Professor C.Sivagnanasundram Oration 2014

By:

Dr. R.P.J.C.Ramanayake

Senior Lecturer, Head, Department of Family Medicine, Faculty of Medicine, University of Kelaniya.

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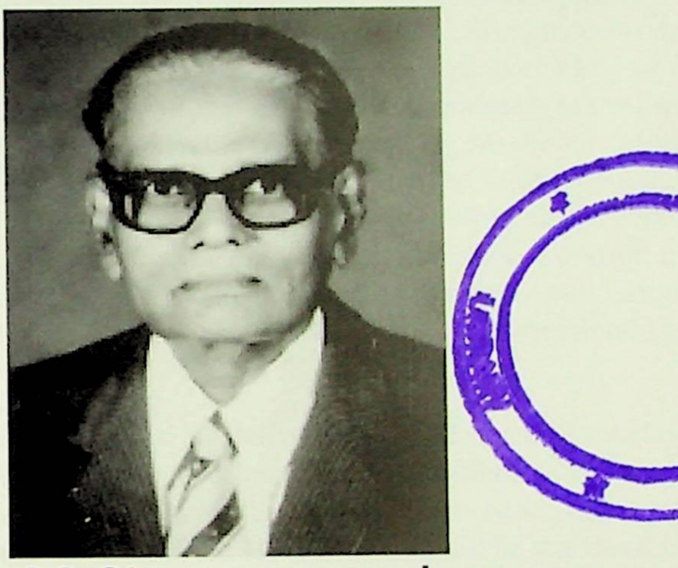

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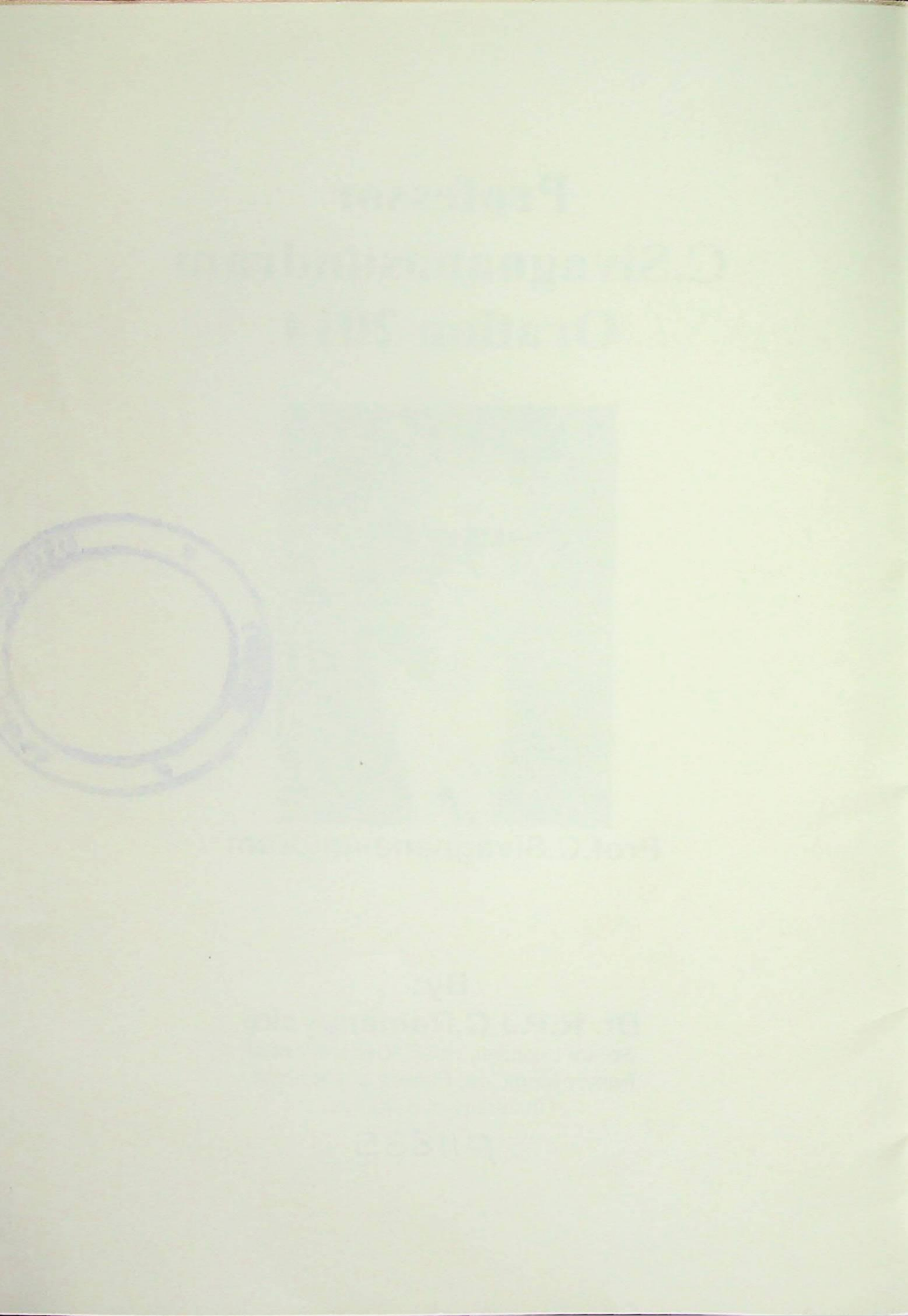


