the 6 criteria of heroin dependence, it is only the criterion of 'use despite harm' (the person is aware of the harm caused by heroin and knowing that, the person continues to use heroin) that is fulfilled, perhaps along with one more criterion. If this 'use despite harm' criterion is fulfilled and the withdrawal symptoms are not seen, then the diagnosis is harmful use of heroin, the less severe disorder of heroin use.

The constellation of withdrawal symptoms is clinically known as withdrawal state, which is another diagnostic category. Once a patient is identified to be having Heroin Dependence, a withdrawal state is also identified in the patient (current or impending), which needs treatment of its own.

It is important to identify the other issues of clinical relevance in this patient and in his family. Practically, no patient only has exclusive heroin use sans other issues. These issues need to be addressed as treating the heroin use only will not be adequate.

Box 4. Usual Major Issues Substance Users Have.

1.	**Substance use disorders other than heroin use disorder**
a)	Alcohol
b)	Tobacco
c)	Cannabis
d)	Other
2.	**Other psychiatric disorders/symptoms**
a)	Depression, anxiety disorders, psychosis (especially with comorbid cannabis and tobacco use)
b)	Suicidality and other issues

3.	**Medical disorders/ conditions/ symptoms**
a)	General: E.g. NCDs
b)	Substance use related: E.g. Lung disease
4.	**Personality:**
a)	General observations
b)	Lack of assertiveness and targeted aggression (e.g. aggressive only to family members)
c)	Overall deterioration of personality
5.	**Motivation to change heroin use and related behaviour**
a)	Intrinsic motivation– actual desire, thoughts and determination to change
b)	Family's perception of the genuine intrinsic motivation level in the patient. NB: Usually, the family believes that the patient is much more motivated than he actually is.
c)	Extrinsic motivation – external pressure on patient to change. E.g. Wife threatening to leave, employer issuing a warning
6.	**Family / occupational function**
a)	Intimate partner relationship
b)	Other relationships
c)	Occupational function
7.	**Sexual function**
a)	Sexual activity and satisfaction
b)	Sexual problems including dysfunction in patient and in partner
c)	Sexual deviations in client
d)	Risk of contracting sexually transmitted infections, Sexual abuse of/ by client. E.g. engaging in sex work to obtain heroin
8.	**Risk of obvious harm/ law enforcement issues**
a)	To self, immediate family members or others
b)	Risk of deterioration of physical health
c)	Risk of Exploitation by others
d)	Issues with police or judiciary, on-going court cases
9.	**Substance use promotion by client**
a)	Directly. E.g. persuading novices to initiate
b)	Indirectly. E.g. demonstrating substance use to novices/ young people
10.	**Unhelpful and erroneous beliefs that are clinical relevant**
a)	In client: e.g. "heroin users cannot ever quit", "since I have a drug problem, it is others' responsibility to fund my drug use habit"
b)	In spouse and other family members e.g. "heroin users cannot ever quit", "since my husband has a drug problem, it is our responsibility to somehow find drugs for him when he is sick", "The Sick will kill him"

These issues can be identified in the first interview or maybe in the subsequent ones. This exhaustive framework of assessment may not be adhered to in one session of patient interview. Following additional assessment inputs are to be considered:

- Repeated sessions of assessment
- Obtaining collateral information from

family and others, sometimes in the absence of patient in the interview room
- Physical examination
- Mental state examination
- Laboratory investigation including radiological (especially chest X-ray)
- Psychological investigations such as IQ testing if relevant
- Obtaining past medical and other records

Conclusion

A detailed and a comprehensive framework for assessment of patients with heroin use has been described along with the techniques useful in application of this assessment framework. This assessment will generate the exact heroin use disorder, presence of withdrawal state together with a list of other clinically relevant issues. Such an assessment outcome will create a strong platform for an effective and a comprehensive management plan, which will be discussed in a subsequent paper. Furthermore, this framework of assessment may be modified slightly and used in the assessment of patients with other substance use such as alcohol.

References

1. UNODC. South Asia Regional Profile. South Asia Reg Profile [Internet]. 1983;(United Nations Drug and Crimes,Regional Office for South Asia, India , New Dheli.):102–19. Available from: https://www.unodc.org/pdf/india/publications/south_Asia_Regional_Profile_Sept_2005/13_srilanka.pdf

2. Phull J. Mental and behavioural disorders due to psychoactive substance use (F10–F19). ICD-10 in Psychiatry. 2021;41–5.

3. Hasin DS, O CP, Auriacombe M, Borges G, Kathleen Bucholz S, Budney A, et al. Reviews and Overviews DSM-5 Criteria for Substance Use Disorders: Recommendations and Rationale. Am J Psychiatry. 2013;170(8).

4. Alcohol Withdrawal Syndrome - American Family Physician [Internet]. 2004. Available from: www.aafp.org/afp.

5. Harrison P, Cowen P, Burns T, Fazel M. Shorter Oxford Textbook of Psychiatry. Oxford University Press; 2018;837

Dr Mahesh Rajasuriya MBBS, MD (Psychiatry)
Senior Lecturer, Department of Psychiatry, Faculty of Medicine,
University of Colombo
Consultant Psychiatrist, National Hospital of Sri Lanka
Director, Centre for Combating Tobacco (CCT)
Member, SLMA Expert Committee on Alcohol,
Tobacco and Illicit Drugs
Chairperson, Alcohol and Drug Information Centre (ADIC)
Vice Patron, Nest Sri Lanka

insuman®

Presenting,

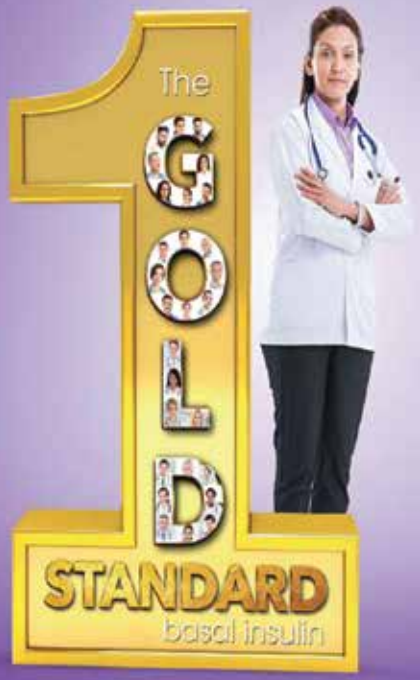
insuman®

Human insulin with a DIFFERENCE

With

Unique

3 Bullet German Technology



LANTUS®

insulin glargine

SANOFI

World Diabetes Day

Dr A L P De S Seneviratne

Diabetes Mellitus AND the General Practitioner

World Diabetes Day is designed to increase global awareness focusing on Diabetes Mellitus. It falls on the 14th of November. This year we are focusing on the management of Diabetes Mellitus.

