COLLEGE OF GENERAL PRACTITIONERS OF SRI LANKA

COUNCIL 2016 – 2017

President
Dr. C E I Fernandopulle

Vice President
Dr. Jayantha Jayatissa

Immediate Past President
Prof. Antoinette Perera

Hony. Secretary
Dr. Maithree Rupasingha

Immediate Past Hony. Secretary
Dr. Shyamalee Samaranayaka

Hony. Treasurer
Dr. M R Haniffa

Hony. Asst. Secretary
Dr. Shobhavi Kohombange

Hony. Asst. Treasurer
Dr. Thivanka Munasinghe

Public Relations Officer
Dr. Shreen Willatgamuwa

Council
Prof. Dennis J Aloysius
Prof. Leela De A Karunaratne
Dr. Preethi Wijegoonawardena
    Dr. K Sri Ranjan
    Dr. W T Fernando
    Dr. A H A Hazari
    Dr. Sanath Hettige
    Dr. K Chandrasekher
    Dr. B Karunaratne
    Dr. D K D Mathew
    Dr. R P J C Ramanayake
    Dr. H D Wijesinghe
    Dr. D D Weerasekera
    Dr. C L K Atapattu
Dr. Priyantha Halambarchchige
Dr. Ariyasena U Gamage
## CONTENTS

**Presidential Address**
Continuity of care, professional values and our role in society

*Carmerl Fernandopulle* 71

**Professor C. Sivagnanasundram Oration 2014 – JMA**
Training medical students in primary care:
Attitudes of patients, views of students and reflections of trainers

*R P J C Ramanayake* 76

**Speech delivered at the Convocation of the Faculty of Medical Sciences, University of Sri Jayewardenapura, 2016**
Social accountability of the Health Professional

*Narada Warnasuriya* 86

Challenges during medical consultations, at the pharmacy and in administering medicines, and coping strategies in a group of Sri Lankan visually disabled older teenagers

*W N V Luke* 86
*C Weeraratne* 86
*S Madugalle* 86
*S Maduranga* 86

Aetiology of traumatic tympanic membrane perforation in Ratnapura

*M C Perera* 91
*M G P K Muruthaghapitiya* 91
*K M S N Kalupahan* 91
*U M A P Madalagama* 91
*W E M P L Ekanayake* 91
*M P A H Perera* 91

**Symposium on prescribing in family practice with care at WONCASAR 2016**
Prescribing with care

*Leela de A Karunarathne* 101

Enabling patients with hearing or vision loss to use medicines independently: Based on Sri Lankan evidence

*Chamari Weeraratne* 105

Improving the prescription – avoiding medication errors in the community

*Nithushi R Samaranayake* 110

(Continued)
Advances in primary care strengthening in Sri Lanka in the state led primary care system  
**Susie Perera**  
112

Patient follow-up and compliance  
**Thivanka Munasinghe**  
117

Referrals in primary care  
**W G Pradeep Gunawardhana**  
119

Sports – the healthy way!  
**Thivanka Munasinghe**  
122

---

**Case reports**

Empty nest syndrome and its consequences  
**S Kumaran**  
124

Dilemma in the diagnosis of subclinical hypothyroidism in an elderly patient combined with peculiar anxious behavior, a common problem in geriatric primary care  
**A A K Jayanath**  
126

Spastic paraparesis with underlying meningioma of the spinal cord  
**Lakmali Bandara**  
128
The Sri Lankan Family Physician

The Sri Lankan Family Physician began publication in 1979. It publishes original articles, reviews and case reports dealing with the medical and allied sciences as well as, lectures and orations delivered to the College of General Practitioners, and the proceedings of symposia and seminars held under the auspices of the College. The primary objective is continuing medical education for family physicians. It also serves as record of the activities of the College. The editors will also consider articles on clinical academic research and philosophical topics of relevance to the family physician. The Sri Lankan Family Physician accepts articles for publication on the understanding that they are contributed solely to this journal and will not be reprinted without the consent of both the author and editors. The editors reserve the right to edit manuscripts for length, clarity and conformity with the style of the journal.

Manuscripts typed in double spacing with 1” margin on both sides in 12 point Times Roman font in Microsoft Word software should be e-mailed to the editors.

A title page should be submitted with the article listing the title, authors’ names, their current positions, and the place where the work was carried out. Wherever possible, the article should be written in the following format – summary, introduction, material and methods, results, discussion, acknowledgements and references.

The Sri Lankan Family Physician subscribes to the principles and bibliographic references style outlined as “Uniform requirements for manuscripts submitted to the biomedical journals”1. References should be numbered according to their first appearance in the text and should be limited to work cited in the article, rather than a bibliography of the subject. Personal communications are not acceptable as references, and unpublished material should be included only if an address can be given from which a copy is available. The accuracy of the references will be the author’s responsibility. Please note that the Sri Lankan Family Physician requires the name of the journal, year, volume, and first and last pages of the cited article.

Drugs should be referred to by their generic names. The brand name may be used, after their generic name. Articles must be submitted in English. All measurements must be metric. While the Sri Lankan Family Physician is the official publication of the College of General Practitioners, statements in the articles are the sole responsibility of the authors and may not reflect the attitude or opinion of the College of General Practitioners. Any clarification of the above can be obtained from the Editors.

Reference


Articles to be e-mailed to

The Editors,
Sri Lankan Family Physician
E-mail: cgpsl@sltnet.lk
Dr. C E I Fernandopulle
President of the College of General Practitioners of Sri Lanka
2016 – 2017
Inaugural Address of the 18th President of the CGPSL

Continuity of care, professional values and our role in society

Carmel Fernandopulle

Sri Lankan Family Physician, 2016, 32, 71-75

Hon. Dr. Rajitha Senaratne, Minister of Health, Nutrition and Indigenous Medicine, Immediate Past President Prof Antoinette Perera, Past Presidents, Members of Council, distinguished invitees, Colleagues, ladies and gentlemen,

I thank you Prof Antoinette Perera for your kind words of introduction; and I thank you past Presidents, members of the Council and all members of the College; for electing me to this prestigious office as the 18th President of The College of General Practitioners of Sri Lanka.

I accept this privilege with a deep sense of commitment and humility. I am aware of the responsibilities this entails and I pledge to perform to the best of my ability being mindful of the aspirations and objectives of The College.

With the support of the past Presidents and the newly elected Council and you my dear members I will endeavour to steer it to greater heights.

I thank Prof Antoinette Perera for her able stewardship in the past year and I congratulate her together with the WONCASAR Conference Steering Committee for having organised an International Conference of very high calibre; WONCASAR 2016. This Conference helped to prove our commitment, towards the development of Family Medicine in Sri Lanka and the world.

The College of General Practitioners of Sri Lanka is in its 42nd year of existence and my predecessors have built it to the present state with their sacrifice and dedicated service.

At this moment let me pay homage to the 18 founder members who established the College of General Practitioners of Sri Lanka by Law in 1974, with the leadership given by Dr. G. M. Heenilame, Dr. A. M. Fernando and Dr. M. P. M. Cooray who became the first President of the College.

1. Dr. M P M Cooray – 28th July 1938
2. Dr. B D J de Silva – 1949
3. Dr. K A D R J D Peiris – 28th March 1942
4. Dr. G M Heennilame – 26th August 1949
5. Dr. L S Kotagama – April 1954
6. Dr. T Nagendra – March 1935
7. Dr. M S M Refai – August 1943
8. Dr. A H Hazari – February 1956
9. Dr. A M Karunaratne – January 1951
10. Dr. A M Fernando – 4th August 1933
11. Dr. M Sivasuriam – March 1956
12. Dr. R P Wijeratne – March 1934
13. Dr. H Jayalath – December 1952
14. Dr. R M L Fernando – September 1951
15. Dr. J Warusavitarana – 20th November 1951
16. Dr. D P Kannangara – 1937
17. Dr. A D P A Wijegoonewardene – June 1932
18. Dr. D H P R Senanayake – April 1951

College of General Practitioners of Sri Lanka – 1974
Founder Members

1 President, College of General Practitioners of Sri Lanka (CGPSL) 2016-2017.
I am happy to acknowledge the presence of Founder Member Dr. A M Karunaratne in the audience.

Prof. Dennis Aloysius, the doyen of the medical profession was among the pioneer members, and has been on the Council of the College since then. He has remained a very strong and ardent supporter and still plays an active role in the College. We in Council regard him with respect as a senior advisor to us.

Another senior member of the Council who deserves to be mentioned is Prof Leela Karunaratne who joined the College in 1975. She has contributed a great deal in establishing family medicine as an academic discipline in Sri Lanka. She has always been ready to guide us whenever needed.

Both of you have “Distinguished yourself by your humaneness, your wisdom and your inspiring leadership.” May you be blessed with good health, long life, cherished memories and peace of mind.

Today I would focus on:

**Continuity of care, professional values and our role in society**

**Attributes of a General /Family Practitioner**

The cardinal principle of family medicine is continuity of care together with the other key components of comprehensive, coordinated, collaborative and Holistic care in the patients and their families.

Continuity of care does not mean only chronological continuity; it means continuity in several aspects.

- It spans over the life time of a patient, through a family life cycle, over a family group or even generations.
- Over a long continued illness or from one problem to another when multiple problems in several body systems affect the same person.
- This continuous relationship does not end with the duration of the problem; it ends only if the doctor or the patient elects to end it, or when either is no more.
- Continuity is not disrupted even when other health professionals are involved, because it is the family doctors obligation to remain as coordinator of the persons total health care.
• The advantages of continuity are many but its contribution to medical science is invaluable since it allows the natural history of disease to be studied.
• It also provides opportunity for patient education, health education and enhances patient compliance, while having an effect on the health seeking behaviour of the patient, there is less delay in seeking assistance if there is continuity of care. In this process the General Practitioner continues to learn and understand his patients and builds up the relationship with trust and confidence.

Professional values
Continuity of Care together with the values learned has helped the community to accept all the General Practitioner’s as well respected individuals.

The General Practitioner has to accept his professional responsibility of continuing to update himself by continued medical education, and also by self directed learning and impart his knowledge, skills and motivational attitudes in students of medicine, peer practitioners and members of the community.

Doctors should be decent, compassionate, empathetic, trustworthy, loyal, competent and grateful.

Key values expected of doctors include
• High standard of ethics,
• Continued professional development,
• The ability to work in a team,
• Concern for maintaining clinical standards,
• Ability to communicate.

The professional values are really “ancient virtues distilled over time” but need to be made relevant to modern society.

The values of the General Practitioner have altered little in the last 12-15 years, with 2 exceptions.

First is the resurgence of family values and the second emerging value is working as part of a team.

A higher percentage of care is now given by non medical health care providers. The contribution of other team members to providing high quality care is now recognised and more highly valued.

We have to be aware of changing potential boundaries; information technology; audit and quality improvement; evidence based medicine; community based care; changing from generalist to a specialist role; and empathy.

Medicine is above all a practical job with a knowledge base that must be acquired and sustained.

The changes in General Practice can be viewed as a transition from relative autonomy to a much closer linkage with the Health Care system.

Our role in society and the art of giving
The College of General Practitioners has embarked on projects of corporate social responsibility and venture out into outer city areas and remote villages screening the population and educating people with key messages of health promotion, prevention and control of non-communicable diseases. For this we were equipped with the 12 healthy hints developed by the Non Communicable Deceases Committee of the College.

So far we have reached out to Matugama, Ratmalana, Wellawatte and Ittapane in Ratnapura district. Our next focus is on Kothahena, Bulathsinhala and follow up of Ittapane.

We have worked in collaboration with the State health services, non governmental organisations, religious organisations and some laboratory services.

We stress on prevention and health education in the 4 major diseases – diabetes, hypertension, cardiac disease and chronic respiratory diseases by identifying the 4 major risk factors – alcohol, smoking, unhealthy diet, and inadequate physical exercise.

Although we have taken up our responsibility collectively, we general practitioners could find a great deal to do in our individual capacities.

I am aware that several of us have engaged in community service projects. My own experience is that these have moulded us to appreciate problems of humanity and give us the inclination to pursue humaneness.

I appeal to our members to give selflessly to improve the lives of people we serve, remembering what society has given us in our medical education.

This I am sure will bring great solace and happiness to us. Having a higher purpose in life is good
for our own health and this has been proven by research which has shown that the occurrence of cardiovascular events are less when we lead such a life.

As much as we provide first contact medical care with continuity for individuals and families in our community, there are several other needs of the community which beckon us to take care of.

I will now speak about these needs in brief.

- Beginning with infants and children; they need to be monitored and guided for healthy growth and development and protected from communicable diseases by immunisation; either by us or the health team with whom we must communicate and collaborate.
- School authorities need our advice and I’m sure will gladly accept an offer for advice on maintaining hygienic conditions in all facilities provided for school children, and age appropriate health education with behavioural changes on matters such as personal hygiene, healthy diet, exercise, disease prevention, and the facts of life – leading to sex education in the older age groups.
- School children will be a receptive group for creating awareness of the non communicable diseases giving them basic knowledge on, prevention – specially with changes in lifestyle, appropriate screening that is available and the need to follow up of patients to control the disease and secondary prevention.
- At an appropriate age school children must be made aware of the evils of alcohol, smoking and the chewing of betel with tobacco and arecanut, and other substance abuse, and the difficulty of extricating one’s self once entangled in the web.
- Reaching out to school children is of special value because they will take the message home and bring about changes in health behaviour in the family.
- A general practitioner being a leader of the community will be able to reach out to civil society organisations who will be very receptive to health education messages on health promotion and prevention of disease, the availability of methods for early detection by screening and the treatment available for non communicable diseases especially cancers the predominant killer which can be treated successfully if detected early. Cancer represents lost productivity, so the global cancer epidemic is a particular threat to lesser developed and developing nations.
- The general practitioner can very easily win over the support of these organisations for carrying out public activities related to health promotion and prevention.
- Finally but very importantly I call upon the members of the College to solicit the help of civil society to eradicate the scourge of alcohol and substance abuse and addiction which go on in a vicious cycle; causing much damage to society and the future of our children.
- We general family practitioners who have a close relationship with individuals and families are leaders in our community, and we must bear the responsibility that comes with it; to network with other health professionals and the Government to work for the country, especially when faced with natural disasters.
- Our values and ideals should not remain within the confines of our homes and practices. They must be carried out wherever we are, and whoever we are with. We must remember that we portray our discipline general family practice and act accordingly in what we think, what we say, what we do, and how we do our task.
- Our communities specially our children deserve no less.
- Let us together build an enduring legacy beyond fond memories.

Acknowledgements

- Good Shepherd Convent, Kotaheanamoulded me with rich values and morals and I am deeply indebted to my Alma mater, my teachers; the presence of the current Principal Sr. Renuka together with Sr. Geethanjali the Superior, gives me further strength, I also acknowledge with gratitude your contribution to today’s proceedings; in the form of 35 students out of your 150 strength choir rendering their beautiful voices in harmony.
- The great faith I have In God Almighty, the religious upbringing, all the love and guidance
given by my late parents, my brothers, sisters, relations and friends still continue to influence me. I am very appreciative of the contribution of my uncle Mano Channugam who with his usual flare and finesse has sorted the media coverage.

- A special word of appreciation to Hon. Dr. Rajitha Senaratne, Dr. Sujatha Senaratne, Hon. Dr. Sudharshini Fernandopulle and Hon. Chathura Senarathne for their presence.
- I thank my teachers at the Faculty of Medicine Colombo, Prof. Carlo Fonseka who is present here tonight, Thank you Sir for your presence; I am truly indebted to all of them.
- The interactions with all the suffering patients from all walks of life strengthened me further and awoke in me the dedication to serve with empathy.
- I thank the Managing Director of Nestle Ms. Shivani Hedge and the Executives of Nestle for their presence and support extended.
- I thank HNB Chairman Mr. Rienzie Arsecularatne and Mrs. Hermione for their presence and support.
- The Chairman of State Pharmaceutical Manufac-
turing Corporation, Dr. Sayuru Samarasinghe for his contribution.
- I thank Prof. Mohan de Silva and Dr. Indranie

Amarasinghe, my batchmates for the thoughts and ideas incorporated in my presentation.

- Dr. Janaka Ramanayake, Prof Antoinette Perera, Prof. Leela Karunaratne and Dr. Eugene Corea for the encouragement, guidance and editing of the script and Senior Administrative Officer Dimuthu in the preparation of these slides.
- My son Chryshane, daughter-in-law Harini and grand daughter Chryshelle for the beautiful memories and constant support. You have brought a lot of happiness and a meaning to our life.
- My daughter Chryshanie who has always made me rethink on all my crazy ideas, supports me with son-in-law Nuvina. I miss them much as they are overseas.
- My husband Collin has been a tower of strength and the wind beneath my wings.

Thanks to all of you for having encouraged, tolerated and put up with my impulsive and occasionally demanding behavior. I look forward to your continued support as always.

I thank every one of you who are here today; for having graced this occasion and having helped me make this milestone in my life a memorable one.

God bless you.
Training medical students in primary care:
Attitudes of patients, views of students and reflections of trainers

R P J C Ramanayake

Sri Lankan Family Physician, 2016, 32, 76-85

Chief guest Dr. Ragunandan, special guest Dr. Sravanapavanathan, guest of honour Dr. Nachchinar-kiniyan, President, members of council and members of the Jaffna Medical Association, family members of late Prof C. Sivagnasundaram, distinguished guests, ladies and gentlemen.

I would like to thank the President and the Council of the Jaffna Medical Association for having invited me to deliver the prestigious Prof C Sivagnasundaram oration in the year 2014. I feel honoured and touched.

It is appropriate at this juncture to speak a few words about this illustrious community physician and outstanding academic and medical educationist. I was fortunate to have associated with him once as he was one of the examiners who evaluated my dissertation for MD in Family Medicine. His comments undoubtedly improved the quality of my dissertation. I have referred the book he authored on research methodology many times even for the research studies I am going to present here today.

He was a dedicated community physician. His contribution towards the development of Community Medicine in the university and country is immeasurable. I am aware that he rendered his services to the university even after his retirement. His contribution to Family Medicine was also very significant. As a member of the Board of Study in Family Medicine at the PGIM he contributed to uplift Family Medicine as an academic discipline.

I hope my oration today will be a tribute to this eminent academic.