MESSAGE FROM THE PRESIDENT

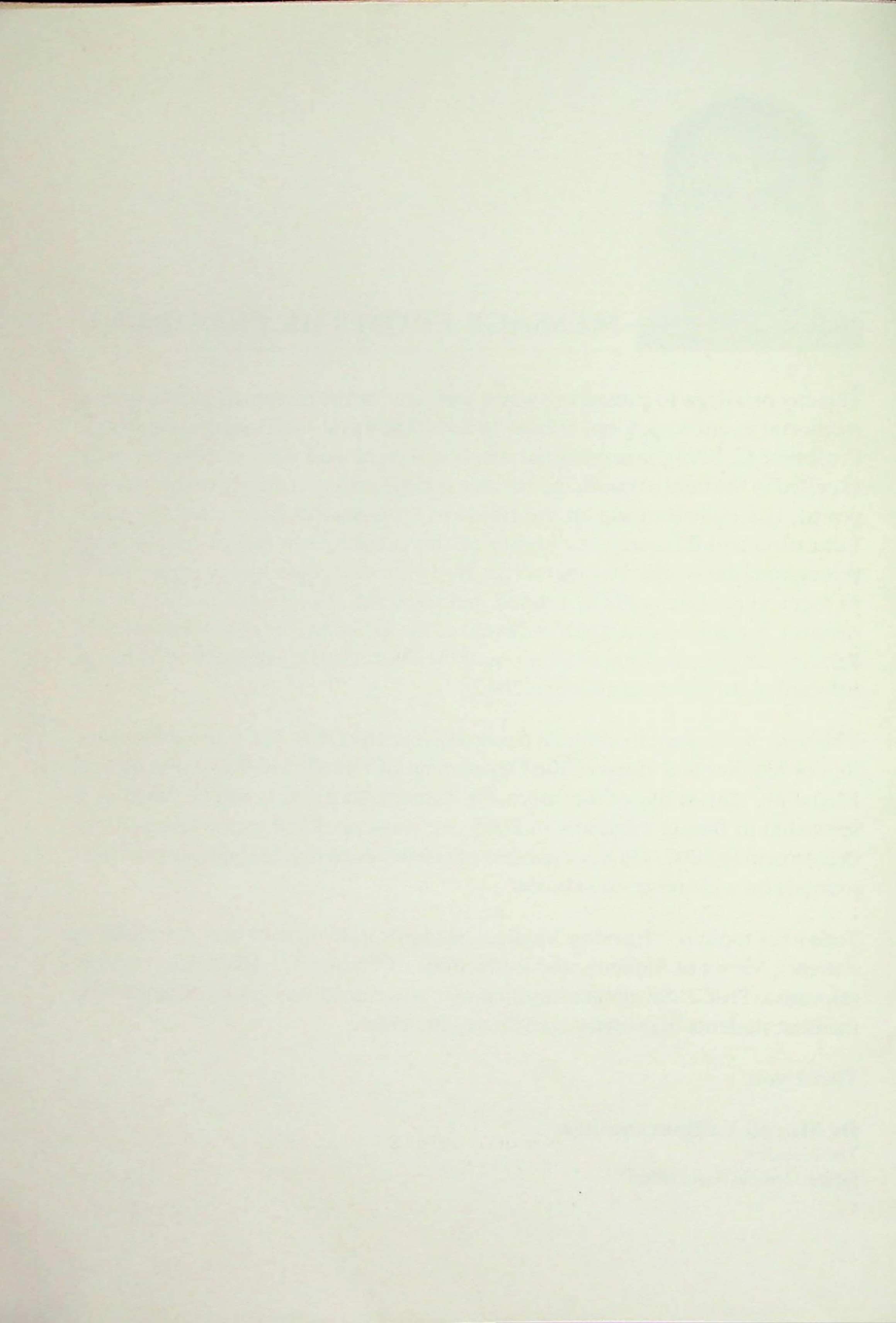
It is my privilege to extend my warm welcome to the esteemed guests to this memorial event to pay our tribute to Late Professor C.Sivagnanasundram. Professor C .Sivagnanasundram was a distinguished person who not only excelled in the field of medicine but also contributed immensely to the literary world. His contributions in the fields of Community Medicine, Medical Education and Research are highly commended by the fellow researchers throughout the world. His memories are being cherished by the generations of medical professionals he trained including me. The annual oration in his memory is the most distinguished event of the Jaffna Medical Association and delivered during the Annual Sessions of the JMA. I had the distinction of being selected to deliver this oration in 2012.