This day was launched in 1991 by the International Diabetes Federation (IDF) and the World Health Organization (WHO) in response to the rapid increase in the number of patients with Diabetes. The day marks the birthday of Fedrick Banting who along with Charles Best and John Rickard Macleod first Conceived the idea leading to the discovery of Insulin.

Primary Care Diabetes Group Sri Lanka (PCDGSL) is an organization that consists of General Practitioners with special interest in diabetic care. All members are GPs with SLMC registration. All members show much enthusiasm and organization in delivering diabetic care to their patients. They are motivated, and interested.

The GP provides continuing and comprehensive care to the patients and their families. Diabetes is a disease needing very good doctor-patient relationship, good communication, needing to provide continuity and comprehensive care. As a result, the GP (Family Doctor) is the ideal person to manage diabetes. The GP should identify the need for referral to an endocrinologist.

Diabetes Mellitus has now risen to endemic proportions in our small country Sri Lanka. The latest studies in 2019 have shown that it is 10.7% in the age groups of 25-79 years in Sri Lanka. The International Diabetes Federation (IDF) estimates that the global diabetes prevalence in 2019 is to be **9.3% (463 million people)**, rising to 10.2% (578 million) by 2030 and 10.9% (700 million) by 2045. Although the rise is predicted to occur virtually in every nation, the greatest increase is in developing countries. The alarming feature is the changing profile of this metabolic disease. Initially Type 2 diabetes was regarded as a disease of the middle age and elderly. There is accumulating and disturbing evidence that the age of onset has now fallen to the 20 to 30 year age group in our country. Worse still children too are now caught up in the diabetic epidemic.

Managing patients with Diabetes.

1. Prevention

Epidemiological evidence has reported a higher incidence of Type 2 diabetes in low birth weight children. Therefore, maternal nutrition plays a major role. Studies suggest a relationship between stress and insulin resistance. Maternal stress is a known etiological factor which may predispose the newborn to develop DM in the future. Maternal infections during the antenatal period too contribute strongly.

The GP should take all steps to avoid low birth weight (LBW) babies, improve maternal nutrition, avoid maternal stress

and infections during the antenatal period.

2. Screening and case detection

The GP should screen all patients > 40 years with a Fasting Blood Sugar (FBS). If there is a degree of suspicion he should request a 2h PPBS. If the patient can afford a HbA1C is very useful to arrive at an early diagnosis. If these are normal it could be repeated in 3 years.

In those with Cardio-metabolic risk (CMR) screening should be done < 35 years of age and if normal should be repeated annually.

Who are those with CMR?

- Patients at a risk of developing type2 diabetes and/or cardiovascular disease (MI/Stroke)
- Patients with a cluster of modifiable risk factors which include:
  - Classical risk factors-diabetes, HT, IHD, Dyslipidemia, obesity, smoking
  - Others-endothelial dysfunction, vascular inflammation, coagulatory disorders

e.g. High C RP

Once a clear diagnosis of diabetes is made this should be conveyed to the patient.

The patients with diabetes should know:

- The nature of the disorder
- Symptoms of diabetes
- Risk of complications and in, particular, the importance of foot care
- Individual targets of treatment
- Life style requirement and meal planning
- Regular exercises
- Oral hypoglycaemics and side effects
- Features of hypoglycaemia and treatment
- Self monitoring of blood glucose
- Special attention in pregnancy

3. Clear diagnosis

The GP should be familiar with the diagnostic criteria.

Diagnostic criteria of Diabetes Mellitus-venous plasma glucose

ADA criteria:

Type of Patient	*FBS*
Normal	<110
IFG(pre diabetes)	110-125
Diabetes	>126
HbA1c > 6.5%	

WHO criteria

Patient	Glucose Value	
Normal	FBS	<110
	OGT 2h	<140
IFG(prediabetes)	FBS	110-125
IGT(prediabetes)	OGT 2h	140-200
Diabetes	FBS	>126
	OGT2h	>200

HbA1c > 6.5%

ADA-American Diabetic Association, IFG - impaired fasting glucose, IGT-impaired glucose tolerance, FBS-fasting blood sugar, OGT-oral glucose tolerance

4. Managing elevated blood sugar

Life-Style modification

The patient should be advised on the dietary requirements as -''AVOID"

Sugars and foods containing sugar
Sugar, juggery and honey
Sweet snacks
Sweets, choclates, sweet buiscuits
Buns and cakes
Sugar in tea and coffee
Cordials and cool beverages
All those containing a high refine carbohydrates, fats and high calorie content

Ideal foods

Diabetic Plate

Rice-parboiled red rice / Nivudu rice / Basmathi

Vegetables - High fibre Eg.kohila, cucumber, vatakolu, snakegourd (avoid oil and coconut during preparation)

Fruits - Papaw, pineapple, mango and plantains in order of benefit

Pulses - Green gram, cowpea, chick peas, dhal, bean seeds, Ulundi, winged bean(dambala)

Physical activity is important to control the blood sugar due to various reasons

Exercise plan

- Brisk walking /jogging
- Minimum of 5 days a week
- At least 30 mins at a session
- Ideally pulse rate should reach 100/ min.
- Avoid chatting during your walk
- Walk at uniform speed
- Usually should cover 1 km distance in 10 mins

Other types of beneficial exercises include Cycling, Gardening, Swimming, Farming, digging drains and pits, Climbing stairs, mountains.

Drug Therapy

Oral hypoglycaemic drugs

These could be selected according to-Type of diabetes, age, cost, BMI, meal pattern, Post-prandial hyperglycemia and evidence of other complications.

Metformin

Metformin is recommended as a first line therapy in obese and could be used in non obese patients. Promotes modest weight reduction, lipid lowering effect and reduces HbA1c by 1.5%. It is best avoided in hypoxic states and in situations with evidence of other organ failure.