Worldwide Family Medicine has come into the core of the medical curriculum during the last few decades1-5. This trend has invaded the Sri Lankan medical schools as well and it is now well established in most of the medical schools in the country.

Lets have a look at the history of Family Medicine in undergraduate medical education. In 1952 Royal College of General Practitioners recommended that all medical schools should have a department of General Practice. In 1969 USA recognized Family Medicine as a clinical discipline. In the Asia Pacific region Singapore was the first to establish a department of Family Medicine. In the early 1980s Faculty of Medicine, University of Colombo started sending students to general practices and the first department of Community Medicine and Family Medicine was established in Faculty of Medical Sciences, University of Sri Jayawardenapura in 1993. In 1994 the University of Kelaniya also established a department of Community and Family Medicine. Both these universities now have departments of Family Medicine.

The reasons for this trend are many; everywhere in the world in-patient care as a proportion of all medical care is decreasing. Some of the diseases which required in-patient care earlier no longer do so due to the availability of new medications and new techniques and doctors in primary care have access to investigations, telemedicine and internet.

The duration of stay in hospitals for diseases which require admission has also reduced considerably, due to more efficient medication and newer techniques.

Educationally, there is an impact on undergraduate training due to this trend. The morbidity seen in a hospital ward has become less and less representative of the overall morbidity in the whole population and the opportunity for hands on experience for students has reduced5,6.

In the meantime the community offers a wealth of teaching opportunities for medical students, a fact which was recognized by the General Medical Council of United Kingdom by its directive, Tomorrow’s Doctors in 19933.

General practices offer a highly personalized teaching in an environment where the importance of social,
Training medical students in primary care

economic, psychological and cultural influences on a patient’s illness and the family response can be experienced at firsthand. It is also an opportunity for students to get an insight into the socio-economic environment of patients and the local resources available to them.

Studies on utilization of health care services also revealed the importance of training undergraduates in primary care. “The Ecology of Medical Care,” by White et al., in 1961, was a turning point. It produced framework for thinking about organization of health care, medical education and research.

It reported that in a population of 1000 adults, in an average month, 750 reported an illness, 250 consulted a physician, 15 were hospitalized or referred.

“The Ecology of Medical Care Revisited” by Green et al. in 2001 revealed that the majority of the ill patients sought help from primary care doctors and only a minority are admitted to secondary/tertiary care hospitals. De Silva confirmed these findings in a study carried out in Sri Lanka. She revealed that for 80% of the study population first contact point was primary care.

By exposing undergraduates to primary care, students not only gain knowledge in managing health problems in primary care but also acquire the skill of early detection and pre hospital management of emergencies and serious illnesses as well.

Training undergraduates in family practices converts an activity between two parties (doctor and patient) into a three party affair. It’s in the privacy of the consultation room that patients divulge and discuss some sensitive issues and the presence of students could affect the doctor patient relationship and interaction. In a family practice patients are autonomous and a majority of the patients are ambulatory. They are able to spend only a limited time in a family practice and student participation could lead to delays.

Studies worldwide have revealed the positive attitude of patients towards the presence and involvement of students during the consultation. Still it could have number of implications to the patient as well as to the doctor. It is a different experience for students who are used to the hospital settings. For trainers also, there could be many challenges in adapting their practices and themselves to the role of being a trainer in a training center.

During the month long Family Medicine clinical attachment of the Faculty of Medicine, University of Kelaniya students are exposed to primary medical care in three settings: University Family Medicine Clinic, General Practices in the community and the out-patient department (OPD) at the nearby teaching hospital.

Three studies were conducted to assess the views and attitudes of patients, students and GP trainers towards training undergraduates in general practices in the year 2012. Research in this field has been scarce not only in Sri Lanka but in South Asian region as well.

1. Patients’ attitudes

A descriptive cross sectional study was conducted in 6 general practices purposively selected to represent different backgrounds. All these practices have been undergraduate training centers for more than ten years. Fifty patients from each practice who were 16 years and above and consulted the doctor in the presence of students were included in the study.

Demographic details of patients (%)

<table>
<thead>
<tr>
<th>Demographic detail</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>57.2</td>
</tr>
<tr>
<td>Male</td>
<td>42.8</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>16-34</td>
<td>36.2</td>
</tr>
<tr>
<td>35-59</td>
<td>43.6</td>
</tr>
<tr>
<td>60 and more</td>
<td>20.2</td>
</tr>
<tr>
<td>Educational status</td>
<td></td>
</tr>
<tr>
<td>Up to Grade 5</td>
<td>6.4</td>
</tr>
<tr>
<td>Grade 6-12</td>
<td>51.7</td>
</tr>
<tr>
<td>Beyond Grade 12</td>
<td>41.9</td>
</tr>
<tr>
<td>Income</td>
<td></td>
</tr>
<tr>
<td>Less than 10000LKR</td>
<td>9.5</td>
</tr>
<tr>
<td>10000-20000</td>
<td>37.0</td>
</tr>
<tr>
<td>20001-50000</td>
<td>33.8</td>
</tr>
<tr>
<td>&gt;50000</td>
<td>19.7</td>
</tr>
<tr>
<td>Previous consultations with students</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>48.3</td>
</tr>
<tr>
<td>1-3 times</td>
<td>24.3</td>
</tr>
<tr>
<td>&gt;3 times</td>
<td>19.8</td>
</tr>
<tr>
<td>Cannot remember</td>
<td>7.6</td>
</tr>
<tr>
<td>Ability to understand English</td>
<td></td>
</tr>
<tr>
<td>Able to understand well</td>
<td>30.3</td>
</tr>
<tr>
<td>Unable to understand well</td>
<td>69.7</td>
</tr>
</tbody>
</table>
Patients’ attitudes towards observation of consultations by students

Patients’ responses showed their positive attitudes but it was evident that the reason for consultation and the nature of the physical examination required, influenced their decision. Even though more than 90% of the patients agreed to the presence of students during history taking, there was resistance to their presence during examination. There was a step wise decline in the consent rate from examination over clothes to examination of genital organs. This has been a universal phenomenon. Wright18 in 1974 and Choudry et al20 in 2006 among British patients and Salisbury et al21 in 2004 among Australian patients observed that there was a lesser degree of acceptance of students during examination compared to history taking.

While there was little reluctance to discuss about physical illness they were less prepared to discuss family problems and sexual problems in the presence of students. Research also suggested that consent for a student to be present is given more readily for physical rather than psychological complaints22,23 and presence of students could be a problem in consultations that involved emotional upset, internal examinations, and sexual problems.19,24

This study (see chart below) explored views of patients on doctor student interaction taking place in English which is not the mother tongue of patients. Only 30% of the participants could understand English language well according to them. Even though they agreed to doctor student interaction in English they preferred if discussions took place in their native language. Studies conducted in western countries where the medium of learning and the mother tongue of patients were the same revealed that patients enjoyed hearing their condition being discussed with the students,25 drew more information from the explanation directed at students and discussions with students led to increased insight into clinical reasoning.26 Such benefits cannot be expected for patients in Sri Lankan settings and even could have unwarranted effects such as misunderstandings in patients which could create unnecessary anxiety. Therefore GP teachers should either discuss with students in native language or offer an explanation to patients afterwards. Studies have revealed that it is important not to sideline patients in discussions and a sense of inclusion and participation is essential for patient satisfaction with the experience.24

Patients’ preference of number of students at a time

Patients’ opinion on the number of students they would like to interact with at a time varied. 17% preferred to have only one student during consultation while 29% and 24% agreed to have 2 and 3 students respectively. Others liked to have even more than 3 students.

Trainer-trainee interaction in English

Patients’ attitudes towards interaction in English vs their knowledge of English

<table>
<thead>
<tr>
<th>Patients’ response</th>
<th>Able (%) (n=90)</th>
<th>Unable (%) (n=207)</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree to discussing their problem in English</td>
<td>82 (91.1)</td>
<td>160 (78.4)</td>
<td>p=0.136</td>
</tr>
<tr>
<td>Better if discussed in native language</td>
<td>55 (62.5)</td>
<td>174 (84.9)</td>
<td>p=0.186</td>
</tr>
</tbody>
</table>
Training medical students in primary care

The perception among patients that the quality of the consultation was not adversely affected due to the presence of students by the majority (92.6%) is an encouragement to GP trainers. In fact about one third felt there was a positive impact perhaps due to more detailed history taking, methodical examination and plan of management and doctor spending more time with the patient.

Impact of students on duration and quality of consultation

![Impact of students on duration and quality of consultation graph]

Opinion on “Involvement in training students is a social service” and Expectation of a payment

![Opinion on “Involvement in training students is a social service” and Expectation of a payment graph]

Its heartening to note that majority of the respondents were of the view that their involvement in undergraduate training is a social service and did not expect a payment for their involvement and contribution.

Previous studies have shown that sense of altruism, mutual obligation and giving something back to the system.26,27 were the probable reasons.

Patients’ attitudes towards gender of students

<table>
<thead>
<tr>
<th>Patient Preferable Gender of student</th>
<th>Female (%)</th>
<th>Male (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>38 (23.0)</td>
<td>17 (14.0)</td>
</tr>
<tr>
<td>Male</td>
<td>6 (3.6)</td>
<td>9 (7.4)</td>
</tr>
<tr>
<td>No preference</td>
<td>121 (73.3)</td>
<td>95 (78.5)</td>
</tr>
<tr>
<td>Total</td>
<td>165 (100)</td>
<td>121 (100)</td>
</tr>
</tbody>
</table>

Pearson Chi square = 5.099  p = 0.012

Gender of the student mattered more for female patients. 23% of the females preferred involvement of female students compared to 7.4% among males even though this difference was not statistically significant. Chipp et al28 and Bentham et al29 also found that women preferred a student of their own sex more often than men.

Patients’ views on consent

<table>
<thead>
<tr>
<th>View</th>
<th>Yes (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior notice was there</td>
<td>30.6</td>
</tr>
<tr>
<td>It’s better if informed</td>
<td>45.8</td>
</tr>
<tr>
<td>Better if I have right to choose</td>
<td>50.5</td>
</tr>
<tr>
<td>Feel comfortable in telling not to have students</td>
<td>52.9</td>
</tr>
</tbody>
</table>

According to patients only 30.6% were aware that students would be present during the consultation which is not a satisfactory situation. A fairly high percentage thought it would have been better if they were informed beforehand. It is interesting to note that half the patients felt that they should be given the choice to decide. Studies elsewhere in the world have revealed that patients’ consent to participation in medical education is often taken for granted and formal consent is not obtained prior to their involvement in teaching.30 Its only 52.9% who felt comfortable in telling the doctor not to have students. Patients may feel pressured to consent to the students’ presence and they may be concerned that refusal to have students may disappoint their family doctor. There is evidence that patients may have difficulty refusing consent31 and GPs should be mindful of this fact.

This study which demonstrates the views of a broad range of patients, reveals the positive attitudes of patients and their willingness to participate in student training which is vital for the sustainability of community-based teaching.32 Exploring views of patients is important to make training programs patient centered which is the current trend in medical education. The findings of this study will be reassuring for doctors who are presently involved and those who plan to be involved in undergraduate training in the future.

2. Views of students

This descriptive cross sectional study was conducted among fourth year students after completion of the final Family Medicine examination at the end of the fourth year.

Results

There were 176 students in the batch and 171 students responded (response rate was 97.1%). 57.4% were females.
Majority of the students acquired knowledge on basic functions of family physicians which was one of the key objectives of the training.

Acquisition of knowledge on Family Medicine concepts and basic skills

Its an encouragement that more than 90% of the students learnt about common conditions and early stages of illnesses. Family medicine clerkship is the only opportunity for them to gain exposure to these aspects of medicine. Another specific objective which is to expose them to holistic care approach in patient management has been achieved by 80% of the students. This is a rather neglected aspect of patient care in other settings.

Apart from blood pressure measurement students did not acquire knowledge on other procedural skills satisfactorily. Inability to learn and practice procedural skills in ambulatory care settings has been a constant finding elsewhere in the world as well. It has been shown that learning procedural skills can be best achieved in hospitals.35

Acquisition of knowledge on documentation

Students were unable to learn about documentation to the extent they learnt about basic functions of family doctors and concepts of family medicine. The reason may be the limited exposure. The lowest acquisition rate for referral letter writing and medical certificates which are not part of each and every consultation supports this presumption.

Student views on satisfacion of training

Overall satisfaction of the training was very high. Students appreciated learning in an less stressful atmosphere and the attention received from GP trainers which is probably due to less student: trainer ratio. Personal attention and supervision had been described as distinct advantages in training in general practices.35,36 Trainers can watch history taking, clinical examination and communication skills of students and provide a feedback which will be striking and effective. One to one or one to two ratio allows them to pick up what a student is good at, which area needs improvement and teach exactly what should be taught to the particular student.
Training medical students in primary care

Problems encountered by students

Distance to general practices, transportation and travelling time were the main problems identified by the students and these problems can have negative influence on the students. Therefore every effort should be made to find general practices with close proximity to the medical school to minimize these problems.

Students have shown their interest and the value they have attached to the training in their responses to the questionnaire. This positive experience may motivate them to take up a career in Family Medicine once they are graduated and that is extremely important for the balanced development of health care systems.

3. Reflections of trainers

A qualitative study was conducted among 11 general practitioners who train undergraduates in their practices. They were interviewed using a semi structured interview format to identify emerging themes, categories and patterns. Interviews were recorded and transcribed verbatim.

Results

Why do they like to teach students?

GP trainers were enthusiastic about training students. Altruistic reasons, self satisfaction of helping students, self esteem of being a trainer, pleasure of getting involved in teaching, drive and opportunity to improve their knowledge were some of the reasons for their involvement in teaching. Another expression was that teaching broke the monotony of everyday work.

Let's have a look at some of the comments.

“You get the satisfaction of helping young people and helping them to take one step forward in life”

“I become more outstanding, than other GPs, because I’m recognized as a GP teacher”

“I will be respected by my patients”

“Because I get a pleasure from it”

The reasons expressed by GP trainers were in line with literature. A study carried out in UK reported that teaching medical students had a positive effect on GPs’ morale and professional self-image. Enhanced sense of self worth and confidence and welcome role as ‘teachers of medical students’ were also identified as potential benefits of teaching. Similar to the findings of this study GP trainers in London also revealed that students added variety to their work, reduced isolation and increased the morale of the whole practice.

Improvement of knowledge was a beneficial effect of teaching students and this could be attributed to increased reading and reflection on practice, information from students, challenging questions from students and more time with patients.

GPs’ knowledge and skills in teaching

Trainers were aware of the objectives of training. They were confident about their knowledge and their role as trainers.

Even though there are reports about anxiety among GP teachers regarding adequacy of their knowledge and competence in skills, the participants of this study were confident about their knowledge and skills in teaching perhaps due to longstanding experience of teaching. A few participants liked to have a feedback from students. Probably they want an affirmation of their role as teachers. It has been reported that positive feedback from students was important for teachers’ morale and insufficient feedback led to disappointment.

What can be taught?

Concepts of family medicine, common problems, importance of psychosocial aspects in health and disease, doctor patient relationship, art of family medicine, history taking and examination, record keeping, practice organization and management were the key areas they taught students.

They were of the view that 3 visits, which took place once a week were not sufficient to teach procedural skills, progression of illness and continuity of care adequately. It is interesting that GPs were able to teach important aspects of health care which students could not learn in a hospital setup. Insufficient exposure to continuity of care should be taken into account seriously since this is one of the most unique features in family medicine. Increasing the number of visits is a possible solution. Fewer opportunities to learn procedural skills in general practices has been a constant finding previously as well but this need not be considered as a drawback in training since students could learn and practice these skills in hospital.
Impact on consultation dynamics

Doctor patient relationship

GPs were of the view that doctor patient relationship was not affected most of the time but occasionally there were instances where patients were reluctant to discuss intimate issues in front of students.

“Look at the patient, you know whether she/he is comfortable with students. So if they feel uncomfortable I send students away. When discussing confidential issues also I do the same.”

Quality of consultation

A constant theme emerged was that quality of the consultation improved when students were present, since they had to take a thorough history and stick to the correct technique in examination.

“I think quality is better. Because we are also careful, we don’t take short cuts when there are students.”

Longer consultation time, comprehensiveness in history taking and examination, more methodical in management were the potential benefits to the patients according to GPs.

Positive effects on clinical practice such as being more methodical in clinical examination, management and maintaining records and selective in referral had been reported by other studies.

Duration of consultation

GP trainers pointed out that the duration of consultation increased due to students. Another opinion was that it depended on the condition of the patient and the patient’s willingness to get involved with the training process.

“That of course gets prolonged, when there are students. Because you have to explain and you can’t take short cuts”

“It depends on patients as well, when they are prepared to spend time we discuss more.”

Prescription pattern

GPs highlighted that they did not change their pattern of prescription due to the presence of students. In fact they thought it was important for students to know what they prescribed.

“No, if I change they don’t know exactly what should be given to the patient.”

Students’ attitudes

GPs pointed out that at the beginning they (students) thought primary care was a superficial thing and they didn’t take it seriously but by the time they came for the third visit they had changed and appreciated the difference between primary care and tertiary care and had better respect for primary care.

They have noticed that the more mature students were keen and more interested in learning than students of the 3rd year and early part of 4th year. They attributed this to the better background knowledge of senior students. Another opinion was that having to sit for an examination made students more enthusiastic and it is an accepted fact among educationists. On the other hand, when it was too close to an examination students were not interested.

Trainers were generally happy with the behaviour and attitudes of students even though they had experienced a few incidents regarding the professionalism of students, including punctuality, respect and commitment. Nancy Sturman also reported such occasional incidents in her study.

Number of students per session

Ideal number of students they liked to teach at a time was 2, which they could accommodate in their consultation rooms without a problem. The maximum they could accommodate was 3.

“If more than 3 students come, it’s difficult to handle with the available space of the consultation room.”

“Maximum three but the ideal is two.”

When deciding on the number of students the space in the consultation room also should be taken in to account. If the room is overcrowded patients may not feel free to divulge information and feel embarrassed during examination. It can create problems for the doctor in managing patients and for students such an environment may not be conducive for learning. More students could compromise one of the key advantages of community based learning which is the one to one supervision and the attention of the trainer.

Problems encountered

Time has been the key problem for many. They managed the space by allowing only 2 or three students at a time.