This year the memorial oration is being delivered by Dr. R. P. J. C. Ramanayake, Senior lecturer and Head of the Department of Family Medicine, Faculty of Medicine, University of Kelaniya. Dr.Ramanayake was board certified as a specialist in family medicine in 2005. He was appointed as the Head of the department in 2007. He has a number of publications in local and international journals on wide range of subjects.

Today his topic is "Training Medical Students in Primary Care; Attitudes of Patients, Views of Students and Reflections of Trainers ". His oration is very relevant to Prof. C.Sivagnanasundram who was extensively involved in training medical students in primary care during his time.

Thank you.

Dr Murali Vallipuranathan
The President,
Jaffna Medical Association.



Training Medical Students in Primary Care;

Attitudes of Patients, Views of Students and Reflections of Trainers

Chief guest, special guest, guest of honour, president, council members and members of the Jaffna Medical association, family members of late Prof C. Sivagnasundaram, distuinguished guests, ladies and gentlemen.

I would like to thank the president and the council of the JMA for having selected me to deliver the prestigious Prof C Sivagnasundaram oration in the year 2014 and I feel honoured and touched.

It is appropriate at this juncture to speak a few words about this illustrious community physician, 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.

He was a brilliant community physician, outstanding university academic and a writer. He contributed a lot for the development of public health services and his contribution for family medicine was also quite significant. As a member of the board of study in family medicine at the PGIM he contributed to up lift 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 decades[1-5]. 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.

The reasons for this trend are many; everywhere in the world in patient care as a proportion of all medical care is decreasing. Diseases which required in patient care earlier no longer do so due to invent of newer medications and newer techniques and accessibility of primary care

doctors to investigations, telemedicine and internet. The duration of stay in hospitals for diseases which require admission has also reduced considerably due to more efficient newer medications and techniques. Educationally, there are implications 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 reduced[5,6]. In the mean time community offers a wealth of teaching opportunities for medical students, a fact which was recognized by the The General medical council's directive, Tomorrow's doctors in 1993[7].

General practitioner teachers have also transformed from their original role as teachers of behavioral science and general practice[8] into teachers of clinical skills, with excellent access to a wide range of patients.[9,10] It has been found that community based teaching is as effective as hospital based teaching of basic clinical skills.[11,12,13]

General practices offer a highly personalized teaching in an environment where the importance of social, economic, psychological and cultural influences on a patient's illness and the family response can be experienced 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[14].

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[15], in 1961, and "The ecology of medical care revisited" by Green et al[16] in 2001 revealed that majority of the ill patients sought help from primary care doctors and only minority gets 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[17].

By exposing undergraduates to primary care, students not only gain knowledge in managing

Health problems in primary care but also acquire skill of 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.[18] 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 majority of the patients are ambulatory. They spend only a limited time in a family practice and student participation could lead to delays. Patient's consent to participate in medical education is often taken for granted and patients are not always aware of teaching activities.[19]

Studies worldwide have revealed the positive attitude of patients towards 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. At the same time they could experience difficulties as well. For trainers also there could be many challenges in adapting their practices and themselves to the role of a training center and trainer.

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 (UFMC), 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 on this field has been scarce not only in Sri Lanka but in south Asian region as well.

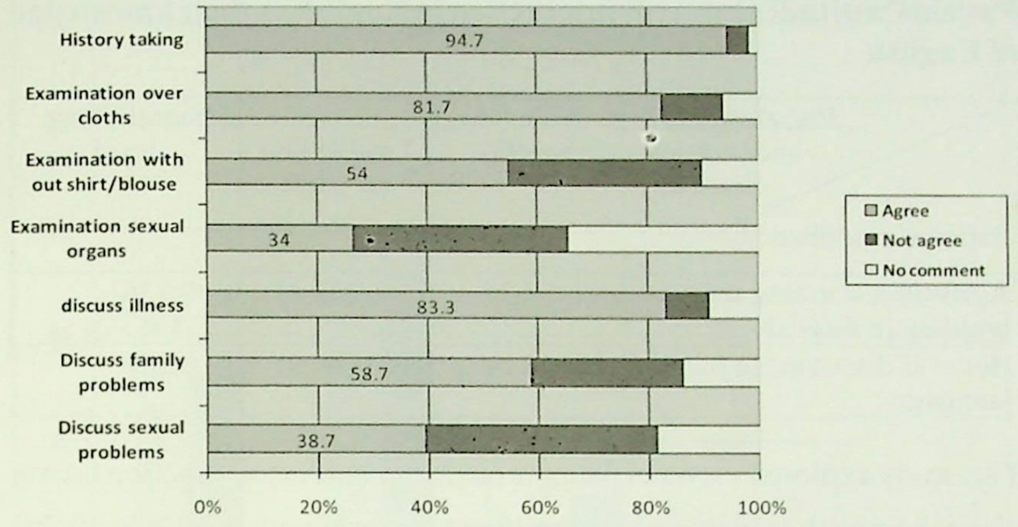
1. Patients' attitudes

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 16years and above and consulted the doctor in the presence of students were included in the study.