Sulphonyl ureas

These stimulate insulin secretion by Beta cells and lower HbA1c by 1.5%. However may lead to weight gain and hypoglycemia. The more specific ones, glyclazide and glimeperide does not cause cardiac effects.

Thiozolidinediones

Pioglitazone improves insulin sensitivity and reduces the HbA1c by 0.3-0.9%. Usually used as a second line therapy with metformin and sulphonylurea. Causes ankle swelling and may worsen heart failure. Thiozolidinediones should not be initiated in patients with active liver disease or transaminases above 2.5 times of upper limit of normal.

α-glucosidase inhibitors

Acarbose slows down carbohydrate

absorption from the jejunum and hence decrease the post-prandial blood glucose. It reduces the HbA1c by 1%. Is known to cause gastrointestinal side effects. In hypoglycemia patients should be given glucose only.

Glinides

Nateglinide reduces the post-prandial blood glucose by 60-70 mgs. It is not a sulphonylurea. Is given with meals. Therefore could adjust the regime according to the meal pattern.

GLP 1

These drugs Improves beta-cell responsiveness to increasing glucose levels, decreases glucagon secretion. It also slows gastric emptying, results in a feeling of fullness. Must be injected subcutaneously twice a day, within 30-60 minutes before a meal. Reduces HbA1c by ~1%

DPP4 Inhibitors

DPP-4 inhibitors that have FDA approval include sitagliptin, saxagliptin, linagliptin, and alogliptin. The mechanism of DPP-4 inhibitors is to increase incretin levels (GLP-1 and GIP), which inhibit glucagon release, which in turn increases insulin secretion, decreases gastric emptying, and decreases blood glucose levels.

SGLT 2 Inhibitors

SGLT2 inhibitors, also called gliflozins, are a class of medications that alter essential physiology of the nephron. The foremost metabolic effect appears to show that this pharmaceutical class inhibits reabsorption of glucose in the kidney and therefore lower blood sugar. They act by inhibiting sodium-glucose transport protein 2 (SGLT2). SGLT2 inhibitors are used in the treatment of type II diabetes mellitus (T2DM). Apart from blood sugar control, gliflozins have been shown to provide significant cardiovascular benefit in T2DM patients. Several medications of this class have been approved. In studies on canagliflozin, a member of this class, the medication was found to enhance blood sugar control as well as reduce body weight and systolic and diastolic blood pressure.

Insulins

Indications for insulin therapy

- Type 1 diabetes
- Women with diabetes who become pregnant or are breastfeeding
- Transiently in type 2 diabetes in special situations
- In type 2 diabetes, inadequately controlled on glucose-lowering medicines (secondary failure)

Barriers of insulin therapy

- Patient's perception that is a last resort
- Fear of injection
- Fear of hypoglycaemic symptoms
- Difficulties in storage

Types of insulin

Short acting - Bovine: Soluble analogue: Actrapid
Rapid Acting Regular - Human: Insulin Asparte
Intemediate Acting - Isophane (NPH) Insulatard HM
Long Acting - Human Lente/Analogue : Glargine, Determir
Pre-Mixed - Mixtard 30/70, Novomix 30

There are several regimes of insulin therapy to suit the patients' needs.

The GP should start encouraging self monitoring blood glucose (SMBG) among his patients. This will give a better patient care, responsibility, patient satisfaction and even cost effective.

Diabetes is a metabolic disease affecting most of the body organs leading to complications.

5. Blood pressure control and addressing dyslipidemia

A blood pressure of 140/90 or lower should be always maintained. The drugs of choice is ARBs and/or ACEI. E.g.losartan/ enalapril. Enalapril or calcium channel blockers. Enalapril could cause an irritative noisy cough and amlodipine is known to cause ankle swelling.

The lipid levels too should be maintained at lower than a normal person. You will aim for:

Total Cholesterol< 160mg to get the maximum benefit
LDL < 100mg
Triglycerides < 150mg
HDL > 45-50mg

Always request a SGPT with serum lipids. If it is 3 times above normal you should omit the statins.

6. Renal assessment

You should request urinary microalbumin, Serum Creatinine with eGFR in all patients. If present start on ACEI or ARB.

A serum creatine should be done and if >1.5mg/dL with eGFR < 30 metformin should be omitted. Most of the laboratories will calculate eGFR giving you a rough idea about the renal function. If you are in doubt this is an indication for referral to nephrologist for an opinion.

7. Foot Care

This is a very important and a neglected area. The GP should follow a check list, advice accordingly, identify the risk patient for foot amputation and reinforce foot care advice in every visit. All GPS should have a 10G monofilament in his clinic. This will give the earliest evidence of loss of protective sensation.

A. Sensory Functions
Touch (cotton wool)
Pain (prick)
Vibration (128Mhz tunings folk)
10G monofilamet

B. Vascular Status
Skin temperature
Pallor on elevation
Foot pulses

C. Deformities
Prominent metatarsal heads
Claw toes
Callosities
Charcot joints

D. Infections
Ulcers
Tinea
Paronychia
Cellulitis

E. Obesity

F. Impaired sight

Patients at risk for foot amputation:

Peripheral Vasculopathy
Sensory neuropathy
Infection of the feet
Foot deformities
History of foot ulcers
Obesity
Impaired sight

7. Eye referral

Your patients with diabetes should be referred to an eye surgeon for ophthalmic assessment.

To facilitate good diabetic care, the GPs could run a diabetic clinic with a well-maintained diabetic follow up medical record. This is one of our objectives in our members of PCDGSL.

8. Some of the Indication for referral to a consultant

A. Poor glycaemic control in spite of treatment
B. Type 1 diabetes mellitus
C. Diabetes in pregnancy
D. Evidence of chronic kidney disease
E. Complication of diabetes e.g. ketoacidosis
F. Diabetic cellulitis
G. Peripheral vascular disease needing vascular surgery
H. Non healing diabetic foot ulcer

Dr A L P De S Seneviratne MB.BS; DFM; FCGP; MRCGP[Int.] MD
Consultant Family Physician
President
Primary Care Diabetic Group Sri Lanka

INTRODUCING... GLARGINE

ABASAGLAR™

A Gentle Giant...

70+ COUNTRIES AROUND THE WORLD EXPERIENCED...

MADE IN FRANCE

FDA Approved

LKR 1,280.00

For more product information please check API.