“Time is the main problem. Patients start to complain, otherwise I love teaching.”
Training medical students in primary care

“They (patients) hurry sometimes and when students are there they think that we take a long time.”

“Space of course I don’t like to take more than 2.”

Time pressures and space were common problems faced by GP trainers. According to most of the trainers presence of students increased consultation time and lengthened their workday. It has been reported that time pressures led to anxiety among trainers because of loss of clinical time due to teaching and preparation. Obviously the consultation room should have sufficient space to accommodate 2 or 3 students. Pears et al described lack of time, work load and insufficient space as challenges of teaching in general practice.

Support from the faculty

“So you have to keep us informed about the changes and how you want us to change. Teaching workshops should be arranged on a convenient day.”

“Organizing teaching workshop to train all teachers. We should have a uniformity of teaching.”

“I would like to have students’ feedback.”

They expected the University to keep them informed and make them aware of the changes that take place. Their request to organize teacher training workshops to sharpen their skills in teaching and to make the training uniform in all the practices is appreciable. Obtaining skills in teaching was described as a challenge by Pears et al and they also recommended departments of general practice should provide resources for GPs to gain appropriate teaching skills.

GP trainers in the community are rather isolated with little contact with their colleagues and they have limited opportunities for continuous professional development. It is extremely important to help them to enhance their knowledge and teaching skills which will invariably boost their morale, confidence and enthusiasm in teaching. This will eventually benefit students.

Remuneration from the University

“Even if they don’t send a payment, I don’t mind.”

“I’m satisfied with what I’m given.”

The honorarium they received was negligible as one GP trainer pointed out, but they were not bothered about it and had never complained probably due to altruism. They would like to continue with training students in the years to come. Their service should be recognized by the University and the public. The University appoints GP trainers as visiting lecturers which gives them academic status and could be rewarded further by awards and publicity.

It should not be forgotten that there are both direct and indirect costs of teaching. To get involved in teaching, a practice needs to expand beyond the provision of core clinical services. Infrastructure and organizational changes are necessary to provide both the training and patient care. It is essential to balance both components since adequate number of patients is essential to sustain both practice and teaching. In UK and Australia GP trainers receive a reasonable allowance for their service and even improvement to infrastructure.

Willingness to teach in the future

Constant theme was that everybody would like to continue with teaching in the years to come.

“I will continue teaching as long as I can.”

These studies broadly explored views and attitudes of the all the stakeholders. Views of one party was confirmed by the views of other parties which shows the reliability of the results.

Lessons for planning training program

■ Objectives
  Learn common conditions
  Early stages of illnesses
  Concepts of family medicine
  Documentation
  Practice management

■ Students
  Mature students 4th year/final year
  2-3 students per session

■ Training centers
  Not far away from medical school
  Spacious to accommodate students

■ GP trainers
  Knowledgeable
  Confident in training

■ Role of Medical school
  Coordination
  Assist GP’s to update knowledge and skills
  Feedback to GP’s
  Recognize GP’s role
  Remuneration
  Assessment of students

■ Role of GP trainers
  Patient care and teaching to be considered as being equally important
  Patients’ consent to be obtained
  To be aware of situations where patients may not like the presence of students
  Not to sideline patients
A doctor with full registration with SLMC could function as a primary care doctor/general practitioner without any training or qualification in primary care. Therefore training medical students in primary care is more important and relevant in our health system.

Acknowledgement

Co Investigators, Dr. A. H. W. De Silva, Dr. D. P. Perera, Dr. R. D. N. Sumanasekara, Dr. L. R. Jayasingha, Dr. L. A. C. L. Athukorala, Dr. K. C. T. Fernando, patients, students and GP trainers who took part in this study.

References

Training medical students in primary care


37. Mathers J, Parry J, Lewis S, Greenfield S. What impact will an increased number of teaching general practices have on patients, doctors and medical students? Medical Education 2004; 38: 1219-28.

38. Al- Mohaimeed, Midhet F, Barrimah I, Khan NZ, Fawzy K, Alnohair S, Alnohair S. Students’ perceptions about the family medicine course in Qassim, Saudi Arabia Medical Teacher 2014; 36: S49-S54.


Social accountability of the Health Professional

Narada Warnasuriya

Sri Lankan Family Physician, 2016, 32, 86-90

It is a great honour and a pleasure to be with you once again at the annual convocation of this great institution of higher learning with which I had the good fortune to be intimately associated during the last twenty years of my life. To me they have been the most fulfilling and rewarding years professionally, and in the eve of my career there is no greater honour that I hold dear to my heart than being identified as an emeritus professor of this vibrantly thriving centre of learning.

Of course you have made it quite clear that “emeritus” does not mean “retired” and since my retirement in 2009 I have been invited to contribute intellectually on many an occasion. As a lifelong learner it is heartening to know that there are imaginative and innovative academics who are at the peak of their career who feel that retirees like us can play a complementary role in motivating the young minds who are in their care. I must specifically thank your dynamic vice chancellor and equally dynamic dean of the faculty of medical sciences and the rest of the faculty for inviting me.

Since receiving the invitation, I have thought deeply as to the topic on which I should talk to you. After careful consideration I have chosen the topic “social accountability of the health professional”. There are three reasons for choosing it. It has been a topic close to my heart and I sincerely feel that I have done justice to it both by precept and practice. I have taken social accountability to be a cardinal and overriding consideration compared to others including professional success.

Many young health professionals are not quite conversant with what it means as most curricula have only paid lip service to it, that too in a theoretical context. This is in spite of the recent emphasis on professionalism, ethical behavior and the need to focus on personal and professional development. Even this trend has not quite captured the need for social accountability and the importance of the professional being aware of the concept of equity and social justice as a primary condition of human development. I am happy to note that the objectives of the “good intern programme” which some of you will be doing before commencing internship, include enhancing accountability and equity.

I am aware that my audience today consists of a mix of graduates from medical, allied health sciences and management sciences. I hope all of you find this topic relevant to your interests.

Before getting into definitions of social accountability, social justice and equity and how they differ from equality, egalitarianism and socialism the last of which many people use as an umbrella term for all these, I would like to illustrate the concept of equity and social justice, with two events from my life. I think they resonate with the theme of my talk today.

At age of sixteen as an idealistic high school student, a verse written by a fellow student to the school magazine captured my heart and mind. It was written by late Padmal De Silva who subsequently became the academic lead of the clinical psychology programme at the Institute of Psychiatry, London.

The passion for an egalitarian society (Samasamajaya) which motivated me then has not dimmed yet, but I have become more pragmatic about the means of achieving it and also I am more realistic about the degree of equality that is desirable. You will appreciate this more when I talk about the difference between equity and equality and between social justice and socialism.

I am now convinced that it is the responsibility for those more fortunate in life to seek a remedy for this

---

1 Emeritus Professor of Paediatrics, University of Sri Jayewardenapura, Senior Professor of Paediatrics, Kotelawela Defence University, Ratmalana, Sri Lanka.
disparity. Bill Gates has echoed this view when he addressed Harvard’s graduating class in their convocation address in 2007.

He said “Humanity’s greatest advances are not in discoveries, but in how these discoveries are applied to reduce inequity. Whether through democracy, strong public education, quality healthcare or broad economic opportunity reducing inequity is the highest human achievement.”

More recently I had the opportunity to do a study tour of the health system in Cuba. In spite of embargos and trade barriers for nearly thirty years, they have managed to provide high quality healthcare in an equitable manner to their whole population utilizing locally developed infrastructure and health manpower. Their health indicators compare favourably with the best in the world. This was epitomized to me when I visited the haemodialysis unit of their Institute of Nephrology. Through a network of such units every patient with end stage renal failure in Cuba has access to haemo-dialysis when they need it, without having to wait and without incurring any personal costs. Retired university professors and political leaders were being dialysed alongside manual workers. Although I could not come to a judgment as to the success or failure of socialism during my short stay in Cuba I was convinced that its citizens had equitable access to high quality healthcare!

Now that I have confused you even more than you were at the start, let us get down to basic concepts and definitions. Social accountability refers to being held to account by society. That is having to be answerable to society whether you have fulfilled your role satisfactorily. It is a concept that is usually applied to institutions such as universities and medical schools. Medical schools have the obligation to direct their education, research and service activities towards addressing the priority health concerns of the community, region and or nation they have a mandate to serve.

The same concept can be applied to individuals in respect of their role in the community. A doctor, a nurse or a teacher has to be socially accountable. The core values of social accountability are quality, relevance, equity and cost effectiveness. All four are equally important but unfortunately in professional contexts greater emphasis is always placed on quality, and equity is often completely ignored. In my talk today it will be the reverse!

Let us consider each of these core values in respect of a health professional. Quality means fitness for purpose. This would to some extent depend on the training that you have received in the medical school. If you have been well-trained you are more likely to be capable of delivering high quality healthcare. Intrinsic factors such as your own personality, ability and attitude are the other determinants of quality. There are differences in the quality of care between graduates of the same medical school. You have an obligation to maintain and enhance your quality through continuing professional development and on the job training where relevant. It is up to you to seek opportunities for training and to make maximum use of such training. To take a simple example if you are a paediatric house officer it would be essential for you to get hands on training in neonatal resuscitation at the earliest opportunity. Feedback from performance appraisals need to be taken constructively and deficiencies corrected.

If you take on responsibilities for which you have not been fully trained such as undertaking part time general practice while doing a hospital job such as a medical officer in some specialized unit, it is preferable to seek mentoring from a senior practitioner from the College of General Practitioners (CGPSL). You could also do the MCGP training conducted by the CGPSL. The CGPSL will provide a suitable senior general practitioner from the area who will act as your mentor during your training. This is a uniquely unselfish initiative by the CGPSL which deserves wider publicity.

Relevance in a given context is the ability to address the most important problems first. You become more relevant by identifying the priority health needs of the community that you are serving and sharpening your own skills to match them. If you are in a managerial role like being a medical officer in charge of a hospital, improving the physical resources and infrastructure in a relevant manner is also a means of improving relevance. On the tenth anniversary of the first batch of graduates from the FMS, USJP we were able to identify such medical officers and felicitate them along with those who had become medical specialists.

Relevance of a health professional’s skills and competencies to the community he or she is expected to serve is very much a determinant of the curriculum of the training institution. It is a feature of the medical school’s social responsibility. However as we are functioning in a global free market there is a feeling that our graduates need to be globally relevant. Unlike a producer of a commodity such as readymade garments it would be a mistake on the part of a national university to train its graduates for the export market only! It would be our duty to ensure the right balance between global and national relevance.

Cost effectiveness is a desirable attribute of health care. This means maximizing the impact with the least possible consumption of scarce resources. It is an essential attitude which needs to be ingrained in a health pro-
fessional. This applies specially to the use of diagnostic tests and medications. In public health interventions like screening and immunization it is a mandatory consideration. The most cost effective alternative must be used when treating patients. Health promotion and disease prevention measures are preferred as cost effective alternatives in conditions like non communicable diseases where the curative measures tend to be cost intensive. The health professional’s concern for cost effectiveness should be irrespective of who pays the bill, the state, the patient or the insurance company. There are some unscrupulous doctors who inflate the charges when insurance cover is available. This is an unethical practice.

The SLMA Declaration on Health gives clear guidelines on this aspect. It emphasizes the need for the doctor to discuss the financial implications of the management plan with the patient, when the patient is paying for it out of his pocket or through an insurance scheme. The relevant section is given below.

The people have the right to expect that fees that are charged from patients for services rendered are reasonable. People are entitled to receive relevant information on one’s illness, its principal complications, available methods of investigation and treatment, their advantages, disadvantages and costs.

The fourth core value of social accountability is equity. This is the real thrust of my talk today.

Equity is defined in terms of health as the absence of potentially remediable systemic differences in one or more aspects of health across socially, economically, demographically defined population groups or subgroups.

Margaret Whitehead offers a more easily understood definition of health equity, viz; The absence of differences in health that are not only unnecessary and avoidable but in addition are unfair and unjust.

Equity is not the same as equality. As we all know absolute equality in all aspects pertaining to health is neither feasible nor even desirable in some instances.

A good example is the slight advantage in life expectancy that females in developed countries have over their male counterparts. This is mostly biologically determined and is not considered an inequity. However when females in developing countries have lower life spans than their male counterparts this is mostly due to social, cultural and economic reasons. It is not only correctible by the right interventions, it is clearly unfair and unjust. It is considered an inequity.

The following bar diagrams, reprinted from a WHO publication on social determinants of health, depict several clear examples of inequities in health seen globally. They are self explanatory. Though the need for health care systems to address these glaring inequities is apparent to anyone, one may wonder how the concept of tackling inequities or promoting equity operates at the level of an individual health professional. I will give a few brief case scenarios to illustrate the potential to enhance equity in our professional practice.

You are the medical officer of a rural hospital and your usual practice is to do a quick round of the inpatients, attend to the administrative tasks and then adjourn to your quarters for lunch, leaving the outpatients to be seen by the Assistant Medical Practitioner (AMP). In the afternoon you do your busy private practice dispensing a much better selection of drugs than is available in the hospital pharmacy. Even if these drugs have been bought privately, this is a very inequitable situation. The poorer patients are denied your clinical expertise as well as access to an adequate range of drugs. The latter could even be the result of your administrative inertia. This theme could occur in various settings including a tertiary hospital where some consultants could do a selective round of their private patients or give them priority in their operative list. These instances though relatively uncommon, do occur, and seriously compromise equity in healthcare provision.

Although roughly forty percent of the patients in your part time general practice are children you still do not have a children’s cuff to measure blood pressure. This too is inequitable health care. If you embark on part time general practice to supplement your income, not only should you enhance your professional competencies appropriately, you need to provide the minimum required clinic setting for ambulatory care.

You are a second year student nurse doing a clinical attachment in an orthopaedic ward. Your group of six have been instructed to give a bed bath daily to all the bed bound patients. However the Sister in charge has told you that the long standing patient in the last bed, a tree-cutter by profession who suffered a cervical spine fracture and now has quadri-pareisis needs to be given a bed-bath only twice a week as the procedure is cumbersome.

You are a senior physiotherapist in physiotherapy department of a busy teaching hospital. Your department is extremely busy with both outpatient and inpatient referrals for physiotherapy. Your usual practice is to complete the physiotherapy procedures for the more demanding ambulatory patients before attending to the inpatients referred from the wards, most of them being patients with neurological disabilities like stroke. They are kept waiting on their trolleys and wheel chairs outside your unit till the ambulatory patients are dealt with.
The last two scenarios highlight the relatively inequitable manner in which chronically disabled patients are treated in our acute care focused hospitals. These patients often tend to be from a lower social class and have few to advocate their cause.

I hope I have made the point. Doctors and other health professionals need to be equity conscious. They have to be fair and just in the way they provide their services. Doctors and medical students have been very vociferous recently on the need for equity in educational opportunity. They need to think in the same way regarding access to healthcare.

Let me wind up now by returning to my credo. Equity and social justice are paramount for wellbeing in any society.

After the fall of the iron curtain and the demise of communism the predominant societal model that is pervasive globally is the market economy, euphemistically referred to as the knowledge economy by the World Bank. It is the only show in town. Socialism by its old definition as a society in which the state controls the means of production and distribution is virtually nonexistent. However even the most ardent advocates of the market economy have to concede the need for regulation by the state of the vital services like health and education, which they refer to as public goods.

Karl Polanyi the well known Hungarian economist said “To allow the market mechanism to be the sole director of the fate of human beings and their environment would result in the demolition of society.” We see proof of this in the global consequences of climate change.

Everett Koop, U.S Surgeon general is on record as follows “While I am a believer in the freemarket I have some real reservations about the ability of the market forces alone to do what is best for the health of the American people.”

The WHO Commission on Social Determinants of Health, has concluded that unless we improve the circumstances in which people are born, grow, live, work and age by tackling the inequitable distribution of power, money and resources which are the structural drivers of these conditions it would be unrealistic to expect a real improvement in health.

It recommends developing a health workforce that is trained on the social determinants of health and is capable of raising public awareness of the social determinants of health.

There may be some who still wonder why we as doctors or other health professionals need be so concerned about social justice and equity. This was well answered by Dr P. R. Anthonis one of the most eminent surgeons in this country when he was interviewed by a journalist on his fiftieth anniversary as a surgeon. He said “I owe everything that I achieved in my professional life to the poor people of this country. It was by operating on them in the government hospitals that I acquired and honed my surgical skills and it is the experience thus gained which made me what I am today.”

Another doctor we can emulate with pride is Professor Senaka Bibile a doctor well ahead of his time, a doctor who was not commercially oriented, who viewed medicine in terms of service to the people and was courageous and successful in the pursuit of medical reform in the social interest.

Let us all live by the words of Marcus Tullius Cicero, Roman Philosopher Statesman.

“In nothing do men more nearly approach gods than in giving health to men”

And by the Dhammapada. “‘กสิ, ข้ามัน ‘กสิ, ข้ามัน ‘กสิ”

Health is the greatest gain: Contentment is the greatest wealth.
Challenges during medical consultations, at the pharmacy and in administering medicines, and coping strategies in a group of Sri Lankan visually disabled older teenagers

W N V Luke1, C Weeraratne2, S Madugalle3, S Maduranga4

Sri Lankan Family Physician, 2016, 32, 91-97

Abstract

Background: Issues of persons with visual disability in the health care settings and in using medicines is under explored worldwide, especially in the developing countries. This has compromised the ability of health professionals to provide a satisfactory service to them. This is a pilot study exploring the need for primary health care and challenges to use of medicines by visually disabled teenagers.

Objectives:
• To study their need to use primary health care.
• To identify challenges they faced at medical consultations and at the pharmacy.
• To identify challenges they had to effective use of medicines and their strategies to overcome them.

Methods: A descriptive cross sectional study was conducted in a school for the visually disabled in Sri Lanka. Fifty four students in the age group of 16 to 19 years were enrolled purposively. An interviewer administered questionnaire was used for data collection.

Results: Of them, 27.8% had chronic disease. The knowledge they had of the diseases they had was poor. Most of them were accompanied by caretakers to the doctors and the pharmacies. 98.1% were satisfied about the overall care given by the doctors but complained that during medical consultations the conversation was mainly between the caretaker and doctor ignoring them. 53.3% said that they were not adequately educated by the pharmacists regarding the medications given to them and that verbal instructions were given only in 60% of the instances. Using different shaped containers to store medicines, using tactile sensation to differentiate between pills, and memorizing the drug regimes were methods used by some of them to help take medicines. Partially sighted students additionally used their limited ability to read large fonts and identify colours for this purpose.