Demographic details of patients(%)

Demographic detail	%
Gender	
Female	57.2
Male	42.8
Age	
16 -34	36.2
35-59	43.6
60 and more	20.2
Educational status	
Up to Grade 5	6.4
Grade 6-12	51.7
Beyond Grade 12	41.9
Income	
Less than 10000LKR	9.5
10000-20000	37.0
20001-50000	33.8
>50000	19.7
Previous consultations with students	
Never	48.3
1-3 times	24.3
>3 times	19.8
Cannot remember	7.6
Ability to understand English	
Able to understand well	30.3
Unable to understand well	69.7

Patients' attitudes towards observation of consultations by students



Patients' responses showed their positive attitudes towards students 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. Wright[18] in 1974 and Choudry et al[20] in 2006 among British patients and Salisbury et al[21] 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 complaints[22,23] and presence of students could be a problem in consultations that involved emotional upset, internal examinations, and sexual problems.[19,24]

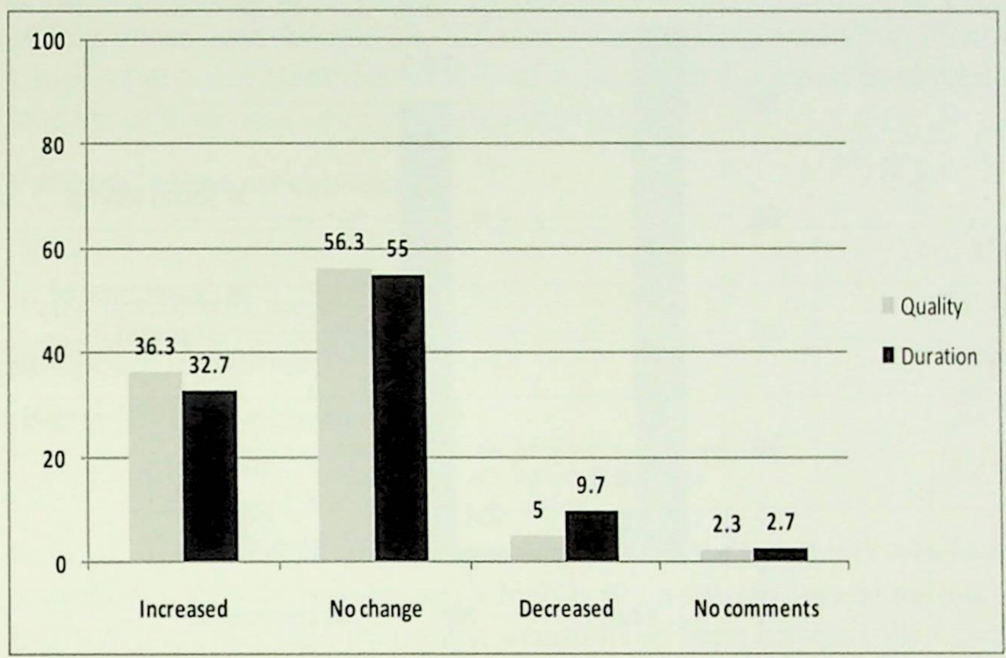
Trainer trainee interaction in English

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

Pts' ability to understand English / Patients' response.	Able (%) (n=90)	Unable (%) (n=207)	Significance level
Agree to discussing their problem in English	82 (91.1)	160 (78.4)	p=0.136
Better if discussed in native language	55 (62.5)	174 (84.9)	p=0.186

This study explored views of patients on doctor student interaction taking place in English which is not the mother tongue of patients. Only 30.3% 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. 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]

Impact of students on duration and quality of consultation



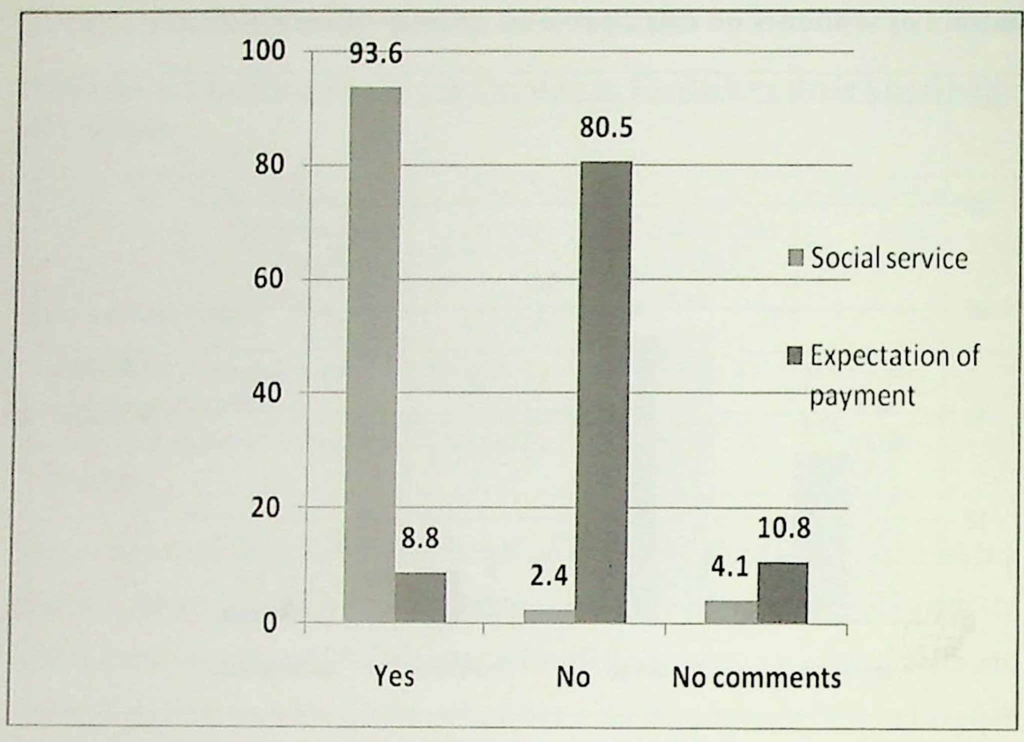
The perception among patients that the quality of the consultation was not adversely affected due to the presence of students by the majority (92.6%) is an encouragement to GP trainers. In fact about one third felt there was a positive impact perhaps due to more detailed history taking, methodical examination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