Pharmacovigilance
Hotline: 0770 54000 E-Mail: pv.pharma@hemas.com

Hemas Pharmaceuticals (Pvt) Ltd.,
12, Glen Aber Place, Colombo 03.
Tel/ Fax: 0114 515458 Gen: 0114 766666

abasaglar™
insulin glargine injection
(rDNA origin) 100 units/mL

AB/AD/SEP 2021

NAWALOKA HOSPITALS

YOUR TRUSTED PLACE
FOR HEALTH AND BEAUTY

- PRP Treatments
- Laser Hair Removal
- Skin Tightening
- Fat Burning
- Acne Removal
- Stretch Mark Removal

Nawaloka Skin Care & Cosmetic Centre

FOR MORE INFORMATION, CALL US
0115 777 777

Detect Breast Cancer
AT AN EARLY STAGE

PERFORM A MAMMOGRAM SCAN WITHOUT DELAY

Advanced 3D Digital Mammography

- Minimal Radiation
- Least discomfort and pain

NAWALOKA Breast Care Centre

FOR MORE INFORMATION, CALL US
0115 777 777

Clinical audit and Quality assurance in family practice

Dr Aruni de Silva, Prof I Joel Fernando

Learning outcomes:
The family physician will be able to -

1. Explain what is clinical audit and the levels of audit.
2. Explain the concept of quality assurance in family practice.
3. Carry out quality assurance activities in his/her practice.

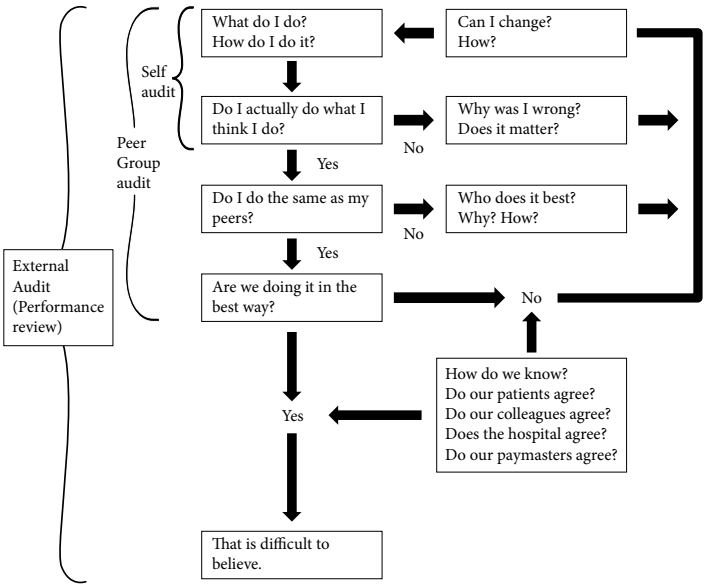
Clinical audit is planned examination of the process of clinical care. This may take the form of self audit, peer group audit and external audit. The examination covers history, physical examination, laboratory investigations, diagnosis, treatment and outcome.

Self audit is relatively easy and is least threatening of the audit procedures. The individual examiners one aspect of his or her own work and tries to compare this with a standard that he or she has generated. Self audit develops the ability for realistic self criticism. Change can take place without outside intervention thus promoting self learning.

In peer audit the individual teams up with a group of colleagues in similar circumstances for the audit process. Peer audit has the major advantage of allowing individuals to learn from each other in their own environment where realistic less threatening standards are possible.

In external audit protocols and standards are set by special committees for the purpose of clinical audit. The practitioner whose clinical conduct is audited must see the relevance of the standard to be able to conform to it. Ideally practitioners have to be involved in the production of such standards.

(Insert fig. 1 Components of the audit process)



Quality assurance is a broader concept that goes beyond clinical audit. It focuses on many aspects of care including structure, process and outcome and technical and interpersonal matters.

At the individual level an outcome measure might be how will and quickly a patient recovers. Patient satisfaction with the care given is a very important outcome measure in family practice.

Aspects of quality in family practice

Aspects of Care	Technical	Interpersonal
Structure	Premises Equipment Costs	Access to services Availability of services
Process	Clinical care Practice management	Communication Continuity of provider
Outcome	Recovery or relief of symptoms Morbidity or mortality Change in health related behaviors	Patient satisfaction

Structures are the things that go into health care, the resources used both in human and material terms. Quality assurance focusing on the structures of family practice are concerned with staffing, premises, availability of equipment and the cost of running the facility.

Process concerns how health care is carried out. This includes all the things that doctors do when they talk to, examine, investigate, advise and treat patients. It also covers many aspects of the way the practice functions such as organization of the practice, business management, confidentiality of records and staff relations.

Outcome refers to the results of what doctors do. Traditional measures of outcome include mortality and morbidity data. Such data are not are not very helpful at the individual level nor do they explain what needs to be done to change outcomes. At the individual level nor do they explain what needs to be done to change outcomes.

Quality of care could also be considered from technical and interpersonal aspects. Interpersonal incorporates all those aspects of quality to do with the relationships between people and technical can be taken to cover all other matters.

Quality assurance is a cyclical process of defining guidelines, measuring and evaluating performance, identifying opportunities for change and subsequent review. The world organization of Family Doctors (WONCA) has agreed that quality assurance for general/family practice is a planned action or program which includes performance review and aims to ensure that patient care is maintained at, or improved to, defined standards or guidelines.

Guidelines are intended to help doctors provide the best care possible given the patient's preferences and available resources. Good practice guidelines are relevant, feasible and applicable, and well organized and understandable.

Guidelines for quality care should be seen to be relevant to work. Often consensus guidelines are just descriptions of scientific evidence and do not fit into the terminology and framework of the medical practitioner.

Guidelines should :

- have a scientific basis
- answer problems presented in family practice.
- Be written from the perspective of family practitioners and the decisions they have to make
- Be presented with examples of cases or prototypical situations.
- Include all the information necessary to apply the guideline eg. Information on indications, risks, complications and specific procedures.

The acceptance and adoption of practice guidelines will increase, when they are feasible and applicable in day to day practice. This means :

- The extent to which they are more favourable than the existing routines in terms of effects, user friendliness, prestige, costs or time.
- The extent to which they are consistent with, or fit in with, existing routines or views regarding patient care
- The extent of their complexity. Simple, understandable guidelines, which do not ask for new skills will be seen as more feasible.
- The extent to which one can experiment with new performance first and can return to old routines easily, when the new guideline is not satisfying
- The extent to which the guideline is acceptable in, and has consequences for, the social setting in which the family practitioner works.

