UNIVERSITY OF JAFFNA

Professor
Chellathurai Sivagnanasundram
Memorial Oration

COMMUNITY BASED MEDICAL EDUCATION
Opportunity or Challenge

by
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Barts and The London,
School of Medicine and Dentistry,
Queen Mary University of London.

14th August 2012

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Message from the Vice-Chancellor

Late Professor Chellathurai Sivagnanasundaram has contributed immensely to the University Jaffna and in particular to the Faculty of Medicine. His contribution to the Medical Curriculum of the Faculty of Medicine and especially to the Department of Community Medicine cannot be forgotten in the history of the Faculty of Medicine, University of Jaffna. Prof. Sivagnansundaram has been a disciplinarian and has been moulding the students not only in the Community Medicine curriculum but also in Community based field and research activities.

Prof. Prof. Sivagnansundaram being a Medical doctor also has contributed to the modern Tamil literature and well known as 'Nanthi' among the Tamil scholars. Prof. Sivagnansundaram's family members have graciously established a fund for conducting the Memorial Lecture and give their contribution to arrange for the Lecture with the University administration.

We are happy to have Dr. Ann O'Brien who has similar interest as Prof. Sivagnansundaram in the Medical Education and Community based Medicine is delivering this year's Memorial Lecture. Ann's interest and academic activities are related to improve various skills of the Medical students and especially she acts as the facilitator to the first and second year students in Problem Based Learning (PBL). Her specialty and experience with the community could also be used by the Faculty of Medicine, University of Jaffna for the development of the Personal and Professional Development stream and Community stream.

Prof.Vasanthy Arasaratnam,
Vice -Chancellor.

Introduction:

Vice Chancellor, Deans of the Faculty, senior and junior academics, Family members of Professor Sivagnanasundram, friends and students, ladies and gentleman---

I am honoured and touched to be asked to speak at this year's Professor Chellathurai Sivagnanasundram Memorial Lecture.

I regret not having been acquainted with Professor Sivagnanasundram, but recognise the high regard in which he was held. He obviously had a passion for the provision of high quality community care. This is a passion that I share. I am delighted to be here in your country and at your University in Jaffna. The opportunities for future collaborative working on medical education projects between the University of Jaffna and Barts and the London School of Medicine and Dentistry are exciting and, the benefits of Dr Surenthirakumaran's visit to the UK last year must not be lost.

Why Community based medical education?

When I was a medical student- a few years ago now- the curriculum of my medical school was split into pre-clinical and clinical years. It was two years before I saw my first patient and that wasn't necessarily to be able to speak to them. The structure of teaching was didactic, at times rigid and certainly not patient focussed. The curriculum was very definitely directed to produce

secondary care clinicians, even though it was recognised that 50% of medical graduates would eventually become general practitioners.

My experience of general practice teaching at medical school was four weeks in the fourth year. Opportunities to really meet with and understand other health professionals' roles and responsibilities in the community were very limited. Doctors were not expected to fully recognise what nurses were capable of and nurses were expected to do as a doctor requested, without question. It has taken a career in general practice over the last thirty years and, increasing autonomy of non-medical health practitioners to fill that gap for me.

Since those early days of my medical undergraduate training, there has been widespread reform around the world in undergraduate medical curricula in recent years. In the United Kingdom (UK), medical schools have introduced radical changes to the content of curricula due to recommendations contained in Tomorrow's Doctors published by the General Medical Council (GMC), which reflected worldwide trends in medical education. The GMC called for an end to factual overload with integration of basic and clinical sciences and a move away from didactic teaching to encourage problem solving, critical thinking and life-long learning.[1]

In addition, community settings, including general practices, have become increasingly important for the delivery of medical undergraduate education in the past 20 years.

The reasons for this are well documented and include: changing patterns of health care delivery with reduced numbers of hospital inpatients, recognition that patients in teaching hospitals are not representative of the general population, and an emphasis on community management of chronic disease.[2]

So should community based medical education be more widely experienced in undergraduate programmes in Sri Lanka? It would seem eminently appropriate to do so, but there are both opportunities and challenge in this endeavour.