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

Opinion on "Involvement in training students is a social service" & Expectation of a payment



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. The probable reasons may be sense of altruism, mutual obligation and giving something back to the system.[27,28]

Patients' attitudes towards gender of students

Patient / Preferable Gender of student	Female (%)	Male (%)
Female	38(23.0)	17(14.0)
Male	6(3.6)	9(7.4)
No preference	121(73.3)	95(78.5)
Total	165(100)	121(100)

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 al[29] and Bentham et al[30] also found that women preferred a student of their own sex more often than men.

Patients' views on consent

View	Yes (%)
Prior notice was there	30.6
It's better if informed	45.8
Better if I have right to choose	50.5
Feel comfortable in telling not to have students	52.9

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.[31] 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 consent[32] and GPs should be mindful of this fact.

This study which demonstrates the views of 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.[33] The findings of this study will be reassuring for doctors who presently are involved and those who plan to be involved in undergraduate training in the future. It will be of help in planning general practice clerkships.

Conclusions

1. Patients are a willing resource for student education in training practices.
2. Trainers should be aware of the instances where patients may not like the presence of students
3. Patients perceive that presence of students does not affect the quality of consultation.
4. Patients should be able to choose when they want to be involved in teaching.
5. Trainers should be careful when discussing with students in a language not understood by the patient and at least a brief explanation should be provided to the patient on what was discussed

2. Views of Students

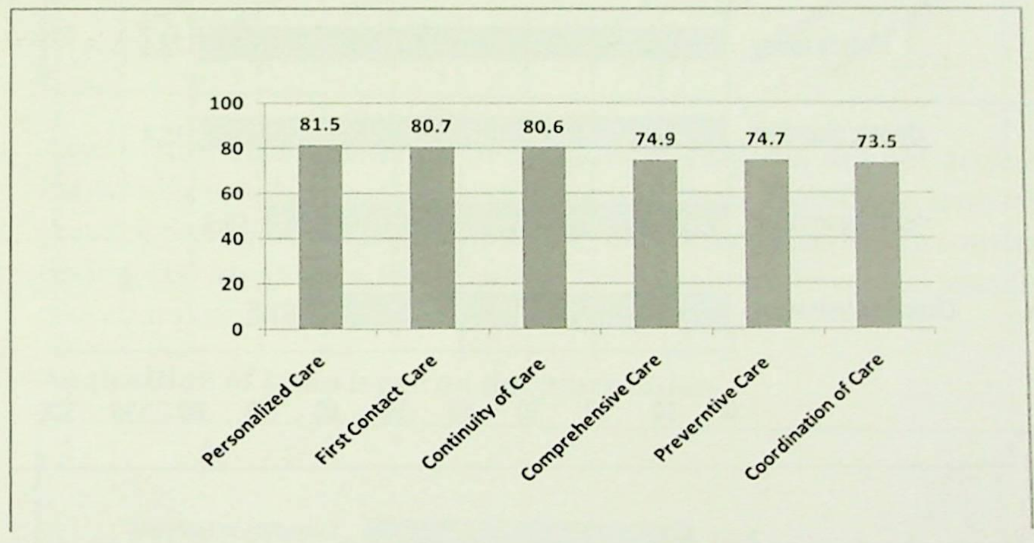
This descriptive cross sectional study was conducted among fourth year students after completion of the bar examination at the end of the fourth year.

Results

There were176 students in the batch and 171 students responded. (response rate was 97.1) 57.4% were females.