Conclusions: Participants had difficulties during medical consultations, at the pharmacy and in using medicines. Doctors, pharmacists and caregivers should be aware of these difficulties and develop effective systems and methods to overcome them.

Introduction

The visually disabled population poses a significant burden on the health care system in both the developed and developing world. According to the World Health Organization statistics, 285 million people are estimated to be visually disabled worldwide. 39 million are blind and 246 have low vision. About 90% of the world’s visually disabled people live in low-income settings.1

Many challenges to effective ambulatory medical care have been identified among the visually disabled subjects worldwide. Important aspects of medical care are effective consultations, doctor patient communication, patient pharmacist communication, adherence of patients to treatment and ultimately the overall patient satisfaction regarding the process. The blind people face numerous problems with regards to all these aspects.2,3,4,5,6 They have difficulties in finding their way to health care settings7, difficulties at health care settings and during contact with the doctors8, difficulties in obtaining medicines at pharmacies and remembering the instructions given by the pharmacists9, difficulties in self-administering medicines causing medication errors, and poor adherence to treatment6.

Only a few studies have been conducted internationally to identify limitations to health care for the blind people; very few studies have been done in the developing world and the available information is mostly from the developed countries where the quality of life and services.

1 Lecturer, Department of Pharmacology, Faculty of Medicine, University of Kelaniya, Sri Lanka.
2 Senior Lecturer, Department of Pharmacology, Faculty of Medicine, University of Colombo, Sri Lanka.
3 MO, Base Hospital, Panadura, Sri Lanka.
4 MO, General Hospital, Matura, Sri Lanka.
available for the disabled are much better compared to the developing world. As a result there is a void in our knowledge and insight regarding their health status, need to access primary health care and difficulties they face in using medicines. This hinders the ability of health professionals such as doctors and pharmacists to improve the care they provide to facilitate the safe and effective use of medicines in this group.

This is a pilot study conducted in Sri Lanka to develop a preliminary understanding of the nature, type and magnitude of the issues in accessing ambulatory health care and the use of medicines by visually disabled persons. The study is focused on the older teenage age group since no study has been done previously in Sri Lanka of visually disabled persons of this age group who will next enter society as adults needing more health care and medication.

The objectives of the study were to study their need to use primary health care; to identify challenges they faced at medical consultations and at the pharmacy; to identify challenges to self-administration of medicines and the strategies they used to overcome them.

Methods

A descriptive cross sectional study was conducted at the School for the Visually Disabled, in Ratmalana, Sri Lanka. This study setting was selected because it was the main school for the visually disabled students in Sri Lanka. Students from different socio-economic backgrounds from throughout the country attend this school.

Students aged 16 years and above who assented or consented to participate were recruited for the study. A purposive sample was obtained and all consenting students who met the inclusion criteria were included in the study since the study population was restricted in numbers.

Inclusion criteria for the study were as follows.

- Students with visual acuity below 1/60 in both eyes as previously diagnosed (from student health records at school).
- Students who have been given permission by the institution and guardians to be interviewed.
- Students who have given informed consent or assent to participate.

Exclusion criteria for the study were as follows.

- Students with visual acuity above 1/60 in at least one eye as previously diagnosed (from school health records at school).

- Students who were mentally retarded.
- Students who were below 16 years.
- Students who were not given permission by the institution or guardians to be interviewed.

Ethics clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, University of Colombo. Permission was obtained from the Social Services Department and the school where the study was to be conducted. Informed verbal assent or consent was taken from all the participants. Consent from the guardians was also taken to interview students. Privacy, confidentiality and anonymity of the participants were ensured.

Data collection tool was an interviewer administered questionnaire. Data on the general health status, need for ambulatory health care, challenges at medical consultations, at the pharmacy and in using medicines was collected.

Data analysis was done using the SPSS statistical software version 17.0.

Results

Fifty four study subjects were enrolled in the study.

Level of disability in the population

54 students, aged between 16-19 years with visual disability (visual acuity below 1/60 in both eyes) were included in the study. Of the 54 students interviewed, 66.7% were congenitally blind while 33.3% were suffering from acquired blindness.

General health status

The presence of medical conditions other than visual impairment was assessed in the study group (Table 1). Of them, 27.9% had chronic diseases.

Table 1. Chronic diseases in the study participants

<table>
<thead>
<tr>
<th>Disease</th>
<th>Frequency</th>
<th>Percentage of the total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>5</td>
<td>9.3%</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>7</td>
<td>13%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

The 3 students classified as having other diseases were suffering from either chronic headache, hearing impairment or skin rash.
requirements for health care

Forty six (85.3%) of the students claimed that they required medical consultations at a frequency of once a month or less on average. Eight (14.9%) needed two or more medical consultations per month (Figure 1). All of them have required ambulatory medical care within the last year.

Of the group who required medical consultations twice a month or more the presence and type of chronic disease is given in table 2.

Table 2. Chronic disease among those who needed two or more consultations per month

<table>
<thead>
<tr>
<th>Type of disease</th>
<th>Number affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epilepsy</td>
<td>3</td>
</tr>
<tr>
<td>Asthma</td>
<td>1</td>
</tr>
<tr>
<td>Dermatological condition</td>
<td>1</td>
</tr>
<tr>
<td>Recurrent headaches</td>
<td>1</td>
</tr>
<tr>
<td>No chronic disease</td>
<td>2</td>
</tr>
</tbody>
</table>

Of the group who required healthcare once a month or less the presence and type of chronic disease is shown in table 3.

Table 3. Chronic disease prevalence among those with infrequent consultations

<table>
<thead>
<tr>
<th>Type of disease</th>
<th>Number affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epilepsy</td>
<td>3</td>
</tr>
<tr>
<td>Asthma</td>
<td>1</td>
</tr>
<tr>
<td>Dermatological condition</td>
<td>1</td>
</tr>
</tbody>
</table>

Utilization of health care

The health care facilities from which the study participants obtained health care is depicted in table 4.

Table 4. Utilization of health care

<table>
<thead>
<tr>
<th>Type of health care facility</th>
<th>Number using it</th>
</tr>
</thead>
<tbody>
<tr>
<td>General practices and private hospitals</td>
<td>25 (46.3%)</td>
</tr>
<tr>
<td>Government hospitals and clinics</td>
<td>24 (44.4%)</td>
</tr>
<tr>
<td>Private and government health care facilities</td>
<td>5 (9.3%)</td>
</tr>
</tbody>
</table>

They had to pay to utilize private health care facilities. Despite financial difficulties the majority of the participants said they preferred private health care facilities where they could be seen by the same doctor who would have more time for them and would understand their difficulties better. They also preferred to use the same pharmacy where the pharmacist knew them better than the dispensers and pharmacists in the crowded public health care settings. However the 7 epileptics received primary care as well as specialized care at government hospitals which provided health care and medicines free of charge. The better health care facilities and care provided for epilepsy and financial constrains were the reasons they mentioned for using the government hospitals. Among the 5 asthmatics 4 were receiving care in the private sector.

Medical consultations

52 (96.3%) of the participants were accompanied by an adult caregiver when going for medical consultations while only 3.7%, numerically 2 subjects were able to visit the doctor on their own. These two students were males studying in grade 13 (Figure 2). The study participants said they did not feel confident travelling to health care settings by themselves and that they faced negative experiences in travelling by public transport on the few occasions they have attempted to do so. Some buses did not stop for them and they did not know whether they were getting into the correct bus. Sometimes they could not get down at the correct locations even though co-travelers tried to help.
50% of those receiving care at government hospitals and 76% of those receiving care at general practitioners and private hospitals were given priority to enter the doctor's consultation room and obtain medicines at the pharmacy. When inquiry was made about negative experiences faced while in the waiting area, 70% of those who were not given priority stated that as a negative experience. The remaining 30% of them stated that they had long waiting times for consultations. A participant who had gone for a medical consultation not accompanied by a caregiver had once experienced waiting in the queue for 6-7 hours at a government clinic because people were entering the consultation room from out of the queue.

Among the students who believed that they were given priority at medical clinics, 2 had faced negative experiences. One stated that she felt that she was being humiliated by the patients in the waiting room and the other said that people were taking advantage of their visual disability and jumped the queue.

Overall 98.1% were happy with the care provided to them by doctors. 79.6% of students had no problems in making the doctor perceive their problem. Patients were able to make doctors understand by expressing their problems verbally, however in most instances it was the caregiver who explained the problem to the doctor while the students gave supplementary information and answered questions asked by the doctors.

Eleven (20.4%) had difficulties in making the doctor understand their problems. 4 of them attributed it to lack of time for the consultation while one student attributed it to the palate deformity he had which gave rise to speech difficulties. The rest were unable to attribute this communication problem to any specific cause.

Of the participants, only 72.2% believed that they received adequate information regarding the disease and the treatment while the rest thought that the information provided was inadequate. Students accompanied by caregivers stated that the information was usually given to the caregiver and not to them in most instances. 83.3% were usually happy about the answers they received for their questions. Of the participants, 16.7% said that opportunity was not given to them or their caregivers to ask questions (Table 5).

Seven epileptics were present in the study group of which 6 were on anti-epileptic drugs (AEDs). Three of them were free of fits currently while 4 of them kept getting fits despite treatment. Among the 7 epileptics of the study group only 1 student knew the names of the drug he was on. Two students stated that headache and nausea were side effects of AEDs while the remaining 5 were totally unaware of side effects of AEDs. None of them were aware of the importance of continuing the drugs despite absence of symptoms and thought it was safe to stop the drugs if they were free of fits. They stated that the parents and teachers were educated by doctors on what to do if fits occurred. 4 of the 7 epileptics were not satisfied by the answers provided by the doctors to their questions and 3 of 7 students thought that they were not properly informed by doctors regarding their condition.

Table 5. At medical consultations

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you accompanied by a caregiver for medical consultations?</td>
<td>96.3%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Are you happy with the care provided at consultations?</td>
<td>98.1%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Can you make the doctor perceive your problems at consultations?</td>
<td>79.6%</td>
<td>20.4%</td>
</tr>
<tr>
<td>Were you adequately informed by the doctors?</td>
<td>72.2%</td>
<td>27.8%</td>
</tr>
<tr>
<td>Were your questions satisfactorily answered?</td>
<td>83.3%</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

Among the 5 asthmatics in the study group, 3 had good control of their disease with less than one episode per month. Two of these three students were using on demand inhaled salbutamol while the other student used to get oral medications from a doctor once exacerbations occurred. Regular inhaled steroids were taken by two students: Of them, one took oral salbutamol tablets to relieve acute attacks while the other used a salbutamol inhaler. Of the 4 students who used inhalers, two used incorrect inhaler technique. None of them were well aware of the concept of relievers and preventers used in asthma. However the students on regular treatment knew the names of their drugs. Four of them stated that the information given by the doctor regarding the disease and treatment was inadequate.

Pharmacy

Almost all of them were accompanied by a caregiver when visiting the pharmacy. 55.6% felt that they were given priority at the pharmacy. Only in 60% of the instances verbal advice had been provided by the pharmacist.

53.3% stated that communication problems occurred at the pharmacy as they were unable to comprehend the advice given by the pharmacist due to their inability to visualize the drugs. Of those who stated that they got adequate information, majority were given verbal instructions by the pharmacist. Advice regarding drug
usage was given to the caregivers rather than to the patient in most instances making them feel left out (Table 6).

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were you given priority at the pharmacy?</td>
<td>55.6%</td>
<td>44.4%</td>
</tr>
<tr>
<td>Did the pharmacist provide verbal advice?</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>Were there communication problems at the pharmacy?</td>
<td>53.3%</td>
<td>46.7%</td>
</tr>
</tbody>
</table>

Consuming medications – problems and strategies

81.5% of the study population was provided external support by caregivers when they needed to use medicines. The tablets for consumption were given to them by parents when at home and the sick room staff of the institution when at school. 18.5% were competent to handle the use of medicines on their own (Table 7).

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you get external assistance when consuming medicine?</td>
<td>81.5%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Can you identify medicines on your own?</td>
<td>48%</td>
<td>52%</td>
</tr>
</tbody>
</table>

29.5% (13 out of 44) stated that they could identify and administer medicines on their own though they were supported. Among these 13 individuals, some had their own strategies to use medicines. One student revealed that he stored drugs in different shaped containers with the assistance of a person who could see, obtained advice on the regime verbally, memorized it and consumed medicines accordingly. Though he received support at the institute he had used this method at home. Another student identified pills based on tactile sensation, size and shape. 5 students claimed to be able to see some colours which aided identifying drugs when combined with tactile identification by sizes and shapes. 5 students identified drugs solely based on the tactile sensation.

Nine (18.5%) have used medicines on their own without or with minimal external support. All of them received verbal advice regarding drug regimes, which they memorized. They used tactile sensation to differentiate the shapes, textures and sizes of capsules and tablets.

Two students said that they identify pills based on the limited ability to identify colours. However they found it difficult to rely solely on the colour vision as they were unable to clearly differentiate shades particularly of light colours but could manage aided by the tactile sensation.

The four asthmatic students on inhalers were able to take their medication without external support. 2 used metered dose inhalers (MDI) as relievers and among the two using preventers one used a MDI while the other used a dry powder (DP) inhaler. The student using DP inhalers was able to insert the capsule into the device without external support. This student was also on MDI which he identified by its particular shape. However they needed assistance when using drugs other than their regular medication.

All participants who have attempted self administration of medicines stated that remembering instructions on how to take the medicines was a challenge since they could not read medication instructions and labels. Sometimes they forgot when to take the medicines or how much to take. All of them said that they have missed medicines at times or took the wrong dose by mistake. They also had a challenge taking medicines out of blister packs and bottles without spilling and dividing tablets accurately.

Discussion

This pilot study has brought to light that there is a considerable need for the use of medicines in visually disabled teenagers. Of them, 27.8% had chronic diseases. All the study participants had a need for medical consultations, to obtain medicines from the pharmacy, and to use medicines. There are many challenges faced by them during this process. The study has also disclosed some methods they use to overcome these challenges.

Our study revealed that visually disabled persons had challenges in accessing a doctor or a pharmacist due to personal issues such as lack of confidence and difficulty in finding their way without caretaker assistance. This has been reported in studies done in other countries as well and has been identified as an important aspect to be addressed to improve health care access for visually disabled patients.

High satisfaction rates (98%) regarding the medical care given was seen in the study group. This figure appears to be more than or equal to the study findings from developed countries. However this should be interpreted cautiously as our study group was a dependant population who were mostly being accompanied by caregivers to see doctors and to obtain medicines from the pharmacy.
This study has disclosed some aspects that need improvement in the health care settings. The staff in the waiting areas should be educated to assist the patients to see the doctors and the pharmacists in a timely manner without making them face negative experiences such as fellow patients jumping the queues. Another challenge highlighted by most of them was the communication issues with the doctors and the pharmacists. More than 90% of them were accompanied by caregivers to the pharmacy and to the doctor. Communication was predominantly between the health care provider and the caregiver while the study participants were not fully involved in communication and decision making. Similar experiences by visually disabled patients during ambulatory health care access have been reported from other countries as well. This may hinder development of skills in them necessary for effective use of healthcare. Doctors and pharmacists should be made aware of this finding; they should try their best to communicate directly with the patients.

In spite of the high satisfaction rates regarding care received from doctors majority of the chronic disease sufferers believed that the doctors failed to give them adequate health information and that their questions were not answered adequately. The blind epileptics and asthmatics had very poor knowledge about their disease and treatment in general. Some of them were not aware about their deficiency in knowledge. Hence special emphasis and attention should be given by the doctors to convey the necessary information in a suitable manner preferred by them.

Majority of the participants have experienced communication problems at pharmacies. Verbal advice regarding drug usage had been provided only in 60% of the cases. Therefore pharmacists should improve verbal communication with the patients and give the necessary information verbally since this is a very cost effective and simple method to help improve their understanding and ability to use medicines dispensed to them.

More than 80% needed assistance to follow a drug regimen. Using tactile sensation, using different shaped and sized containers to store different medications, and memorizing the drug regimen were methods used by some students. Similar methods have been identified among the blind population worldwide. However, these methods have their limitations and might give rise to errors in the use of medicines.

**Limitations**

The study is limited to a small number of visually disabled teenagers in a selected setting. As such the results may not reflect the overall situation in Sri Lanka. Furthermore most of them had assistance from caregivers and therefore their difficulties and experiences may not reflect those of visually disabled persons of an older age group who had less assistance. Despite these limitations the study provides valuable insight regarding this special group, that will help improve the practices of doctors, pharmacists and support staff at the different healthcare settings used by them and also in designing and conduct of future studies in this neglected area of research especially in the developing world.

**Conclusions**

The visually disabled teenagers who were studied had a high percentage of chronic disease and a greater requirement for health care to enable their use of medicines. They seemed to face many difficulties in accessing ambulatory health care and using medicines. They have adopted methods to overcome some difficulties they had in administering medicines but had many more challenges yet to be overcome.

**Acknowledgements**

We thank the Community Stream of the Faculty of Medicine, University of Colombo for giving us the opportunity to carry out the research project and facilitating the process. We thank the Social Services Department, Western Province, Sri Lanka and the Principal of the School for the Visually Disabled, Ratmalana, Sri Lanka for giving us permission for the study. We thank the teachers at the school, guardians of the students and the participants for their contributions to the study.

**References**


Aetiology of traumatic tympanic membrane perforation in Ratnapura

M C Perera1, M GPK Muruthaghapitiya2, K M S N Kalupahana2, U M A P Madalagama2, W E M P L Ekanayake2, M P A H Perera2

Sri Lankan Family Physician, 2016, 32, 98-100

Abstract

Introduction: Tympanic membrane perforation is a condition as old as the human species. It is a common presentation in an E.N.T. unit and a frequent cause of morbidity.

Objectives: The aim of the study is to profile the etiological factors of traumatic tympanic membrane perforation occurring in Ratnapura.

Method: A descriptive, prospective serial study was done at General Hospital Ratnapura. We analysed patients with tympanic membrane perforation during the study period of 6 months which started from 1st April 2015.