Guidelines should be well organized and understandable. Guideline should be well presented and communicate their message clearly. Family practitioners should see the guidelines as understandable, well organized and attractive. This can be achieved by :

- Linking the form of the guideline with the structure of the consultation or the problem solving process
- Giving specific recommendations for the desired behavior in specific situations
- Differentiation, taking into account the different kind of patients with certain disease
- Summaries, synthesis of the guidelines in a well organized form.

When evaluating whether to use a guideline, you should ask the following questions.

1. Is it relevant to my practice?
2. Is it clearly written and easy to use?
3. Is it written or endorsed by groups that influence me or my practice?
4. Is it timely and current?
5. Does it focus on outcomes important to patients (eg. Death, disability, pain hospitalization, cost) more than on outcomes important to doctors (eg. Cholesterol levels) ?
6. Does it account for all the relevant harms and benefits?
7. Does it explicitly describe the evidence, underlying assumptions

and preferences, costs and priorities used to develop the policy ?

8. Does it address similar policies developed by other groups ?
9. Does it indicate whether it was subjected to external revies?
10. Does it specify the situations where it is intended to apply ?
11. Does it describe the strength or flexibility of its recommendations (eg. guideline on skin infection applies only to those without co morbid conditions such as diabetes) ?

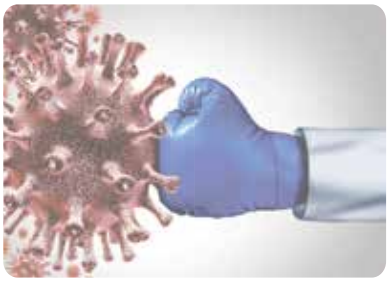
Dr Aruni de Silva MBBS(Col), Dip.Veneriology, DFM, MD(Family Medicine), MRCGP(INT)
Department of Family Medicine
Faculty of Medical Sciences
University of Jayawardenepura

Prof I Joel Fernando MBBS,DFM, FCGP
General Practitioner
Past President, IMPA
DFM Online Distance Education Coordinator
Post Graduate Institute of Medicine, University of Colombo

Himalaya SINCE 1930 — 90 YEARS OF TRUST

COVID UPDATES

Harnessing 'Innate Immunity' to Fight Against SARS-CoV-2



'COVID-19' – 'Innate Immunity' Connection

- Some individuals infected with *SARS-CoV-2* clear the virus without even developing symptoms. This suggests that **'immunity' has a potential role to play in fighting against the COVID-19 virus.**[1]
- **One of the immediate priorities in the fight against *SARS-CoV-2* should be to boost protective innate immunity** to help improve the early antiviral immune responses through immunomodulatory therapy approaches.[1-3]

COVID-19 Know–How: Why are adults more susceptible than children?

- Adults have dysfunctional innate immune response in severe infections, whereas children have strong trained innate immune response due to prior vaccination and cross immunity from prior frequent viral infections.[4,5]
- Ageing-related immune-senescence predisposes elderly to an increased incidence and severity of infection.[4,5]
- Ageing results in impaired regenerative capacity of the lungs, resulting in severe alveolar damage in adults.[4,5]
- Adults have higher incidence of comorbid risk conditions such as smoking, diabetes and obesity when compared to children, resulting in higher disease morbidity.[4,5]

Is 'Healthy Diet', A Possible Preventive Measure Against COVID-19?

- 'Healthy eating' (avoiding foods high in saturated fats and sugar and eating foods rich in fiber, whole grains, unsaturated fats, and antioxidants) helps boost immune function and reduce susceptibility to and complications from COVID-19.[6]

Traditional medicinal plants/herbs may help strengthen the overall immune system, improve the body's antiviral defence against infections and effectively cure respiratory tract infections.[7-9]

SARS-CoV-2: Severe acute respiratory syndrome coronavirus-2

References
1. Golonka RM, et al. Physiol Genomics. 2020; 52(5): 217–221; | 2. Schijns V, et al. Eur J Immunol.2020. In print; | 3. Felsenstein S, et al. Clin Immunol. 2020; 215:108448; | 4. Dhochak N, et al. Indian J Pediatr. 2020. In print; | 5. Lyu J, et al. Medical Hypotheses. 2020. In print; | 6. Butler, et al. Brian, Behavior and Immunity. 2020. In print; | 7. Fan Y, et al. Phytother Res. 2020. In print; | 8. Vellingiri B, et al. Science of the Total Environ. 2020; 138277; 9.Goothy SSK, et al. Int J Res Pharm Sci. 2020;11 (Spl 1):16–18.

From the Makers of:

Septilin (TABLET)

- Improves body's immune defenses
  – Increases IgG levels, chemotaxis & phagocytic capacity
- Reduces inflammation and allergy – the underlying pathological features of infections
  – Decreases pro-inflammatory cytokines & IgE levels
- Builds immunity to prevent recurrent infections

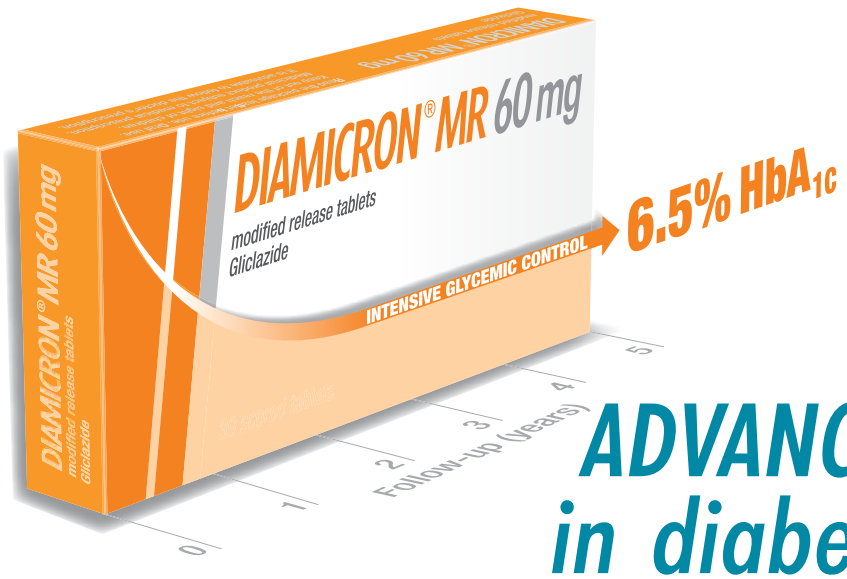
The Himalaya Drug Company Pte Ltd.
238B Thomson Road, Novena Square Tower B #17-01, Singapore 307685.
www.himalayainasia.com