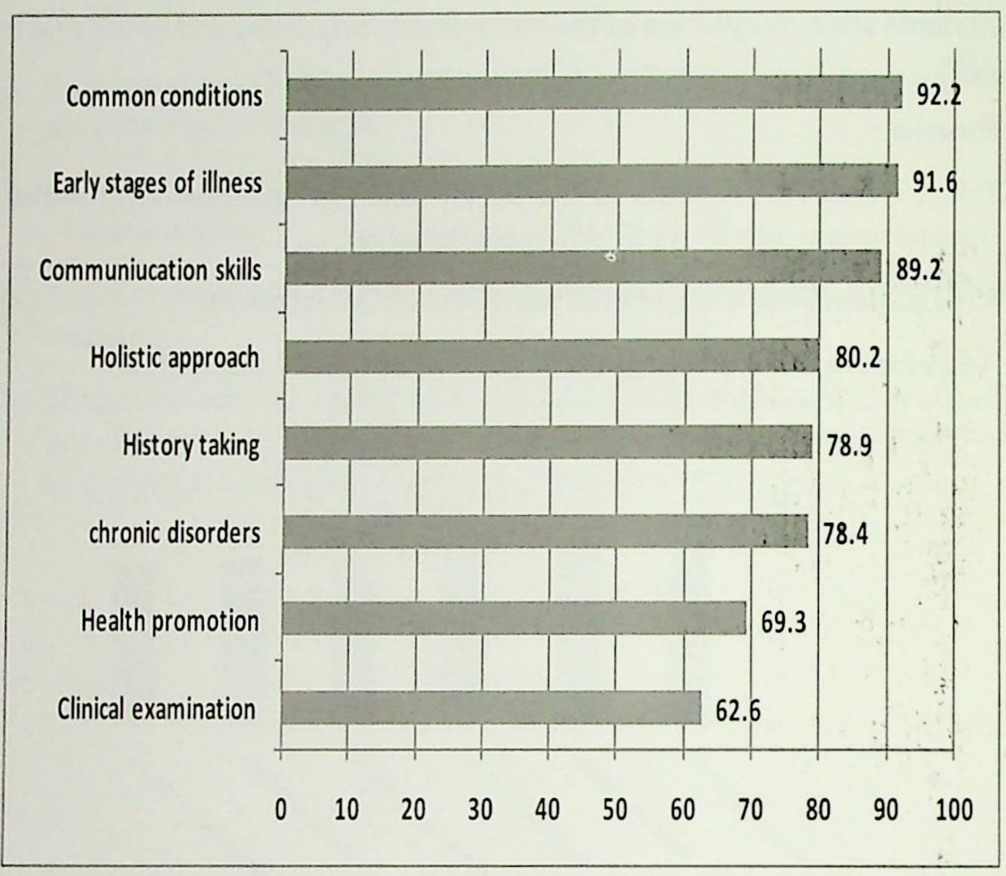
83% students knew the objectives of the GP attachment.

Acquisition of knowledge on functions of family physicians



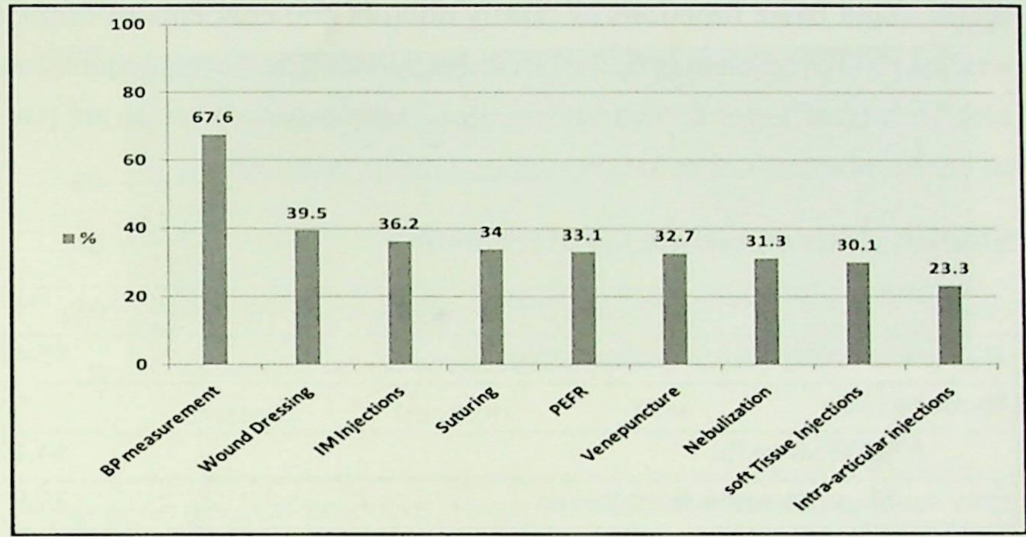
Majority of the students acquired knowledge on basic functions of family physicians which was one of the key objectives of the training but acquisition rate was relatively low for comprehensive care, preventive care and coordination of care. Perhaps the limited exposure of three sessions would not have given them enough opportunities to learn about these concepts thoroughly. This may be the reason why functions like coordination of care and preventive care which may not be demonstrated during each and every consultation had not been learnt by about one quarter of the students.