Results: Fifty two (52) cases of traumatic tympanic perforations were seen. There were 21 (40.4%) females and 31 (59.6%) males. The mean age of younger patients (<20 yrs) was 15 years (STD 4) and in adults (>=20 yrs) it was 35 yrs (STD 9.8). The commonest aetiology was due to blows to the ear (74.3%) and it commonly affects the left ear (80.8%) of the victim. The commonest symptom was hearing impairment (31%). Majority of the affected adults were females (51.4%) and the source of blow was by their husband (64.3%).

Conclusion and recommendations: Traumatic tympanic membrane perforation is a common presentation. Educating school going children and taking steps to change social attitudes against violence especially against women may help to reduce incidence of traumatic tympanic membrane perforation.

Introduction

Human’s tympanic membrane, is a thin, cone-shaped membrane that separates the external ear from the middle ear. It is an important component in increasing of sound energy transmission to the cochlear fluid relative to what would occur with a direct coupling of air to fluid. Tympanic membrane perforation is a condition as old as the human species1. It is a common presentation in an E.N.T. unit and a frequent cause of morbidity. Trauma is in the increase and is a burden to a developing country like Sri Lanka. Trauma patients consume more health care resources than heart and cancer patients combined and the incidence from trauma is on the increase.2,3 In this view it is important to identify, the etiological factors of traumatic tympanic membrane perforation so that authorities can take preventive action in curbing such incidents.

Objectives

The aim of the study is to profile the aetiological factors of traumatic tympanic membrane perforation occurring in patients attending the ENT Unit at General Hospital, Ratnapura.

Method

This descriptive, prospective serial study was done at General Hospital, Ratnapura. The study sample included patients getting admitted to the E.N.T. ward and visiting the clinic with a tympanic membrane perforation during the study period of 6 months which started from 1st April 2015. Only patients giving written consent were included in the study. The data was collected by medical officers using a questionnaire. Ethical clearance for the study was obtained from the National Institute of Health Sciences, Kalutara, Sri Lanka.

Results

The ENT unit had 2580 casualty admissions during this period inclusive of 52 cases of traumatic tympanic membrane perforations (TMP). These casualties consisted of 1 pre-school child (6 months to 4 yrs), 16 school aged and 35 adults (>20 years) (Table 1).

Table 1. Age distribution of patients with traumatic TM perforation

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;4 yrs</td>
<td>1 (1.9%)</td>
</tr>
<tr>
<td>4-20 yrs</td>
<td>16 (30.8%)</td>
</tr>
<tr>
<td>&gt;20 yrs</td>
<td>35 (67.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>52 (100%)</td>
</tr>
</tbody>
</table>

1 Consultant ENT, Head and Neck Surgeon,
2 Medical Officer, General Hospital, Ratnapura,
Sri Lanka.
There were 21 (40.4%) females and 31 (59.6%) males (Table 2). The main cause of TMP was assault by a blow to the ear 39 (75%) (Table 3). The presenting symptoms were hearing impairment 35 (31%), tinnitus 22 (19.5%) and feeling of fullness in the ear 25 (22.1%) (Table 4). In 42 (80.8%) of the cases the left ear was affected and in the rest 10 (19.2%) the right ear was involved. None had bilateral TMP.

Table 2. Age and sex distribution of patients with traumatic TM perforation

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20yrs</td>
<td>14 (82.4%)</td>
<td>3 (17.6 %)</td>
<td>17 (100%)</td>
</tr>
<tr>
<td>&gt;=20yrs</td>
<td>17 (48.6%)</td>
<td>18 (51.4%)</td>
<td>35 (100%)</td>
</tr>
</tbody>
</table>

Table 3. Aetiological profile of TM perforations

<table>
<thead>
<tr>
<th>Aetiology</th>
<th>频率（%）</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assault (Blow)</td>
<td>39 (75%)</td>
</tr>
<tr>
<td>Self-trauma</td>
<td>6 (11.5%)</td>
</tr>
<tr>
<td>Accidental trauma</td>
<td>7 (13.5%)</td>
</tr>
<tr>
<td>Total</td>
<td>52 (100%)</td>
</tr>
</tbody>
</table>

Table 4. Presenting complaints of the patients

<table>
<thead>
<tr>
<th>Presenting complaint</th>
<th>Frequency（%）</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bleeding</td>
<td>7 (6.2%)</td>
</tr>
<tr>
<td>Fullness</td>
<td>25 (22.1%)</td>
</tr>
<tr>
<td>Pain</td>
<td>21 (18.6%)</td>
</tr>
<tr>
<td>Tinnitus</td>
<td>22 (19.5%)</td>
</tr>
<tr>
<td>Vertigo</td>
<td>2 (1.8%)</td>
</tr>
<tr>
<td>Discharge from ear</td>
<td>1 (0.9%)</td>
</tr>
</tbody>
</table>

Table 5. Aetiology and sex in adults with TM perforations

<table>
<thead>
<tr>
<th>Sex</th>
<th>Aetiology</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Assault (blow)</td>
<td>Female 14 (40%)</td>
<td>1 (2.8%) 3 (8.6%)</td>
</tr>
<tr>
<td>Self-injury</td>
<td>Male 12 (34.3%)</td>
<td>3 (8.6%) 2 (5.7%)</td>
</tr>
<tr>
<td>Accidental</td>
<td>Total 26 (74.3%)</td>
<td>4 (11.4%) 5 (14.3%)</td>
</tr>
</tbody>
</table>

Table 6. Source of blow to ear in adults according to sex

<table>
<thead>
<tr>
<th>Source of blow</th>
<th>Frequency（%）</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spouse</td>
<td>Female 9 (64.3%)</td>
</tr>
<tr>
<td>Sibling</td>
<td>Male 2 (14.3%)</td>
</tr>
<tr>
<td>Known person (non-family)</td>
<td>Female 2 (14.3%)</td>
</tr>
<tr>
<td>Unknown person</td>
<td>Male 1 (7.1%)</td>
</tr>
<tr>
<td>Total</td>
<td>Female 14 (100%)</td>
</tr>
</tbody>
</table>

Discussion

Rupture of the tympanic membrane may be caused by changes in air pressure, by fluids or by solid objects. The change in pressure is the commonest cause of tympanic membrane perforation in this study and most of this was due to trauma to the ear due to blows by hand (75%). The less common pressure induced causes were accidental trauma (13.5%) due to tennis balls hitting the ear and one case due to sound of thunder. Self-injury (11.5%) although less common, was almost all due to the fact of using cotton buds to clear ear wax.

The mean age of younger patients (<20 yrs) was 15 years (STD 4) and in adults (>=20 yrs) it was 35 years (STD 9.8). In small and school going age (<20 yrs) the majority (82.4%) of TMP was in males. This could be due to their aggressive and active nature at this age. In adults (>=20 yrs) both males (48.6%) and females (51.4%) were equally affected. The aetiology of this was mainly blows to the ear (74.3%). In females the assailant in majority of these cases was the husband (64.3%) and occurred at
home and almost half (44%) of this incidence was related to the use of alcohol. Only 2 (14.3%) of the affected females were planning to go for legal action as the majority were scared of the consequences to their children due to such an action. The authors view is that this reflects only the tip of the ice burg, as many of the females after TMP following domestic violence tend to get treatment in the private sector, so that their numbers in state sector statistics are minimal.

The main presenting symptoms were hearing impairment (31%), fullness of the ear (22.1%), tinnitus (19.5%) and pain (18.6%). The involved ear was mainly the left (80.8%). This could be due to the fact that most assailants being right handed with the victims facing them so that their left ear becomes more vulnerable.

TMP usually occur in healthy members in the community and the general prognosis is excellent. The main factors which prevent TMP to heal are large tissue loss and local infection. In many cases no active intervention is needed. Masterly inactivity and educating the patient to keep the ear dry by preventing water from entering the ear canal will help in getting a good outcome. If the perforation fails to close spontaneously in 3-6 months surgical closure is indicated.

Conclusions

Traumatic tympanic membrane perforation is a common presentation at the ENT unit Ratnapura Hospital. It affects mainly the school age males and adults of both sexes. The commonest aetiology is due to blows to the ear and it commonly affects the left ear of the victim. The commonest symptom is hearing impairment. The incidence of tympanic membrane perforation in adult females is higher, than in males and is due to violence by the husband in the majority and occurs at home.

Recommendations

Educating school going children and taking steps to change social attitude against violence especially against women and taking punitive action against the assailant may help to reduce incidence of traumatic tympanic membrane perforation.

TMP generally has a good prognosis. Masterly inactivity and educating the patient to keep the ear dry by preventing water from entering the ear canal will help in getting a good outcome. The patient needs referral if the perforation fails to close spontaneously in 3-6 months.

References

Prescribing with care
Leela de A Karunarathne1

Sri Lankan Family Physician, 2016, 32, 101-104

We have joined hands across the shores and met at this beautiful venue to share our thoughts, on how we could enhance the care we provide for people who seek help at the primary level of health care.

The consultation
The essential unit of medical practice is the occasion on which, in the intimacy of the consultation room or sick room, a person who is ill or believes himself to be ill, seeks the advice of a doctor whom he trusts. This is the consultation and all else in the practice of medicine derives from it.

James Spence

This is a description of the scenario in which people receive care from a family doctor and it is the most intimate of doctor-patient interactions. Ideally, at a consultation in family practice, the patient is already known to the doctor and the patient’s personal and health related data are on record.

A consultation usually begins with a greeting of welcome to the patient. When the patient presents the problem, the doctor should respond by listening attentively, and then ask relevant open ended questions. Listening and careful observation are important and may reveal the views and expectations of the patient, and perhaps the reason for consulting at that moment of time.

At a consultation in family practice the nature of the problem presented is often apparent, but the doctor should not rush to ask a few questions and hand over a prescription with the intention of ending the consultation quickly. A caring family doctor should, in an unhurried manner, allow the patient to relate the story of the presenting problem, its onset and progress, and find out whether self care has been tried. With a calm and reassuring manner the doctor should proceed to do a relevant clinical examination, and request any laboratory investigation only if useful, for making a diagnosis or for management.

Health problems presented to a family doctor could be managed in the patient’s home environment, with the exception of a few. A small percentage may be emergencies or problems needing referral to specialists in medical disciplines of the higher levels of health care, for their opinion and/ or services.

Management of a patient in family practice however should not be limited to the problem presented. The family doctor should inquire for any other problems, specially co-morbidity, and manage the patient holistically. If health screening is indicated it should be included in the plan for management. When a plan is made to manage a patient in the home environment there are several factors that the doctor must consider.

Factors to be considered in patient management
Home and family background
Life style
Beliefs and expectations

A family doctor should always make the plan of management in collaboration with the patient or carer, after a thorough discussion. If the doctor lays down the plan authoritatively without discussion and negotiation, patient compliance cannot be expected.

Patient management in family practice almost always includes prescribing. This has been a tradition in family practice, patients expect a prescription, and it is no secret that the physician derives satisfaction.

What does prescribing mean?

Prescribing
To provide clear, explicit and authoritative directions or guidance to those who are supposed to follow it.

Business Dictionary.com

1 Board Certified Family Physician.
A family doctor’s prescription usually includes one or more pharmacological preparations and other therapeutic measures, as I have shown here.

**Pharmacological preparations**
- For preventing disease
- To promote and maintain health
- To relieve symptoms
- To cure specific conditions
- Control progress of NCDs;
- As replacement therapy

**Non-pharmacological therapy**
- Rest
- Physical exercise
- Diet
- Life style modification
- Physiotherapy (specific/non specific)
- Counseling

It is therefore a great responsibility for the doctor, specially when a patient presents with symptoms/signs of undifferentiated illness, with no diagnosis in sight, to prescribe with care.

**What is Care?**

**Care** is the process of protecting someone and providing what that person needs.

*Cambridge Dictionary online*

What does ‘prescribing with care’ mean to a family doctor? What should the doctor do?

**Prescribing with care**
- Should be rational
- Should be appropriate for the individual
- Should be effective but safe
- Life style modification
- Side/adverse effects should be minimal
- Must be economical

**A family doctor should prescribe rationally**

Medication that is prescribed should be appropriate for the nature of the problem. If it is for a self limiting condition only symptom relief may be necessary, while a specific condition may need anti-inflammatory medication or antibiotics.

The dose of medication and the frequency should meet the individual patient’s requirements and should be prescribed for an adequate period of time. The form of the medication prescribed should be suitable for the individual patient. For example a very young child or a bedridden patient may not be able to swallow tablets; and there are inherent dangers too.

When prescribing pharmacological drugs the patient’s age and physical condition must be taken into consideration, not forgetting pregnant women, breast feeding mothers, neonates and patients on concurrent medication or chemotherapy.

*The World Health Organization has reported that four small children died by choking on albendazole tablets during a de-worming campaign in Ethiopia in 2007.*

A family doctor must also look for social factors in the person’s background and find out the reason for consulting at that moment of time. Social factors that I have shown are bound to influence a doctor’s decision.

**Social factors that may influence the decision to prescribe**
- University student sitting final examination
- Business executive due to travel overseas, tonight
- Getting married tomorrow
- 5 year old with a sibling hospitalized with pneumonia

All pharmaceutical preparations used should be effective and safe. Selecting drugs that have minimal side/adverse effects will allow patients to be comfortable during therapy and prevent non-compliance. A family doctor should be guided by national and international drug information publications and use one’s own experience and that of colleagues for making a choice when prescribing.

It is also very important that the doctor’s prescription is economical for the patient. It would not only avoid waste, but also prevent the possibility of effective medication turning out to be inefficient in the patient’s hands. This
could happen when a patient faces financial constraints, and is unable to meet the cost of the doctor’s expensive taste and lavish prescribing. In such circumstances a patient may decide not to purchase all the items or would buy less quantity or even depend on the pharmacist to change the prescription and dispense cheaper alternatives which may be substandard.

Sometimes, a patient may even forego supportive nutritional needs during an illness to buy the drugs prescribed in the overloaded prescription.

Medication prescribed by a doctor should be effective and known to be safe. A wise family doctor should rely on a compendium of time tested pharmacological preparations, and refrain from indulging in a multiplicity of new drugs that are much advertised.

It is an obligation for a family doctor, to select drugs with least side/adverse effects and not add to the discomfort of an already ailing patient.

Poly pharmacy should be avoided and it should not be a problem for a family doctor who provides primary medical care, to prescribe only a very limited number of items. A lengthy prescription will be confusing to the patient, who will find it difficult to follow multiple directions.

It is a wrong assumption that a long list on a prescription would enhance the doctor’s image.

Dr. Stanley De Silva a pediatrician, our teacher in late 1950’s, once said “You should not use machine guns to kill mosquitoes.”

Prescribing should be for the problem and the person. When a prescription is given for relief of symptoms such as pain or fever, simple analgesics or antipyretics should be used. When it is necessary to cure an infection, the first line antibiotics are the most appropriate to begin with, in primary medical care. Although these have been deemed ineffective by those who prescribe irrationally, they are effective in the hands of rational prescribers.

Trying out each new antibiotic which is produced by the pharmaceutical industry is a dangerous game for a family doctor to play. If these valuable drugs are used irrationally, drug resistant microorganisms could emerge and render them ineffective.

When prescribing the dose, frequency and duration for a pharmacological drug the doctor must follow recommendations given in reliable drug information publications. Prescribing a higher dose or increasing the frequency will only add to side/adverse effects.

A family doctor should prescribe only when positively indicated. A careful clinical assessment would help the doctor to decide whether it is necessary to prescribe pharmacological drugs. In many instances the patient may need only advice for self care, but it must be convincing, and given with words of reassurance

Guidelines for prescribing

- Prescribe only when positively indicated.
- Prescribe effective medication known to be safe.
- Select drugs with least side/adverse effects.
- Avoid poly pharmacy.
- Prescribe appropriately for the problem and the person.
- Do not prescribe to please the patient or save consultation time.
- Write a prescription legibly.
- Use a standard format for prescribing.
- Give clear instructions and information to patient/carer.
- Reveal the plan for review.

A family doctor should prescribe only when positively indicated. A careful clinical assessment would help the doctor to decide whether it is necessary to prescribe pharmacological drugs. In many instances the patient may need only advice for self care, but it must be convincing, and given with words of reassurance
A doctor’s prescription should be legible. The purpose of the prescription is lost unless it is readable. The patient will not be aware of what has been prescribed, and the pharmacist could make a mistake. Even the doctor may need time to read it, at the next consultation. Typing may be a solution.

A standard format should be used by a doctor when prescribing. Every single item I have shown is important enough to be included in a prescription form which should be a hallmark of the doctor’s professionalism.

A patient has a right to know the good effects as well as the side/adverse effects which may be experienced. It is not correct to assume these would be imagined, and not tell the patient. It would all depend on how the doctor communicates with the patient.

A patient should be informed, about the form of the medication that would be dispensed, and whether it is for oral intake parenteral administration or topical use. If any medication dispensed needs to be reconstituted before use, clear instructions must be given, and a method of storage advised. The doctor should also make sure that the patient knows to measure liquid preparations accurately.

A family doctor should remember that reviewing a patient is necessary, to monitor progress; the patient’s response to therapy; adverse effects; compliance; and the need to continue or change. A family doctor however should discuss the plan for review with the patient and make it acceptable, instead of laying it down authoritatively.

A standard format for prescribing

- name, address and telephone no of the practice
- date of prescribing
- name and age of patient
- pharmacological drugs prescribed by generic name, and a brand stated when preferred
- dose, frequency and duration for each drug, and any relation to meals
- quantity to be dispensed
- an instruction when repeating is required
- name and signature of prescriber

Clear instruction and information about all that is prescribed must be given verbally to a patient/carer who should also be encouraged to read the prescription. The patient/carer should be made aware of the effects of the pharmacological drugs prescribed.

When a family doctor interacts with a patient, showing interest and giving time, the care and concern shown by the doctor is comforting and has a positive therapeutic effect on the patient.

My colleagues and friends

Finally let me tell you why a family doctor should manage patients with care and concern specially in prescribing.
Enabling patients with hearing or vision loss to use medicines independently: Based on Sri Lankan evidence

Chamari Weeraratne

Sri Lankan Family Physician, 2016, 32, 105-109

A series of pioneering studies in Sri Lanka that we undertook during the past few years have disclosed that patients with low vision or hearing faced many difficulties at the General Practices (GP), pharmacies and in independent self-administering of medicines. Despite the common belief that such patients are dependent on caregivers, our studies have disclosed that some of them used medicines on their own and some had the need and the attitude to be independent. Based on the study findings we explored methods to overcome the identified difficulties.