NEW

DIAMICRON® MR 60

Gliclazide

Scored Tablets



ADVANCEs in diabetes

- Evidence-based medicine including the ADVANCE study, the largest morbidity-mortality trial in diabetes[1-5]
- First scored modified-release formulation allowing progressive titration[6]
- Efficient glycemic control with well proven tolerability and weight neutrality[1,2,7]
- Protective on the β-cell[8,9] and the cardiovascular system[1,3,5,10]

1. The ADVANCE Collaborative Group. *N Engl J Med.* 2008;358:2560-2572. **2.** The GUIDE Study. *Eur J Clin Invest.* 2004;34:535-542. **3.** The STENO 2 Group Study. *N Engl J Med.* 2008;358:580-591. **4.** The CONTROL Study. *Diabetologia.* 2009;52:2288-2298. **5.** Khalangot M, Tronko M, Kravchenko V et al. *Diabetes Res Clin Pract.* 2009;20(6):611-615. **6.** Diamicron MR 60 mg. *Product Monograph.* **7.** Drouin P. and the Diamicron MR Study Group. *J Diabetes Complications.* 2000;14:185-191. **8.** Sawada F, Inoguchi T, Tsubouchi H, et al. *Metabolism.* 2008;57(8):1038–1045. **9.** Del Guerra S, D'Aleo V, Lupi R, et al. *Diabetes Metab.* 2009;35(4):293-298. **10.** Katakami N, Yamasaki Y, Hayaishi-Okano R, et al. *Diabetologia.* 2004;47:1906-1913.

Composition: Each modified-release tablet contains 60 mg of gliclazide. **Indication:** Type 2 diabetes. **Dosage:** One half to 2 tablets per day, ie, 30 to 120 mg as a single daily intake at breakfast time, including in elderly patients and those with mild to moderate renal failure. One DIAMICRON 60 mg modified release tablet is equivalent to two DIAMICRON 30 mg modified release tablets. The breakability of the DIAMICRON 60 mg modified release tablet enables flexibility of dosing to be achieved. **Properties:** Diamicron MR 60 mg is a sulfonylurea lowering blood glucose levels by stimulating insulin secretion thereby restoring the first peak of insulin secretion and increasing the second phase of insulin secretion in response to a meal or intake of glucose. Independent hemovascular properties. No active circulating metabolite. **Contraindications:** Hypersensitivity to sulfonylureas or sulfonamides, type 1 diabetes, diabetic precoma and coma, diabetic ketoacidosis, severe renal or hepatic insufficiency, treatment with miconazole, breast-feeding. **Interactions:** Increased risk of hypoglycemia with miconazole, phenylbutazone, alcohol, other antidiabetics, β-blockers, fluconazole, ACE inhibitors, H_2-receptor antagonists, MAOIs, sulfonamides, NSAIDs. Risk of hyperglycemia with danazol, chlorpromazine, glucocorticoids, β_2 agonists, ritodrine, salbutamol, terbutaline, anticoagulants. **Adverse effects:** Hypoglycemia, gastrointestinal disturbance; more rarely: skin and subcutaneous reactions, hematological disorders, hepato-biliary disorders, visual disorders. **Overdosage:** Possible severe hypoglycemia requiring urgent IV glucose and monitoring. Please refer to the complete summary of product characteristics for your country as variations may exist.

LES LABORATOIRES SERVIER France, Correspondent: SERVIER INTERNATIONAL: 35, rue de Verdun, 92284 Suresnes Cedex, France. www.servier.com

SERVIER

SI/DTC 11 DI 1027 GA

1 to 2 tablets* at breakfast

*In most patients

COVID - 19: Strategy to Mitigate Situation Level - 4

Dr M A J S Fernando

Background

Throughout the recorded history of mankind, there have been nearly 249 pandemics up to the COVID-19 virus today. However, the success stories were written only after losing many human lives. In such a background, the corona viral pneumonia cluster first reported in December 2019 in Wuhan, China, resulted in the 1st COID-19 death in January 2020. Soon, new COVID patients were identified outside of China, and it was first declared a public health emergency and shortly after a world pandemic by WHO in March 2020.

The COVID-19 pandemic, which saw its inception in Sri Lanka in March 2020, has progressed throughout this time with several peaks and troughs. Since then, more than 480,000 patients have been reported from all over the country, with a loss of more than 10,000 lives.

During this period, the Government Medical Officers' Association (GMOA) issued several fruitful strategies and concepts on the management of the pandemic *(Exit Strategy: April 2020, October 2020, and May 2021, vaccination strategy, integrated home-based management, and the extension to mitigate situational level 4 in August 2021)*.

Transmission of COVID-19 and the current Sri Lankan status

The essential decisions in response to active pandemic control are undoubtfully guided by the assessment of the level of transmission. Therefore, the WHO has declared four case scenarios defining the dynamics of the current epidemic.

Accordingly, **at present, Sri Lanka is at WHO situational Level** 4 with a very high incidence of locally acquired, widely dispersed cases in the past 14 days and a very high risk of infection for the general population, which requires a new and stronger mechanism for management. Bearing this in mind, the GMOA, through their concept proposal in August 2021, at length discussed the scientific and technical strategies to mitigate Situation Level-4. The facts highlighted in that report can be summarized as follows:

Outline of the exit strategy

The **"Hammer and Dance"** Theory states the need for large-scale and effective steps or "hammering" during periods where there is a rising caseload. As a result of the rising case number, the government sector has already implemented several measures such as increased vaccination, implementation of home care, travel restrictions, and COVID-19 testing.

The **Integrated Home Care**, which was introduced by GMOA in collaboration with the Ministry of Health and Bank of Ceylon, in May 2021 as a pilot project in Kalutara district, is currently being operationalized island-wide, contributing to the optimal use of hospital facilities.