Acquisition of knowledge on family medicine concepts and basic skills



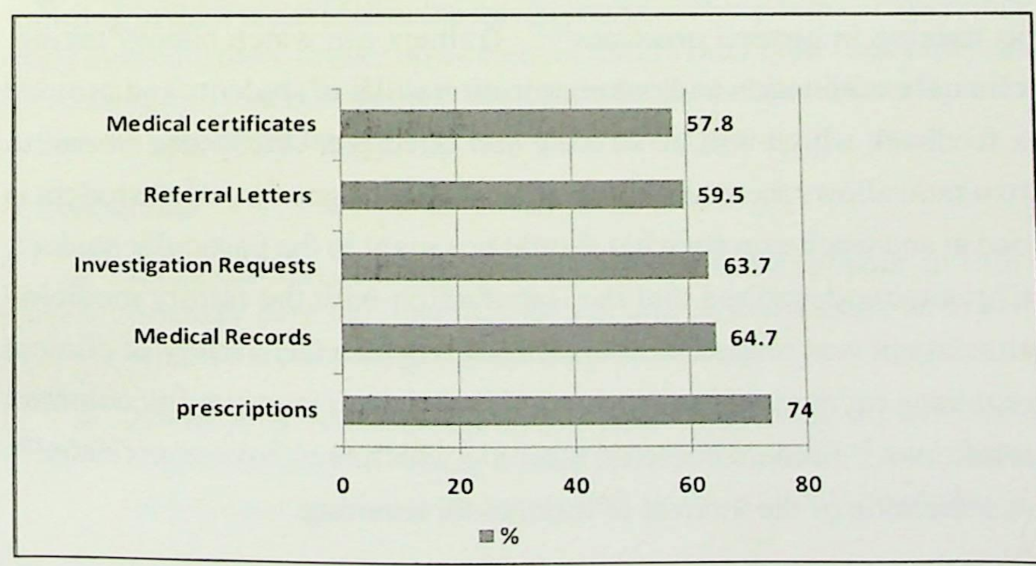
Its an encouragement that more than 90% of the students learnt about common conditions and early stages of illnesses. Family medicine clerkship is the only opportunity for them to gain exposure to these aspects of medicine. Another specific objective which is to expose them to holistic care approach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

Acquisition of clinical & procedural Skills



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.[34,35] It has been shown that learning procedural skills can be best achieved in hospitals.[36]

Acquisition of knowledge on documentation



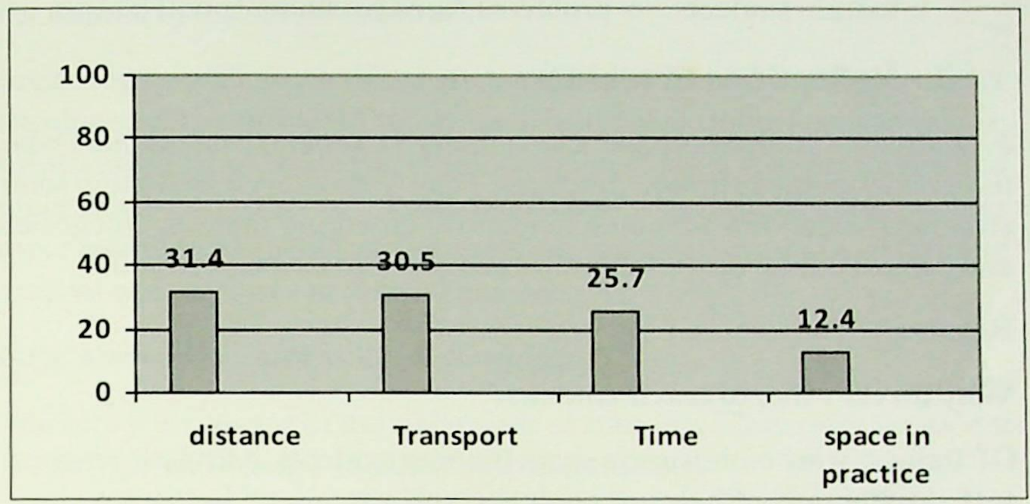
Students were unable to learn about documentation to the extent they learnt about basic functions of family doctors and concepts of family medicine. The reason may be the limited exposure. The lowest acquisition rate for referral letter writing and medical certificates which are not part of each and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

Student views on satisfacion of training

View	%
It's a satisfactory learning experience	85.4
Reasons	
Less stressful	84.4
More attention from trainer	79.9
Student centered training	68.8
Protected teaching time	65.6

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[36,37]. 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 student is good at, what student is bad at and teach exactly what should be taught to the particular student. Christopher described that the satisfaction with the family medicine attachment was related to interest shown by the GP, variety of clinical problems encountered and the experience gained in managing common conditions.[34] Student centered teaching which they have appreciated is an indication of the interest of trainers for teaching.

Problems encountered by students



Distance to general practices, transportation and travelling time were the main problems identified by the students. They emphasised those problems in their free comments as well. Obviously students who had to visit practices in distant places would have experienced these problems more and these problems can have negative influence on the students. Therefore every effort should be made to find general practices with a close proximity to the medical school to minimise these prblems.