We also developed and tested some methods suitable for use in the local settings including medicine containers that indicate dose and frequency of a particular medicine by tactile clues (for patients with vision loss) and by symbols, pictograms and visual sequence maps (for patients with hearing loss). The ensuing discussion, suggestions and recommendations are based mainly on the experience from the local studies.

Enabling hearing disabled patients to use medicines

The doctor’s awareness of the patient’s level of disability and abilities is very important: One size does not fit all. There are two main categories of hearing disabled patients.

1. **Deaf people** (born with hearing disability or develops deafness soon after) consider themselves as a different community with a different culture (Deaf culture). They do not consider their lack of hearing as a disability. In looking after deaf patients the doctors should understand this. Some doctors think that communicating with deaf patients is not a problem because written information and instructions can be provided. However, our studies have revealed that the ability of majority of deaf participants to use written information was very poor. They could not extract the concepts and meanings of even the simplest of written instructions such as “take one tablet three times a day with meals”. This was seen in studies done in other countries including the developed. Since the first language of deaf persons was sign language all other languages were foreign to them. To complicate matters further, in Sri Lanka, there were different forms of sign languages in use; people who have not attended special schools for the deaf used arbitrary signing that was poorly understood even by other deaf people.

2. **Other hearing impaired patients** who developed the disability later in life. These patients used a variety of ways to communicate. They may not know sign language. They may be able to read written information and to lip read.

**How do we enable deaf / hearing impaired patients to use medicines?**

**At out-patients settings:** Encourage patients to inform the doctors, pharmacists and other support staff regarding any hearing impairment they have. Use posters, screen messages etc. at the health care setting instructing the patients to do so. Video clip in sign language can also be displayed giving important messages and instructions to deaf patients.

The patients should be allowed to book clinic appointments by text messages or email. In the waiting room staff should assist patient to go in when his turn comes since he is unable to here the numbers being called.

Doctor should highlight the hearing impairment in the patient’s records to help remember the patient’s disability during the follow up visits. As disclosed by our studies usually the patients were accompanied by relatives who knew sign language and helped during the consultation. However, at times the relatives found it difficult to convey the correct instructions and advice given by the doctors to the deaf patient due to lack of some signs to convey medicine related information. Furthermore, the relatives’ incomplete understanding of the medicine instructions given by the doctor lead to medication errors. To improve communication the patient should be given more time and freedom during the consultation. Continuity of care (seeing the same doctor during the follow up visits) also helps.

---

1 Specialist Physician and Senior Lecturer in Pharmacology, Faculty of Medicine, University of Colombo, Sri Lanka.
How to communicate with hearing disabled patients

Hearing-impaired people use various methods to communicate. These include:

- Lip-reading
- Signing
- Pen and paper

Deaf-blind people (who are both deaf as well as blind) may use additional methods including:

- Deaf-blind manual alphabet or ‘block’ alphabet (methods of spelling words on to the palm of the hand)
- Hands-on signing.
- Visual frame signing

There are various other techniques, depending on the level of visual or hearing impairment. Therefore to communicate medicines instructions effectively to your patient you should first assess the level of disability and abilities and use the patient’s preferred method – e.g. lip-reading, sign language interpreter, or pen and paper.

Look at the patient while speaking and listening. Remember that your face is an essential communication tool. For lip-readers, face the patient in good light. Speak clearly but not too slowly. Don’t exaggerate your speech or shout (this distorts lip movements). Don’t look at the computer while talking. Back up the consultation with written material such as patient information leaflets in simple language.

Doctors and pharmacists should work together to enable safe and effective medicine use in deaf/hearing impaired patients. They should encourage these patients to improve their ability to communication with hearing aids.

Using pictograms and visual sequence maps to convey instructions on medicine use

These are examples of some pictograms and visual sequence maps developed and used in Sri Lanka to convey basic instructions on administering medicines to deaf persons. More than 80% of our study participants were able to understand the instructions conveyed by these and therefore we recommend this method as a useful aid in communicating more effectively with deaf/hearing impaired patients. These are especially useful to overcome the communication barrier posed by hearing impairment in a background where health professionals lack understanding of sign language and do not know how to use it.

Example: The visual sequence maps in Figure 1 tells the patient to take 2 capsules after meals in the morning, noon and night.

Containers that are self explanatory

Containers developed for the visually disabled patients are also effective to convey medicines instructions to hearing disabled patients since they can look at the containers and use it as a memory and instruction aid in administering the different medicines.

Example: The container in figure 2 indicates that the medicine has to be taken 3 times a day by the 3 rubber bands around the container. It indicates the dose by the number of the buttons attached to the particular rubber band. This container conveys the following instruction: “take one tablet in the morning, 2 tablets at noon and one tablet at night”.
How do we enable our visually disabled patients to use medicines?

Using medicines safely and effectively is a challenge for visually disabled patients. Studies in Sri Lanka and abroad indicate that they have issues in adherence to the medications prescribed and faced medicine related mishaps.

The main challenges they had to using medicines as identified by local and foreign studies were:

1. accessing different healthcare settings and overcoming physical barriers
2. accessing information on medicines they used
3. in self-administration of medicines.

How to improve access to different health care settings and help them overcome physical barriers

The doctors, staff and other patients should develop a caring attitude and awareness regarding the issues they have in this regard. The staff at the GP settings, hospitals and pharmacies should be educated and trained to assist such patients in the waiting areas, queues etc. Patients in our studies have highlighted the need for awareness in the doctors, pharmacists, receptionists and other patients regarding their abilities and limitations. They were disappointed when other patients overtook them in the queues taking advantage of their vision loss and were reluctant to assist them. Some sighted persons tried to help them overcome physical barriers such as doorways, steps etc but mostly gave non-specific and poor directions leading to accidents, difficulties and frustrations.

How to improve access to medicines information

They needed specific and general medicine information on the medicines they were prescribed. They preferred doctors to provide them with the necessary information than the pharmacists. Patients have different levels of visual impairment and doctors should have several options available to deliver the necessary information.

Giving information verbally

This is the main method doctors should use. Patients in our studies have expressed their displeasure at doctors talking mainly with their caregivers ignoring them and leaving them out of the conversation during medical consultations. Therefore doctors should speak with the patient directly as much as possible and verbalize information and instructions on medicines prescribed.

Written information for partially sighted patients

If the patient has some sight and can read larger print he should be advised to use a magnifier.

The doctor should check the font size that the patient can see and provide information material using it. A photocopier or a printer can be used to enlarge information material.

Recording information

Many local patients had phones or other audio recording devices such as cassette recorders; some had computer skills and could use audio CDs and flash drives. Therefore health professionals could record the necessary instructions and information on medicines for them depending on their preferences and ability to use them.

Emailing information

Sending medicines information by email can be used for those patients who have software that turns text into speech or Braille.

Digital assistive information technology (DAISY)

Most educated visually disabled persons in Sri Lanka used this special software technology to access information. Information material on medicines can be recorded using this technology by the keen doctors. Sri Lanka council for the Blind and University of Colombo are some places where support could be obtained to produce information material using this technology.

Braille

Information leaflets could be printed in Braille for those who know how to access them. Facilities for such printing are available at the Sri Lanka Council for the Blind, University of Colombo etc. However, in Sri Lanka most patients cannot read English Braille. Therefore translating prescription labels and product information leaflets to English Braille is of very limited use. Some of them use Sinhala Braille whereas others use Tamil Braille. Some have not learnt how to use Braille. Health professionals should be aware of this.

Medicine help line

Most patients had mobile phones and land phones. The participants of our studies liked to receive continued medicines information and instructions from the doctor by phone as and when necessary.

How to overcome barriers to self-administration of medicines

Patients with vision loss have many challenges in using medicines independently. They could not remember the instructions given by the doctors and pharmacists on taking medicines; found it difficult to remember the times to take medicines; could not read the prescription labels and information sheets; could not identify individual medicine containers; could not identify medications and...
measure and take correct dose of a medication. They tried to overcome these limitations by self devised methods some of which were found to be unsuitable and were even a threat to their health²,³.

There are methods and assistive devices in developed countries to help patients with visual impairment take medicines safely and effectively⁴. However most of these devices were not available and affordable to visually impaired patients living in the developing countries. To remind the time to take medicines they should be encouraged to use a talking wrist watch provided by Sri Lanka Council for the blind and other charity organizations.

We have studied several assistive devices in the local setting to overcome some of the above mentioned difficulties in self administering medicines⁴. Containers with different shapes, sizes and textures were recognized by the participants with ease. Color coded rings and caps helped differentiate medicine containers by partially sighted participants. We studied several medicine containers providing instructions on taking medicines via tactile clues (Figure 3). The main advantages of these containers are the simplicity of their design and the ability to be prepared using low cost material readily available in their homes.

In figure 3, the three elastic bands around the container indicate morning, mid day and night from the lid end of the container respectively. The number of buttons stitched to the bands indicates the number of tablets to be taken at each time.

Dropping, spilling and loosing medicines during oral administration was an issue for most of them. To overcome this, patients should be advised to sit at a table and keep their pill boxes on a tray with raised edges. They should open the lids and take pills out holding the container over the tray. They should open one container at a time, take the medicine out, close it and put it outside the tray so that they would not accidentally take an overdose of the same medicines.

Measuring liquid medicines were also a great challenge for them. To measure liquid medicines without spilling, patient should be educated to store the medicine in a container with a wide mouth. The container should be placed on a tray when measuring the liquid. A measuring syringe or dropper with the correct volume to be measured should be used.

**Recommendations and way forward**

The doctors and other health professionals should develop an active interest to improve the situation. The patients and the caregivers should be actively involved in the process towards developing a better system.

**References**


Enabling patients with hearing or vision loss to use medicines independently


Medication errors are a threat to patient safety. They occur when specified standards are not attained during the treatment process, which includes prescribing, compounding, dispensing, and medicines administration. It must be emphasized that ‘Medication’ errors and ‘Medical errors’ are not synonyms. Medication errors are only one component of medical errors and includes failures in the use of medicines. They do not involve errors in diagnosis or errors in treatment decisions. Medication errors can affect patient safety and cause extra burden to healthcare costs. They are known to increase the length of stay in hospitals, cause permanent disability or even death to patients. There are numerous incidents of patients who died due to medication errors, and 1000s of ‘near-misses’ where patients had a narrow escape. Unfortunately not much priority is given towards reducing medication errors in Sri Lanka.

Medication errors may be committed by prescribers, pharmacists, nurses and even by patients. However they are not intentional and is always coupled with a weakness in the system. Hence system improvement is encouraged to minimize these unfortunate but preventable incidents. A major system drawback concerning the pharmacist is the prescription.

The prescription is a very important document used by prescribers to communicate with other healthcare professionals such as pharmacists and nurses. Especially in the community setting, the therapeutic goals of a prescriber are achieved only if the medicines are correctly dispensed by the pharmacist. If wrong medicines are dispensed, the patient will be directly harmed. Therefore the prescription needs to be complete, accurate and clear.

Illegibility of prescriptions is a major problem associated with hand-written prescriptions. Reading and interpreting hand-written prescriptions has become a very challenging task to the pharmacist in Sri Lanka. Most prescriptions that reach the pharmacist are illegible, incomplete and contains unapproved and unclear abbreviations. Among 812 prescriptions, one fourth of prescriptions written by private medical practitioners in Galle district, Sri Lanka were found to be illegible. 95% of hospital pharmacists in a Teaching Hospital in Sri Lanka reported illegibility of prescriptions as a cause of medication error. Illegible prescriptions may be mis-read or mis-interpreted by the pharmacist. Illegible medicine names cause frequent confusion to the pharmacists. Especially look-alike medicine names such as carbamazepine and carbimazole; chlorpromazine and chlorpropamide. Not only the name, but the strength, frequency and duration of the medicine could also be incorrectly interpreted by the pharmacists if the prescription is illegible. These types of medication errors are detrimental to patients. In Sri Lanka, it is difficult for a pharmacist to contact the prescriber directly to clarify ambiguity in prescriptions. Pharmacists are always advised to refrain from dispensing unclear prescriptions, but this in turn would inconvenience patients. Hence it is often found that pharmacists guess what is scribbled on a prescription based on their experience. Prescribers should be aware of this problem and write clear and legible prescriptions. Typed or printed prescriptions are safer than handwritten prescriptions.

The use of error-prone abbreviations and unapproved abbreviations in the prescription could also cause problems in interpreting prescriptions. Safety organizations worldwide advise on avoiding error-prone abbreviations as they are likely to be misinterpreted. There is also a tendency for practitioners to use unapproved abbreviations for their convenience which may be unknown to other healthcare professionals. Adding to the confusion, some unapproved abbreviations have more than one meaning, while some medical terms are expressed using multiple abbreviations. Inappropriate use of abbreviations have been reported in Sri Lanka, both in the hospital and community settings. Patients have been harmed due to this malpractice. Prescribers need to be mindful of this danger and use only accepted abbreviations when prescribing.
Prescriptions need to contain a minimum set of essential information for pharmacists and nurses to interpret them correctly. Prescriptions have been reported to be incomplete in Sri Lanka which is a serious problem, especially in pediatric prescriptions. Some prescriptions lack dosing instruction which is essential for accurate dispensing. The date is essentially needed to assess the legality of the prescription and to discourage prescription misuse by patients. Prescribers need to ensure all essential information are entered in the prescription for pharmacists to assess legality and appropriateness of prescriptions before dispensing.

Medication reconciliation is an important step by the prescriber to improve the appropriateness of prescriptions. It is often found that patients obtain healthcare services from multiple settings and there is always a chance that new medications introduced, medications omitted and changes to medication doses are miscommunicated between the different settings. Medication reconciliation by the prescriber will help to minimize such errors. On receipt of the discharge prescription from hospital, the general practitioners (GPs) can compare the medication history of the patient with the discharge medicines provided by the hospital, identify changes and update the patient’s records. It also happens that some patients who come to GPs only disclose the presenting complaint and not other long term medical problems or medicines taken by them. Lack of medication reconciliation may cause the GP to miss treating these conditions, duplicate medications or prescribe interacting medicines. Four integral steps in the medication reconciliation process can help to overcome this problem.

Step 1: Obtaining a thorough medication history.
Step 2: Confirming the accuracy of the history.
Step 3: Reconcile history with prescribed medicines.
Step 4: Supply accurate and adequate medicines information.

In many developed countries, medication reconciliation is done by a clinical pharmacist at the hospital. However, in the community, clinical pharmacy services may not be available and medication reconciliation becomes the sole responsibility of the general practitioner.

In conclusion, medication errors are a preventable threat to patient safety. Prescribers can contribute to minimize prescribing, dispensing and drug administration errors by writing legible, clear and complete prescriptions, and confirming the appropriateness of prescription through a medication reconciliation process.

References

Advances in primary care strengthening in Sri Lanka in the state led primary care system

Susie Perera

*Sri Lankan Family Physician, 2016, 32, 112-116

Abstract

**Background:** The state lead primary care in Sri Lanka consists of community health services that focus on preventive and promotive health care and a large network of curative care institutions served by non specialist doctors. The community health services is accountable for population health and a Medical Officer of Health (MOH) is accountable for a defined population in a divisional secretariat area. The curative health services comprise of 970 health institutions that are Divisional hospitals (providing both in patient and out patient care) and Primary Medical Care Units that provide only out patient care. Currently they are not responsible for a defined catchment population. Patients choose to seek care at an institution of their choice and considerable bypassing occurs due to lack of essential facilities and emergency care at primary level.

**Methodology and results:** The Policy Analysis and Development Unit of the Ministry of Health undertook an assessment of primary level curative facilities and their capacities to provide essential and comprehensive primary care for chronic non communicable diseases which is personalized, extended to family and provides continuity of care that will prevent adverse outcomes.

A two phase pilot project of developmental nature has lead to the identification of several tools and further interventions to strengthen the primary curative care services. A personal health record, lifestyle modification tools, essential drug list for management of chronic NCDs, list of basic laboratory tests, basic emergency care guidelines, in-service training program for post intern doctors deployed in primary care, supervision tool to be used by provincial managers are some of these. A competency framework to strengthen undergraduate medical education focusing on primary care is also developed. The second phase of the pilot has lead to the identification of a model of care known as "shared care cluster system". A specialist hospital together with surrounding primary care institutions consist of the cluster. It forms a referral unit for shared care. Health institutions will be mapped into clusters using a GIS tool.

Policy coherence and implementation – current National Government policy favors strengthening of primary care. More doctors are needed to be deployed in primary care where they can be assigned a defined population.

**Current state of provision of primary care**

Health care in Sri Lanka is delivered through the government health services and through private health providers. For out patient care the share of care is almost equally distributed, indicating that primary care would be equally provided by these two providers.

<table>
<thead>
<tr>
<th></th>
<th>Government sector (public)</th>
<th>Private sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitalizations</td>
<td>90 - 95%</td>
<td>5%</td>
</tr>
<tr>
<td>Out patient care</td>
<td>52 %</td>
<td>48%</td>
</tr>
</tbody>
</table>

The dominant overall provider of health care in Sri Lanka is the Government with hospitalizations being provided for mainly through the government system.

Who are the primary care providers in Sri Lanka?

The health service delivery structure in Sri Lanka can be considered as a three tiered pyramidal (refer diagram below) with community health services as the base.

An important feature is that there is no gate keeping function as such and patients have the choice to visit any health provider at any level of care for curative services.
According to the government 3 tiered structure one could assume that primary care or first contact care is provided both at community service level and through the hospital network. By definition primary level of hospitals would be hospitals that are managed by non specialist doctors in Divisional hospitals and in primary medical care units. The private sector widely offers primary care services through private full time GPs, other medical officers who are engaged in dual practice in both public and private sector and by specialists, with limited gate keeping, being exercised only by some specialists. Hence a large number of patients would access specialists of different types for primary care needs as they choose.
The service gap in context of changing healthcare needs

The health care burden has changed from a scenario of communicable diseases and maternal and child health to chronic non communicable diseases, accidents and emergencies, elderly and rehabilitation care and challenges due to mental health.