[1] (Date this article, otherwise temporal context is lost) "this article was written in…..)".

While the implementation of home care and island-wide vaccination strategies are significant steps to combat the current situation, a longer period of time will be required for these steps to bring about a reduction in caseload.

Though hospital capacity and resources must be increased, as a low-middle income country, Sri Lanka's government does not possess the capability to achieve this. Therefore, to mitigate the current rising trend and to bring about a reduction in future caseload, the GMOA proposes that the following 4 actions must be adhered to:

1. Strict travel restrictions and stepwise exit.
2. Vaccination of 70% of the population.
3. Implementation of the 3rd dose of the vaccine
4. Improving testing capacity

Strict travel restrictions and stepwise exit

As Sri Lanka has entered Situational Level 4 and the Delta variant with an R-value of 5 to 8.65 has been identified in the community, it is evident that vaccination against COVID-19 must be expedited.

However, this process is time-consuming and the development of immunity following full vaccination (both doses) takes at least 3 to 4 weeks from the 2nd dose. Therefore, implementing a period of strict travel restrictions urging an 80%-90% movement restriction and other essential public health measures during this period when immunity is being developed in a large proportion of the population is necessary.

Therefore, the imposition of strict travel restrictions and their exit should ideally be based on the vaccination availability and schedule. If adequate vaccines are made available with immediate effect, a 2-week strict travel restriction and stepwise exit over a 2-month period must be implemented so that 70% of the population is vaccinated, which will be adequate coverage to reduce community transmission, enabling the reduction of caseload and fatality rate.

Vaccination of 70% of the population

As of the 10th of September, 2021, 23.48 million vaccine doses have been administered in Sri Lanka. Out of these 10 million people, 9.5 million (47.50% of the population) have received both doses, while 61.70% of the population have received at least a single dose. (Astra Zeneca, Sinopharm, Pfizer, Sputnik, and Moderna).

Due to vaccination, a significant number of deaths have been prevented already. However, as we have failed to vaccinate the over-60 population and high-risk working population with both doses as per our recommendations, a rising trend in preventable deaths, particularly in the high-risk categories, has been noted.

As many deficiencies in the existing vaccination programme were noted, the technical guidance of the GMOA; "Recommendations for the COVID-19 vaccination program in Sri Lanka" was published in May 2021.

Based on this GMOA strategy, if vaccination of the high-risk category took place according to the priority order, 90% of all current deaths could have been prevented.

If as stated, the first 10 million doses of vaccines had been utilized to vaccinate 20% of the population belonging to the above 60 age category and below 60 age group with Non-Communicable Diseases (NCDs) and high-risk working populations (nearly 5 million people), more than 90% of the

deaths could have been prevented from the said groups.

Moreover, considering the fact that the only vaccine that has been approved to be used in the 12-18 age group, the GMOA urged the Minister of Health to allocate the Pfizer vaccines to the above age category. Furthermore, according to the information from the Ministry of Health, the country is scheduled to receive four million doses of Pfizer-BioNTech jabs in the next month, which will be enough for the vaccination of the paediatric population of the country. This will reduce the paediatric caseload and the paediatric deaths and also enable the reopening of the schools which have been closed for more than one and half years.

Implementation of the 3rd dose of vaccine and the plan of action for the booster dose of vaccine

According to the WHO, there are several reasons why COVID-19 vaccine booster doses may be needed. They are mainly:

- Waning protection against infection or disease, in particular severe disease, over time (i.e., waning immunity)
- Reduced protection against variants of concern (VOC)
- Inadequate protection from the currently recommended primary series for some risk groups for which evidence from the Phase 3 clinical trials may have been lacking.

When a virus is actively circulating within a population, infecting a large number of individuals, the likelihood of the virus mutating increases. The higher the opportunity that a virus has to spread, the more it replicates, and a new variant can result from the mutation that may take place.

COVID-19, being an RNA virus, has high susceptibility to this phenomenon. Therefore, with the increment in the viral spread and the inefficient vaccination methodology, Sri Lanka currently has a higher risk of getting a new virulent local variant.

Furthermore, it is evident that administering a booster dose, will halt or minimize the spread of the disease and prevent further mutation, thereby preventing a mutant variant.

Considering a way forward to mitigate this potential crisis, with the idea of looking towards the future, the concept of the third dose of vaccine being administered has been accepted globally. Several nations have now commenced and are planning to commence a booster dose of the vaccination for COVID-19 with accepted vaccine types. Countries such as Great Britain, France, Russia, Israel, Germany, and Indonesia are amongst these nations.

Therefore, it is essential to identify and plan for a booster vaccination with a technically accepted vaccine type. As such, the GMOA proposes the following recommendations to combat the impending crisis.

- A minimum of 15 million doses of vaccines is required to administer the 3rd dose.
- If a booster is to be administered, a plan of action must be set in place identifying a timeline, the initial risk categories to be administered, and a methodology.
- Administering the vaccine for the 12-18 age group must also be actively explored at this juncture.

Testing capacity

Having reached the community transmission level with test positivity continuously exceeding 20%, the testing

capacity too should be increased at a pace to diagnose the rising number of patients. However, the current practice of diagnosing a patient solely through RT-PCR and rapid antigen tests are highly insufficient for effective surveillance.

Testing methods, therefore, must be developed based on global practices, and testing must be made more freely available. In order to achieve this, the GMOA suggests:

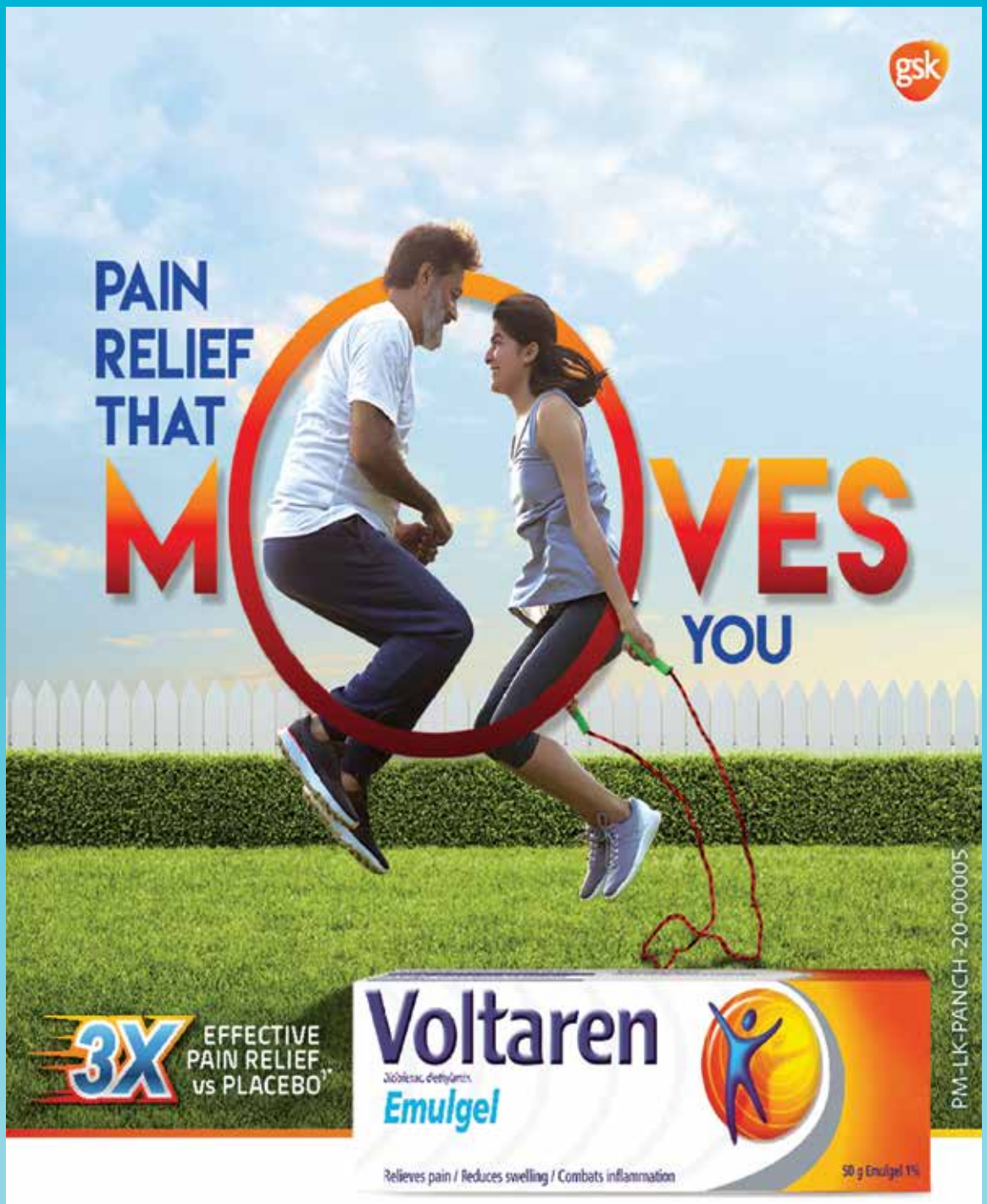
- To study and identify testing methods practiced globally,
- To increase the availability of tests
- To plan testing in the community based on case density and hot spots
- To systematically "test, track and treat" all individuals

Nevertheless, disease control at this stage is challenging, and there is a need to maintain a high stringency index in terms of travel restrictions and better adherence to the DREAM concept which can be elaborated as follows.

1. **D** - Distancing - People should keep at least a one-meter distance from another person at all times; avoid public gatherings, crowded places, close-contact settings, and confined and enclosed spaces.
2. **Re** - Respiratory etiquette - People having a fever, cough, and/or sore throat should stay at home and contact a doctor; coughing/sneezing should be done into their elbow.
3. **A** - Aseptic techniques - People should wash their hands with soap and water often and when soap and water are not available, a hand sanitizer which contains at least 70% of alcohol should be used; touching the eyes, nose, and mouth should be avoided; frequently touched surfaces should be regularly disinfect.
4. **M** - Mask - People should wear a facemask whenever going out of the house, should ensure to put the mask on, take the mask off, and store the mask properly; the mask should be cleaned regularly and both nose and mouth should be covered at all times.

These mechanisms, though contributory to the current management, are insufficient to reduce the current exponential rise in the number of cases, and the government must take more firm decisions to combat this wave. Thus, it is imperative that a new and beneficial strategy be introduced, so that flattening of the curve can be brought about and the caseload can be reduced.

Dr M A J S Fernando MBBS(COLOMBO),
MBA Sp. Health Sector (UK),
Secretary
Government Medical Officers' Association (GMOA)



* In acute neck pain.

References: 1. Predel HG, *et al.* Efficacy and safety of diclofenac diethylamine 1.16% gel in acute neck pain: a randomized, double-blind, placebo-controlled study. *BMC Musculoskeletal Disord* 2013; 14:250

Zincovit®

Tablets

Provides Zinc,
Essential Vitamins & Minerals

SPECIALLY FORMULATED
TO BOOST IMMUNITY

Baurs
Established 1897

apex®
www.apexlab.com

Zincovit®

Tablets

Provides Zinc,
Essential Vitamins & Minerals

SPECIALLY FORMULATED
TO BOOST IMMUNITY

Baurs
Established 1897

apex
www.apexlab.com

Extending the Legacy .....

American Diabetes Association
Recommended by
EASD

Glucophage® XR 500 mg

Prolonged Release Tablets

Metformin hydrochloride

from the originator of Metformin

IMPORTED FROM
FRANCE

Emerchemie NB
helping add life to years

Emerchemie NB (Ceylon) Limited
60, Maligawatte Road, Colombo 10, Sri lanka.

MERCK

SMA GOLD PROGRESS

a formula trusted by generations

now available as

S-26 GOLD

PROGRESS & PROMISE

Estd 1835 GS &Co

BELIEVE

Nucleotides

Omega 3 & 6

Choline

Lutein

Alpha Lactalbumin

Rs.1500/- upwards

Introducing the all-new S-26 Progress & Promise

Milk formula for children from 1-5 years which are enriched with essential nutrients such as Nucleotides, Choline, Omega 3 & 6, Lutein and Alpha Lactalbumin.

Nurture your child's tomorrow

Hotline: 0740 713 473 | Email: nutrition@gshealth.lk

Wyeth® | Nutrition

George Steuart HEALTH

gshealth.lk

LIVE WELL