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[38] once they are graduated and that is extremely important for the balanced development of health care systems.[39]

Conclusions

- Even though students only had a limited exposure in these primary care settings they still acquired knowledge and skills which they cannot gain in a hospital setting.
- Number of visits should be increased to provide students more opportunities to learn about functions and roles of family physicians and basic concepts and skills in family medicine.

- General prcatices closer to the medical school should be recruited to train students, so problems faced by students will be less.

3. Reflections of trainers

A qualitative study was conducted among 11 general practitioners who train undergraduate in their practices. They were interviewed using semi structured interview schedule 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.

"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"

"Whatever I have learnt 35 years ago at medical school has changed, so it is a great opportunity for me to learn."

The reasons expressed by GP the 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.[25] Enhanced sense of self worth and confidence[25] and welcome role as 'teachers of medical students[26] 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[1].

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[42]. Positive effects on clinical practice such as more methodical in clinical examination, management and maintaining records and selective in referral had been reported.[42]

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.

Their awareness in learning outcome could be attributed to their long standing association with the medical school and medical school's strategy of informing them about the objectives regularly. Even though there are reports about anxiety among GP teachers regarding adequacy of their knowledge and competence in skills[42], 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 which university can arrange easily. 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.[1]

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 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[31,41] but this need not be considered as a drawback in training since students could learn and practice these skills in hospital.[31]

Patients' attitudes towards students

GPs perceived that the majority of the patients understood and liked the presence of students. Usually patients accepted students during history taking but when they had to discuss confidential issues some patients were uncomfortable. Most of the patients allowed students to present when they were examined without taking off clothes. When it comes to examination of genital organs most of the GPs did not allow students to present.

The fact that the participants have been trainers for more than a decade could have influence over positive attitudes of patients. Literature shows that there is a tendency for consent rates to increase over time as practice teaching culture becomes more and more established.[28]

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. They emphasized that patients should be watched for their reaction throughout. If it is realized that patients become uncomfortable students should be asked to leave the consultation room.

"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."

"Sometimes we face the issue of confidentiality"

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. They would not take short cuts which they might otherwise take in the presence of students.

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

GP trainers were of the view that the quality of care (consultation) improved due to the presence of students. Longer consultation time, comprehensiveness in history taking and examination, more methodical in management were the potential benefits to the patients according to GPs.

Duration of consultation

GP trainers pointed out that duration of consultation increased due to students. Another opinion was that it depended on the condition of the patient and his/her 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' knowledge

Generally they were happy with the theory knowledge of the students but not so with the practical and procedural aspects. They opined that 4th

year and final year students could understand and learn more since they had better knowledge.

Those who have trained students from other medical schools also made a comparison between students belonged to different levels of training. GP trainers were of the view that senior students, having more background knowledge could gain more from the training. It is the nature of general practice that one encounters a broad spectrum of problems. To understand and appreciate management of varying health problems students should have adequate background knowledge.

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 more respect.

They have noticed that more mature students were keen and more interested in learning than students of the 3rd year and early part of 4th year. They attributed it to the more 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.[28]. At the same time when it was too close to the examination also 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 [28] also reported occasional such 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."

"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 length and lengthen 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.[33] 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. [33]

Support from the faculty

"So you have to keep us inform 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' feed back,"

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.[33]

GPs 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

They were of the view that payment made by the university was a negligible amount but they were prepared to teach students without any payment from 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. This 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 involved with 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.[42,43]

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."

Conclusions

- Altruism, self satisfaction and self esteem are main reasons for GPs' involvement in undergraduate training
- Patients have positive attitudes towards students
- Students could learn different aspects of medicine which they cannot acquire in a hospital setup. More training sessions are needed to expose them to continuity of care
- Mature students will be benefited more from training
- Time pressures and space were the main problems faced by GP trainers
- University should organize workshops periodically to update their knowledge and enhance teaching skills

Patients are a willing resource for training medical students in primary care settings. Students have gained knowledge which they may not get in other settings. General practitioner trainers have shared their knowledge and sacrificed time and resources for the future generation of doctors.

For students this has been positive experience and that may motivate them to take up a career

In family medicine which is crucial for the balanced development of health care systems.

Training medical students in primary care is still more important in Sri Lanka since any doctor having registration with Sri Lanka Medical Council can function as a primary care doctor without formal training in primary care.

Acknowledgement

- Co Investigators:

  Dr. A. H. W. De Silva

  Dr. D. P. Perera

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  Dr. L. R. Jayasingha

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- Patients, students and GP trainers who took part in this study.

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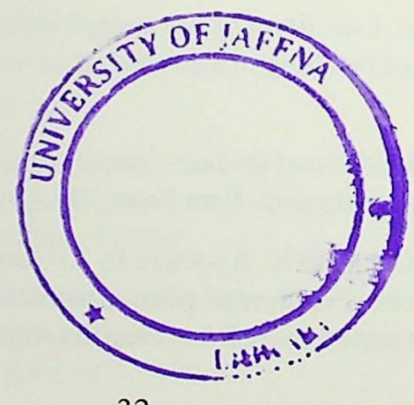
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