As the health system evolved during a time when communicable diseases and maternal and child health challenges were the main stay, the Policy Analysis and Development Unit of Ministry of Health during the period 2009-2011 undertook a series of reviews, specially focusing on primary care.

The primary level health services had expanded over time without clearly addressing the evolving health burden, it was timely to see how rational the services were to manage more chronic conditions.

Health care utilization trends by level of hospital were observed.

A random sample survey of health facilities at all levels of care were done to assess availability of basic equipment, laboratory tests in 2010. A separate study was done on Estate hospitals managed by the Government. Both studies revealed that basic equipment and laboratory tests needed at primary care level were insufficient.

A study that included all hospitals in district of Galle revealed that patients actually preferred to obtain care at the closest hospital to their residence. They would generally bypass closest facility depending on perceived severity of their illness. They preferred hospitalization in larger specialized care hospitals due to perceived lack of care in primary level hospitals. Shortages of medicines and laboratory tests were cited as reasons for bypassing even for ambulatory care.

Rapid assessments of staff in both community health services and in curative hospitals in pilot hospitals in phase one was conducted for the level of knowledge on risk factors for chronic NCDs. It was found that significant gaps existed in their knowledge on risk factors and based on this guidance that could be offered on lifestyle change had limitations.

A similar assessment was done for level of knowledge of patients attending medical clinics for chronic NCD. Although these patients had been attending medical clinics their level of knowledge and practices related to risk factors were unsatisfactory.

Further to these observational studies of outpatient service dynamics were carried out.

It became evident that primary level hospitals were underutilized. They lacked basic facilities and a conducive environment to work, essential medicines were lacking and there was a need for standard guidelines for management of NCDs.

It was as if chronic NCDs were being managed in the same style of management as acute care needs without much attention to needs for continuity of care with an objective of preventing adverse outcomes and prevention extended to families.

Most often patients with NCDs had never had proper guidance or counseling in lifestyle change apart from the few minutes consultation, although they would come regularly to the clinic.

Development pilot

In 2010 the Ministry of Health took a decision to conduct a pilot study with few interventions to strengthen primary care. It consisted of two phases. In Phase one, 5 primary level institutions in three districts were selected.

- The pilot was of ‘development nature’ where experience gained through few interventions such as making essential drugs available, introducing a personal health record, awareness of staff on NCDs and lifestyle guidance sessions.
- The tools and processes were further improved with the feedback from implementation.
- It was noted that drug supply monitoring of primary level institutions was not regularized and primary level institutions were rarely supervised.

Three situations needed to be addressed
1. Changing attitudes and practices of health staff to ensure personalized, family centred care ensuring continuity of care, especially of medical officers was difficult to achieve through inservice training of short durations and through functioning in the present out patient model of care.

As large numbers of medical officers needed to be reoriented we conducted training programs for post intern doctors who had been posted to primary care institutions. This was done for 4 consecutive years.

The impact of this training on the health system was minimal without changing the service model.

It was also impractical to be doing this. What would be more appropriate is to make changes in the medical undergraduate curriculum. This is what we did
subsequently through involvement of all medical faculties in Sri Lanka where a competency framework was developed to guide improvements to medical curriculum.

The Ministry of health being the main employer of medical graduates has requested the UGC to make this change.

2. Improving care in one primary hospital had the effect of attracting patients from nearby similar level hospitals.

This lead to the idea of the second phase where changes were to be implemented throughout a district.

3. It was realized that closer links between primary level institution and the specialist hospital was needed.

Referral institution too needed to be strengthened where specialists supported primary care.

Therefore changes to referral centre or the base hospital was needed to support the primary level specialists. The confidence and understanding for shared care of patients between specialists and primary care doctors was needed.

Sri Lanka has a unique opportunity to make use of the existing facilities and human resource to remodel, retool primary care services.

**The shared care cluster model**

The Shared Care Cluster model is based on a functional arrangement of existing facilities. A cluster is a unit where a specialist care institute functioning as the apex hospital providing general specialties of care will be considered together with its surrounding primary care curative institutions. i.e. (divisional and primary medical care units.

A reform to reorganize health care delivery for greater efficiency and effectiveness – Shared care cluster model

The objectives of the shared care cluster model is

(a) to provide universal access to continuing care making the best use of the existing network of institutions with optimum use of resources

(b) to bring about a system of accountability for care as a shared care cluster will have its defined catchment area.

It introduces the need for care accountability, performance monitoring. A similarity that can be followed from the community health services in Sri Lanka where a Medical Officer of Health and the public health staff are all accountable for defined population within geographical boundaries. In the case of primary care hospitals, more doctors can be appointed and grama niladhari areas amounting to population of 5000 can be allocated to one doctor in primary care to provide holistic, family centred care.

**Policy direction**

Over two decades the key policy direction has been development of specialized care throughout the country. It was a good decision but it has had an effect of attracting more patients to the larger facilities. Skewed distribution of allocation towards specialized care where line ministry is responsible has seen a gradual deterioration of primary care facilities. The Sri lankan model of care was noted for its high efficiency but continued expansion of specialist care without the support of quality primary care has brought in inefficiency into the health system.

In the preparatory phase for scaling up, several key decisions are being made which comes from the experience of the development pilot and other pilot projects that have taken place. These are

- Essential drugs to be made in all hospitals with special monitoring of its availability at primary level.
- NCD management guidelines to provide standard care across primary care hospitals.
- Lifestyle guidance.
- Emergency care strengthening.
- Undergraduate medical curriculum reforms.
- More funds for infrastructure improvements for primary care institutions including better residential facilities.
- Supervision guidelines.
- Personal health record for all.
- Defining catchment areas and assigning of GN areas to one MOH.
National government health policy coherent with the reforms

- The Ministry of Health is to carry out island wide clustering of institutions using GIS tool this year.
- Job descriptions for doctors in primary care.
- Cadre projection and deployment of adequate numbers to primary care.
- Financial allocation for infrastructure improvements.

National government health policy statement too recognizes the importance of “appointing doctors to defined population.” The Ministry of Health is to carry out island wide clustering of institutions using GIS tool this year.

What can we expect for primary care in Sri Lanka?

The tools and processes mentioned are all parts of an interconnected plan to provide equitable access to health care that the people need. Sri Lanka can use its existing service structure together with the support of training faculties to transform the health system based on the opportunities that exist in primary care strengthening.

Primary care should be an attractive future for doctors, with career advancement within primary care setting. Continuous Professional Development (CPD) linked to primary care is important and must include those in dual practice if quality services are to be available universally.
Patient follow-up and compliance

Thivanka Munasinghe1

Sri Lankan Family Physician, 2016, 32, 117-118

‘Patient follow-up’ is an act of making contact with the patient at a specified date to check on his/her progress regarding a change or action that took place at their last consultation or appointment. This can also be defined as an act of renewing contact with sources of information and reviewing data needed to reinforce or to evaluate a previous action or report such as reexamination of an earlier treatment, diagnosis or prognosis.

Proper follow-up is very important in clinical medicine as an excellent patient management and risk management technique. This enhances both patient care and satisfaction by identifying clinical problems early and addressing patient concerns and complaints efficiently. It is the doctor’s responsibility to arrive at a diagnosis, to inform the patient about it in an understandable manner, to identify treatment options, to recommend a therapeutic plan and to explain the importance of recommended followup. Family Physicians with a comfortable clinical environment, build a good rapport and have a strong doctor-patient-family relationship, and are presumed to have superior knowledge of their patients and their conditions as is needed for an effective follow-up1.

Importance of follow-up

✓ maintain or to strengthen the doctor-patient-family relationship.
✓ psychological benefits as moral support and mental relief about the disease.
✓ help prevent or early detection of chronic diseases.
✓ monitor health or to assess the severity of a disease.
✓ identify or check progress with the management.
✓ reinforce knowledge and action plans.
✓ confirm medication adherence or to change the treatment.
✓ know the status of the illness as recurring or worsening.

✓ address ongoing problems due to a disease as physical or psychosocial.
✓ awareness of drug allergies or harmful side effects.
✓ schedule appointments, laboratory investigations, referrals.

There are factors affecting the follow-up of patients which can be either doctor-related or patient-related that can have both positive and negative impacts on patient follow-up.

Factors affecting follow-up

• Communication errors such as the understanding between the doctor and the patient.
• Language barrier, lack of education, not understanding the seriousness of the disease.
• Many patients do not come for follow up, if they feel the doctor would judge them and embarrass them, if they do not comply with the doctors instructions.
• Support of family or caretaker.
• Multiple work schedules, confusions, missing or simply forgetting the appointment date, may be due to medical conditions as dementia or other neurological conditions4.

Compliance

Compliance is a major component of follow-up care. Family physicians play a key role to overcome ‘poor compliance.’ A positive doctor-patient relationship is the most important factor in improving compliance. In medicine, compliance describes the degree to which a patient correctly follows medical advice. Commonly it refers to medication or drug compliance. It also applies to other situations as the use of medical devices, self-care, self-directed exercises or therapy sessions. Patients have enormous influence on treatment outcomes, thus ultimately it is up to them to take medications as directed, follow treatment plans, schedule follow-up appointments, report systems honestly, and make lifestyle changes5.

Poor compliance may be due to lack of counseling and educating patients, and should make an attempt to overcome the fear or myths about drug or multi-drug therapy, especially in patients with low literacy or low

1 Senior Lecturer, Family Medicine Unit, Faculty of Medicine, SAITM. Family Physician, Dr. Neville Fernando Teaching Hospital, Malabe, Sri Lanka.
socio-economic levels. Also should stress on the importance of treatment though at a cost, mainly in chronic conditions where long-term treatment is a must. Some patients feel uncomfortable to meet up with the doctor if there is poor compliance. Most doctors, without understanding or realising the cause of poor compliance may show disrespect towards the patient which patients fear to experience. The ideal Family Physician should anticipate these issues and try to understand patient problems and work with the patients to improve follow-up and compliance.

Ways to improve compliance

- Understand the patient’s thoughts, ideas, fears and myths about the disease, but show no embarrassment or disrespect.
- Through understanding and empathy, calm the patient if anxious or stressed about the condition.
- Improve and encourage patient interactions through motivational interviewing and active listening, and get patients involved in decision making with regards to their own health.
- Many patients do not know or understand the gravity of a disease. They might show poor levels of ‘health literacy.’ Educate them while showing respect to what they understand about the disease.
- Use simple words or steps, understandable to the patient to educate about the disease, importance of treatment and the probable outcome.
- Highlight the complications if poor adherence to treatment, especially in chronic illnesses.
- Answer questions in a confident and positive tone to make the patient feel satisfied and important.
- If the patient cannot afford the cost of the medication or consultation or have no means of transport, discuss possible alternatives.
- Give information about the various modes of treatment and their side effects which may be mild to severe.
- Have an efficient system of record keeping with trained staff and demonstrate a strong focus on patient safety, continuity of care and risk management.
- Keep educating and reminding of the need to continue the treatment though the symptoms are resolved and the patient feels recovered.
- Make arrangements for patient to receive appropriate educational material and literature as leaflets.
- Family physicians can give solutions to the major barriers in completing the treatment, as they have an added advantage about knowing the patient’s personality and lifestyle. They can offer trust, cooperation and mutual responsibility which can greatly improve the connection for a positive impact.
- Talk openly about the wrong or misdirected instructions of friends, relatives or family, regarding positive and negative outcomes of alternative medical treatment methods.
- Promote discussions with other patients with same disease (patient groups) and to explore the ways of overcoming difficulties and side effects of treatment.

The reward for the efforts made to convince a patient regarding the importance of follow-up and compliance, will be when a positive outcome of the treatment is witnessed, both by the patient and the Family Physician.

References

Referrals in primary care

W G Pradeep Gunawardhana

Sri Lankan Family Physician, 2016, 32, 119-121

What is a referral?

Referral is a complex process which implies a transfer of responsibility for some aspect of care of the patient. For the family physician, the transfer of responsibility is never total and always retain an overall responsibility for the patient’s welfare. Decision to refer a patient is an important skill of a family physician. It is often difficult to find the right balance, and some practitioners refer untimely, excessively or inappropriately. Referral is a two way process.

Place of the referral in the process of consultation

Process of consultation consists of many steps. It includes interviewing / history taking, physical examination, patient management, problem solving, behaviour/relationship with patient, anticipatory care and record keeping. Referral is one item that is included in patient management. Patient management in primary care may consist of explanation and reassurance, advice, investigation, prescription, counseling and supportive psychotherapy, health promotion and preventive care, arranging follow up/review and other procedures eg: minor surgeries, certification, and emergency care, including referral.

Types of referrals

The division of responsibility between referring physician and specialist must be clearly defined and this is used to classify different types of referrals.

Interval referral – the patient is referred for complete care for limited period. The referring physician has less responsibilities during this period. After the referral, only the specialist should prescribe treatment. The family physician should advice and comment, but not order treatment. eg: major surgery.

Collateral referral – the referring physician retain overall responsibility, but refer the patient for care of some specific problem only. It may be long term as in glaucoma, etc or short term as in counseling for psychological / social problem.

Cross referral – the patient is advised to see another physician and the referring physician accept no further responsibility for the patient care. This may occur after self referral by the patient or even after being referred by a FP.

Split referral – takes place under conditions of multi specialist practice, when responsibility is divided more or less evenly between two or more physicians.

eg: Endocrinologist for diabetes care and cardiologist for IHD.

Resources for referrals

General Practitioners may refer patients to other individuals or agencies when appropriate. These include: 1) General practitioner colleagues/partners with special interest/expertise. 2) Other members of primary care team such as community nurses, health visitors, social workers, counselors, dieticians, physiotherapist, etc. 3) Helping agencies such as child welfare / ANC by MOH, FP services, elderly homes/Help Age, community mental health centers (Sahanaya), professional counselors, rehabilitation centers for alcoholics/drug addicts, home nursing/physiotherapy services, etc. and 4) Hospital consultants as in state/private or outpatient/inpatient.

Reasons/Indications for referrals

There are very important reasons for appropriate referrals in primary care. These are:

1) to obtain specialist treatment such as surgery, dialysis, etc.
2) to obtain specialist opinion on diagnosis/management of a difficult problem for benefit for patient/doctor.
3) to gain access to certain diagnostic/therapeutic procedures such as colonoscopy, echocardiography, etc.
4) to relieve patients'/relatives’ anxiety/pressure as a “second opinion”.
5) To provide reinforcement of advice/treatment given to poorly compliant patient and
6) to access the services available in the community for patient’s benefit such as rehabilitation centers, etc.

Factors affecting referrals

Successful referral depend on good communication and relationship among primary care doctors, specialists

---

1 Senior Registrar in Family Medicine.
and patients/families, and it is a reflection of degree of integration among primary, secondary and tertiary care of health services. Referrals should be based on realistic assessment of potentialities and limitations of primary care as a discipline, and facilities available in a geographic region other than medical factors, personal, financial, institutional and psychosocial factors affect the decision making in referrals.

Steps in referral process

Following are steps in the referral process. 1) Explanation to the patient as to the reason for referral, 2) recommendation of a specialist, 3) recommendation of a treatment center, and time of referral that best suited to the patient’s medical and personnel needs, 4) preparation of the patient for it, 5) provision of the specialist with the data relevant to patient’s illness/problem, using an appropriate communication of referral; eg: referral letter, phone call, email, etc. Even after referral, remain responsible for the quality of the patient’s care and become coordinator or communicator between patient/family and specialists/other staff.

Referral letter

The formal referral letter should contain following information: 1) a letterhead which contain referring doctor’s name, qualifications, address and contact details, 2) date, 3) name, qualification, designation or consultant status of the specialist, 4) name and age of the patient, clinical details of patient such as symptoms, signs, result of available investigations, treatment tried so far and relevant family, social, past medical history, allergy, and drugs being taken concurrently, 5) what the family physician expects from the specialist and 6) signature and stamp of referring doctor.

Advantages and disadvantages of referrals

Appropriate referrals can be used to ensure that varied and extensive expertise available is fully utilized to patient’s benefit. On the other hand, there are some disadvantages that can occur during referrals. These include: “collusion of anonymity” in fragmented care/division of responsibility. (Balint 1964) – nobody is taking proper responsibility on care of patient, misunderstanding/confusion on term true “referral” whether it is consultation with a specialist or refer to a specialist, inhibited behaviour of family physician due to lack of self confidence, fear of loss of specialist support, inadequate knowledge and fear of blame for not doing enough or embarrassment on mistakes done, feeling of risk of losing the patients and the income. Thus FP may feel pressured to go beyond his/her areas of expertise for financial and professional reasons. They might reinforce the misconception on their patients/families that primary care physicians are inferior, may generate a power struggle between specialists and generalists, end up with multiple admissions or outpatient attendances. These can be confusing to patients especially when they see different doctors on each occasion. The more individuals involved in the care of the patient, greater the potential for confusion and conflicting advice and misunderstandings about diagnosis, prognosis and treatment. These can easily arouse, and may be confounded by natural anxieties.

Some research/evidence based information on referrals

- Referral patterns have shown considerable variations among physicians. 20% of physicians with highest referral rates refer twice as many patients as 20% with lowest rates. (Fleming Et al 1991: European study 1992).
- Referral rate from primary care to secondary care is around 4.7% (COMAC-HSR, 1992). It may range from 1% to 20% between different doctors and different practices. (Wilkin and Smith, 1987).
- There is an association between referral rate and doctor’s temperament (ability to tolerate uncertainty), attitude to illness, value of hospital care and relationship with hospital colleague. (RCGP and BMA, 1979).
- No association between referral rate and age, sex or social class of patient, practice size: age, experience or qualification of doctor, and partnership or access to diagnostic services.
- There is an association between referral rate and attitude of doctor to defensive medicine, advice and misunderstandings about diagnosis, prognosis and treatment. These can easily arouse, and may be confounded by natural anxieties.
- Higher referral rates in doctors with lack of self-confidence and defensiveness (Dowie, 1983).

References

Balint M. 1964. The Doctor, his Patient and the Illness. London; Pitman Medical publishing.
The European Study of referrals from Primary to Secondary care, London: Royal College of General practitioners.
Referrals in primary care


Sports – the healthy way!

Thivanka Munasinghe

Sri Lankan Family Physician, 2016, 32, 122-123

The general thought is that good health is ‘just not being sick’. Health is the physical, mental, social and spiritual wellbeing and not only the absence of a disease. In today’s developing world, our life styles are greatly involved in professions and professional careers. Here we tend to forget or neglect the importance of physical activity until ill health strikes. Many other illnesses are due to an imbalance of the social and mental relationships with society or the community in which they live in. We should be aware that there is a marked rise of non-communicable diseases (NCD) as hypertension, hyperglycemia, hypercholesterolemia, mental illnesses, cancers and etc., when compared to the past decades, and are focused only when faced with ill health, where life-long treatment and life-style modifications are needed.

Sport is not only a physical activity

For some individuals getting involved in physical activity becomes boring or monotonous after some time. This is mainly due to repetitive performance of the same physical act and is a part of treatment for a sickness. Participation in a group activity as a ‘sport’ is healthy, not only in physical health, but also in mental and social health spheres. We should be careful in selecting a sport; one should need not excel in the game, but should have a love or the passion for it, and most of all it should be fun-filled and enjoyable.

The best time to identify the abilities, skills and talent is during school time. At present, most of the school children should select at least one sport of interest compulsorily, in addition to physical training at school level. Here the sport becomes an act of joy, as there is involvement with friends and therefore note the completeness for the human mind or the psychology, it is all about self-satisfaction and happiness.

Sport is to fulfill the dimensions of health

Health care workers always advice the individual, family, community and the society on the importance of getting involved in calorie burning physical activity on a regular basis. The common answer or the excuse is ‘the lack of time’ or ‘tiredness’ after work. Most of us after a tiring day at office or school, tend to be ‘tired in mind’, than physical. The mistake is when we connect the mental tiredness or exhaustion to physical tiredness. We must focus on this point intelligently and understand that to relieve the stress of work, one should be involved in a physical activity of choice. This not only gives a positive approach on the physical factor, but also helps in the social factor, as one may come across different individuals of varying interests and talents. Variety of events during the day itself is a need for the cognitive development.

Sports, the choices and boundaries

Sports fulfill or caters to all dimensions of health. Physical factor is with the involvement in a calorie or an energy burning exercise. The social factor is met with the pleasures of leadership, challenges, team work, identifying the weakness of the opposition, making the utmost of your team players and most of all, meeting different social classes of the community and understanding their thoughts and needs, which vary from one another. Mental dimension is well handled when faced with a win or a loose situation (with minimum psychological effect), self-satisfaction, self-confidence and pride.

An important factor is one has to be well aware of his / her capacity and the capabilities when selecting a sport. It should be a personal choice which should relax one’s mind and thoughts and not to be a burden. If not, the whole focus or the idea is lost, where one will get only the benefit of the physical activity, but will result in a negative way on the mental and social factors due to the anxiety and stress.

Sports, for physical and psychosocial health

A number of studies have shown that sports play a therapeutic role in addressing a number of psychological disorders as anxiety and depression. Physical self-worth and physical self-perception, including body image, has been linked to improve ego and self-esteem.

The evidence relating to health benefits of sport / physical activity predominantly focuses on intra-personal benefits which can also produce positive health effect in individuals and communities. Also have indirect contribution to the well-being of people by reducing stress levels and improving sleep patterns. Sports have long been used in the treatment and rehabilitation of non-communicable as well as communicable diseases.

---

1 Senior Lecturer, Family Medicine Unit, Faculty of Medicine, SAITM, Family Physician, Dr. Neville Fernando Teaching Hospital, Malabe, Sri Lanka.
Sports as a profession

If one excels in a sport, starting preferably at the school level, it is good and healthy to pursue a sport even as a professional career. If there is excelling performance at school level, only then one must think of national and international levels with the guidance of a coach. In our society, there are many such figures, most of them sporting professionals who represent our country internationally. This is mainly with the training and the involvement and the experience they have gained during school life.

The current mistake we see is the psychological strain one gets into, when trying to pursue a sporting career as a profession, even with the lack of the talent and training. This may be a huge burden to one’s life as it will have an impact on overall health and wellbeing, which may even lead to substance abuse and may have an unprofessional or an unethical conduct. This completely takes off the whole idea of a sport or a game.

Sports as a stress reliever

A sport should be an enjoyed event by an individual. There will be a variation of choice of the sport on an individual basis. An enjoyable act as a sport, can relieve a person’s stressed mind and to take the person to a different dimension or a level of thought. Team or individual effort being put on a game is an important part or a component of relaxation. Many will experience an increased energetic feeling, enthusiasm and interest in days or weeks to come. This shows that sports takes off the inner stress component or reduces the level of stress one has.

Before thinking on achieving goals or taking sports as a profession, one must enjoy the act of the particular chosen sport. Only if one is excelling in talent on a particular field of sport, one should think of moving in a more professional manner with the guidance of a coach. Some individuals do vice-versa, that is without identifying their talents, get involved in a sport, which ultimately adds more stress to life. Especially this is seen mainly among the youth.

Sport is a way for a healthy, peaceful, enjoyable and a fun-filled life which may even enhance one’s cognitive capabilities, but is not a way to be stressed, burdened, psychologically pressurized (through self or peer) for a unhealthy life. This together will make the complete and the balanced man.

References
3. https://medschool.vanderbilt.edu/orthopaedics/fellowship-sports-medicine-primary-care
Case report

Empty nest syndrome and its consequences

S Kumaran

Sri Lankan Family Physician, 2016, 32, 124-125

A 70 year old male presented to the University Family Practice Centre with a history of multiple complaints of lethargy, difficulty in swallowing, generalised body aches and headache for the last three months. After watching a medical programme on the television he became worried that his lethargy could be due to a cancer. During the last three months he had consulted several doctors and undergone many investigations including endoscopies, CT scans and an array of haematological investigations and reassured that he had no serious illness.

As he had been experiencing urinary symptoms such as hesitancy and poor stream for the same duration of time he was diagnosed as having mild benign prostatic hyperplasia (BPH). This resulted in his pursuing literature on the subject. After reading many articles he concluded that his lethargy was possibly due to an early prostate cancer which is not detectable with the investigations he underwent.

He is a retired assistant director of a government institution who was well respected person at his workplace. He is married, his wife is a retired teacher. His son and daughter are married and live separately.

His health related issues started after his retirement and after the children moved away from home. When he spoke about his children he was tearful, had no eye contact and was unable to verbalise his feelings and emotions. After a moment of silence he further added that he hardly has time with his children or grandchildren due to their busy schedules.

As a way out of his emotional issues, he wanted to visit his estate in his rural hometown and do some planting which he enjoys much. However his wife is totally uninterested in visiting his hometown and is absorbed in religious activities. He does not want to displease his wife or the children by staying long periods in his hometown. Instead he has found an alternative way to overcome his emotional issues by reading books and watching TV programs. He thought that upgrading of health literacy is useful in view of preventing illness. When he reads articles or watch TV programs related to serious illness, he feels that he is also suffering from the same. This in turn leads him to consult doctors who order a number of investigations to exclude serious illness. However neither the investigations nor the doctors explanations and reassurances satisfied him. He also noticed a significant variation in the explanations and interpretation of illness among doctors. It made him more confused and anxious.

In summary, as a result of his health seeking behavior he has to spend half of his pension for doctors’ fees. This resulted in a vicious cycle of anxiety.

Possible health problems

1. Empty nest syndrome leading to emotional problems.
2. Health anxiety syndrome leads to doctor shopping and economical constraints.
3. Early stage of depression and anxiety.

Management

1. The condition was explained to the patient and maximum effort was been taken to explain the relationship of the mind and the body.
2. He was advised to loop into a local elders society in the view of sharing elders experiences.
3. He was encouraged to get involved in voluntary activities related to his former profession.
4. The importance of spirituality was explained to him and example was shown in his wife.
5. Review visits were arranged for long consultations for counseling.

He claimed to be better after one counseling session and had a smiling and happy face at the next visit.

Discussion

Presently, Sri Lanka is going through a demographic transition and it is predicted that in 2020 more than 20% of the population will be elders. Health problems of the elderly differ from those of adults. Most of them are a mixture of


1 Senior Registrar in Family Medicine.
Empty nest syndrome and its consequences

psychosocial and physiological issues and thus a cost effective comprehensive approach is necessary. In addition a conducive socio-cultural environment would facilitate better quality of life of elders. These problems need to be addressed in the near future.

In the above case the root of the pathology would be the feeling of loneliness. Even though the patient’s wife also may feel the same she has adapted to the situation by practicing spiritual health. This patient who wanted to move into his rural estate felt it difficult to take decision to do so considering his local socio cultural context. His method of diverting his mind by reading books should be appreciated. But it resulted in aggravating his emotional problems as whatever articles he read made him more confused. Health articles should be made reader friendly creating awareness about health conditions without making the reader anxious.

Further, the lack of effective communication skills among the medical practitioners made the situation worse. The profit oriented and not properly governed private sector makes the poor patient poorer. This case spot lights the importance of the development of a health sector which can provide comprehensive care on a continuing basis where effective communication should be the corner stone.

It is time that family practice approach is strengthened in the heath sector.

Conclusion

In the above case all pathology was rooted from loneliness. The wife adapted well to it but not the husband. Spirituality can be considered as an effective tool to deal with various emotional issues. Patient’s condition was worsening due to some health articles and the lack of cost effective health care and poor communication skills among the doctors.

Recommendation

The health system should be enriched with the principles of family medicine. All the medical professionals should be trained properly to deal with the geriatric population. The health sector should be audited periodically in the view of cost effective care. Geriatric health problems should be addressed in a comprehensive manner. Any health related articles in the public media should be scanned thoroughly in the view of preventing public anxiety. All the health institutions should be governed for their cost effective services.

Acknowledgements

Professor Antoinette Perera, for the guidance and support extended in preparing this case report.

References

Dilemma in the diagnosis of subclinical hypothyroidism in an elderly patient combined with peculiar anxious behavior, a common problem in geriatric primary care

A A K Jayanath

Sri Lankan Family Physician, 2016, 32, 126-127

Mr. N. S., 78 yrs, from Gangodawila, presented to the University Family Practice Centre with multiple complaints of tightness of the legs below knee joints, difficulty in walking due to weakness, numbness, and prominent veins in the legs for four years. During day time, when she is doing her day to day activities, she feels tightness and weakness of her both legs. However, she continues her daily activities in spite of difficulties. At the same time, she sees that her leg veins are prominent. The sight of prominent leg veins makes her anxious as she believes that the walls of her blood vessels have become swollen causing lack of blood flow in the legs resulting tightness and weakness. She also feels numbness of legs and heels and she is unable to sense the feeling that she has slippers on her feet.

She complained of loss of appetite and losing weight over the last 8-9 months. Although she complains loss of weight, the weight measurements have been steady. She has troublesome constipation and feels lack of energy over the same duration. She does not have dry skin, cold intolerance, or voice change.

She does not have any red flag symptoms of a neuropathy, malignancy, space occupying lesion, vascular disease or any other spine disease. There are no symptoms of depression either.

At present, she is retired. She is unmarried and living alone in her own house. She has good protection and a support from her nephews. She does manage her all activities of daily living and all instrumental activities of daily living.

Over the last four years she has seen a number of doctors, mostly taken on a round of doctors/specialists by her nephews whenever she complained. She had undergone many investigations, had different explanations about her problems and multiple medications including vitamins. Her last doctor, a consultant VP, diagnosed her problem as hypothyroidism and started her on L. thyroxine 50mcg mane six months before.

<table>
<thead>
<tr>
<th>Summary of Investigations</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBC – Hb – 11.9 %</td>
</tr>
<tr>
<td>WBC – 5.8 * 10^3, N – 56%, L – 40%, E- 2%</td>
</tr>
<tr>
<td>CRP – 5.11</td>
</tr>
<tr>
<td>ESR – 60/ 1st hour</td>
</tr>
<tr>
<td>FBS – 101mg/dL; HbA1C % - 5.71</td>
</tr>
<tr>
<td>TSH – 5.5 → 1.5 → 0.785 → 7.050 mIU/L</td>
</tr>
<tr>
<td>(with treatment it had gone down when she stopped treatment, TSH had increased again)</td>
</tr>
<tr>
<td>Free T4 – 0.602 (0.7 - 1.9 ng/dL)</td>
</tr>
<tr>
<td>CA 125 – 3.13</td>
</tr>
<tr>
<td>S. Creatinine - 0.6mg/dL, e GFR - 87ml/ mg/ m²</td>
</tr>
<tr>
<td>Total cholesterol – 177, TG - 84, HDL - 68, LDL - 92, VLDL - 16.8, TC/HDL - 2.6</td>
</tr>
</tbody>
</table>

Despite those treatments, she still suffers from her main complaint; tightness, weakness, and numbness of both legs.

She has bronchial asthma which is under control on steroid inhalers. She has no history of hypertension, ischemic heart disease, peripheral vascular disease, diabetes mellitus or renal diseases.

She has been first started on L. thyroxine 50mcg mane and her TSH had gone markedly below normal and therefore stopped but TSH has again increased up to current level (7.050 mIU/L).

Her brother and sister suffer from diabetes mellitus and no one has goiter or thyroid problems.

Because of her leg problem, she does not like to go
Dilemma in the diagnosis of subclinical hypothyroidism in an elderly patient

out the house unless otherwise on an urgent matter. She believes she has a bad disease either a cancer or a nerve degeneration. During the day time when she observes her leg veins getting dilated, she fears that she is going to have her leg blood vessels dried. Then she feels tightness of her legs, numbness and weakness.

On clinical examination she is thin, not pale and had no lymphadenopathy. Her thyroid and breast were normal. Examination of lungs, abdomen and cardiovascular system were also normal. Examination of back, spine and lower limb were normal too.

Mobility problems – ataxia  Dementia and depression
Musculoskeletal problems – Carpal tunnel syndrome muscle pain and weakness  Sloved speech and thinking
Fatigue  Cerebellar dysfunction
Weight gain  Neuropathy
Constipation  Anemia

They have laboratory abnormalities like;

• Elevation of;
  – serum cholesterol and TG
  – creatinine phosphokinase
  – Lactate dehydrogenase
• Hyponatremia
• Blood picture – macrocytic anemia

Ms. N.S. has a TSH report of 7.05 mIU/L. A TSH level below 10mU/L is categorically in the subclinical hypothyroid level. Generally, patients with subclinical hypothyroidism has normal Free T4 levels with minimum hypothyroid features. This patient has loss of appetite, constipation, lack of energy and muscle weakness. Ms. N.S. has a Free T4 level of 0.602ng/dL and it is just below the normal lower limit. Because of the fact Free T4 is below normal, one can argue whether this is elderly primary hypothyroidism. Elderly primary hypothyroidism has low free thyroxine (FT4) and high TSH. As this patient has some symptoms and mildly elevated TSH, starting low-dose of L. thyroxine (25mcg) is rational despite the type of hypothyroidism.

Important finding in this case is the peculiar sick belief and behavior of this patient. Whenever she observed her normal lower limb venous dilation, a normal physiological phenomena, she had her own misbelief and a consequent fears and anxieties. These anxieties had resulted some sick behaviors on the top of a real physical disease.

Although the physical disease had been treated earlier, her sick behavior has not been identified and addressed for last four years.

Acknowledgements

Professor Antoinette, for the guidance and support extended in preparing this case report.

References

Case report

Spastic paraparesis with underlying meningioma of the spinal cord

Lakmali Bandara

Sri Lankan Family Physician, 2016, 32, 128

An example from the Family Practice Centre of Sri Jayawardenapura University that highlights the importance of correct identification and proper referral by primary care physicians.

In July 2016 a 53 year old lady presented at the University Family Practice Centre (FPC) of the Department of Family Medicine. She complained of numbness and heaviness in both lower limbs which had been progressing slowly over the past six months. Since about a month prior to visiting the FPC, the patient had also started experiencing difficulty in walking. The onset of numbness had been gradual. At the beginning it had only been numbness in the lower extremity of both the legs. This had gradually ascended to the upper part of the legs. By this time the patient had also found it difficult to put on her footwear. There was no backache or radiating pain along the lower limbs. Nor had there been a history of trauma to the back.

The bowel habits and bladder control were normal. There had not been any episodes of sudden visual disturbance or swallowing difficulty nor had there been a history of chronic cough or contact history of tuberculosis. There was neither numbness in the upper limbs nor any associated neck pain noted. The patient indicated a history of fall in November 2015 but acknowledged that there was no pain or weakness afterwards of the fall.

The patient had been diabetic for over 10 years and had been on oral hypoglycemic drugs. But the diabetic control in general had been poor. The patient walked into the examination room with the help of her husband. She was average in built and at the time of presentation a febrile. Her blood pressure was 200/90 mmHg. The examination of cardiovascular and respiratory systems was normal. Both lower limbs were spastic and weakness of the right leg was more than the left. Muscle strength of flexion of the hip, knee and ankle was weaker than extension. Both abduction and adduction were poor at hip and knee joints. The big toe elevation was very poor in both sides even though flexion was normal. On both sides knee jerks as well as ankle jerks were exaggerated and planters were up going. The bilateral straight leg raising test was negative.

While sensory level was detected at T 10, the joint position sense was impaired in the right. However, it was intact in the left. The upper limbs were normal in tone, power and reflexes. There was no sensory impairment noted. In addition, the sacral sensation was normal. The gait was broad based and the patient was unable to walk unaided.

She had taken Ayurvedic medicine right throughout the alleged illness and finally was brought to the Family Practice Centre since the situation was fast deteriorating rather than improving. After a careful recording of the patient’s history and a full examination, and discussion with other senior colleagues and peers the following main differential diagnoses were considered

- A cord compression at higher level
- Diabetic neuropathy
- A vitamin B12 deficiency

Subsequent to a discussion with both the patient and her husband a decision was made to refer the patient to a neurologist for an expert evaluation without any further delay.

Later she had been admitted to the National Hospital of Sri Lanka (NHSL). She was thoroughly investigated and found to be having a meningioma of the spinal cord at T 6 level. She had undergone a T6-7 laminectomy and excision of meningioma in neurosurgical ward.

Two weeks later the patient visited the Family Practice Centre smiling and walking without any help. Although the numbness was still present the heaviness had disappeared.

The patient was brought by another registered patient who visits regularly for care at the FPC.

Acknowledgement

Professor Antoinette Perera, for the guidance and support extended in preparing this case report.

1 Registrar in Family Medicine.