The stated mission of your national health strategy is.....
To contribute to social and economic development of Sri Lanka by achieving the highest attainable health status through promotive, preventative, curative and rehabilitative services of high validity made available and accessible to the people of Sri Lanka

The medical curriculum in Jaffna has been through a number of changes and developments over the years, the latter ones led by Professor Sivagnanasundram. The medical school continues to have a duty of care toward its students and to the development of the most effective curriculum that provides a

clinical education for medics, in order to meet the health needs in the changing population of the future. Public health together with the health of the public needs to be the goal!

Student Opportunities:

Why should your medical undergraduates not have the opportunity to experience a holistic model of care closer to the patients' homes? The broader the exposure to all varieties of patients' needs, the more likely are clinicians to be able to support and care for those medical conditions that do not need treatment in secondary care.

Experiences in general practice can include early patient contact, learning basic clinical skills (history taking and physical examination) and enhancing knowledge of medical conditions, especially chronic disease in nonhospital settings.[2] All of these educational goals are key components of the learners' needs.

However,it must not be forgotten that patients are first and foremost the users of the health economy. Their involvement and agreement to the participation in teaching of medical students is paramount. Patients have been found to enjoy their involvement in community-based teaching and perceive themselves as making a valuable contribution.

It appears that there are two underlying components to this: altruism and personal gain. The aspects of personal gain

included: improved knowledge, improved self-esteem and companionship. Doctors also need to be aware of the possible shifts in the doctor-patient relationship when actively seeking patients' help in teaching[3]. The experience of my Unit in the UK seems to show that once a practice is established as a teaching practice, this shift reduces as patients get used to seeing medical students regularly.

Worldwide experience of CBME

Various studies of the impact of community based medical education, across a number of countries, have explored the views of students in a number of programmes. This research into students' opinions of curricula, that have a community based delivery, also highlights positive feelings of their experiences. In Nigeria, Jinadu *et al* in 2004, using a focus group study, demonstrated as a key outcome, increased awareness by students of the preventative aspects of various communicable and non-communicable diseases.

The study also identified that the presence of medical undergraduate students in the community, helps encourage the community to participate activity in support of primary health acre activities.[4]

Ebuhi and Avankogbe additionally identified that student opinion of a new primary health care programme at the University of Lagos also supported the view that this CBME

system helps prepare graduates for their expected leadership role in meeting the health needs of their communities through primary health care.[5]

A further study of medical students in India by Dongre *et al*[6] demonstrated that students' self-perceived skills and knowledge were significantly higher than the retrospective assessments of themselves prior to the primary care based course, particularly in areas such as their skills in interviewing and communicating with local villagers, being aware of the public health research process, and the ability to collect data, enter it via a computer and present gathered information. There were six categories of common responses, all positive, that emerged from the open-ended feedback:

These are

1) ability to apply learning to research work,
2) communication skills,
3) awareness about local epidemiology of injury,
4) awareness of local first-aid practices and health care seeking behavior,
5) awareness of survey techniques, and
6) anticipated application of this learning in the future and its effect on the student.

It seems that these would be valid outcomes for students in Sri Lanka also.

Barts and the London School of Medicine and Dentistry, through the academic unit of community-based medical education, place over 1500 students per year from all years of the curriculum in various modules. This involves working with over 160 practices across the UK. The relationship of trust and respect between the Unit and tutors, that produces consistently high quality student feedback about their experiences, has taken ten years to achieve but is easily disrupted.

Impact of the Alma-Ata declaration

Despite the overarching adoption of the Alma-Ata declaration by most countries, as a strategy for achieving health for all, it is highlighted that for those countries with traditional medical education, it does not necessarily adequately prepare doctors for their role in this vision. The evidence base also demonstrates that it is critical, in the context of continuing serious shortages of doctors and health workers in rural areas, to recognise that "the overflow effect" does not always happen.[7]

There needs to be ways of providing cost-effective approaches to the training of all health professionals that will facilitate the achievement of the Alma-Ata goal.

In the UK, 'Common learning' has been commended more recently by the Government to facilitate substitution and to ease progression between professions, in order to develop a more flexible and more responsive workforce. Inter-professional

education can make an indispensable contribution to common learning by cultivating collaboration without which workforce reforms may falter for lack of give and take between the professions, and counter resistance when change is threatening.[8]

The Context of Rural practice

It is recognised that rural practitioners carry a heavier workload, provide a wider range of services and carry a higher level of clinical responsibility in relative professional isolation. This perhaps makes the decision to follow a career path in that setting, a less attractive and more problematic one.

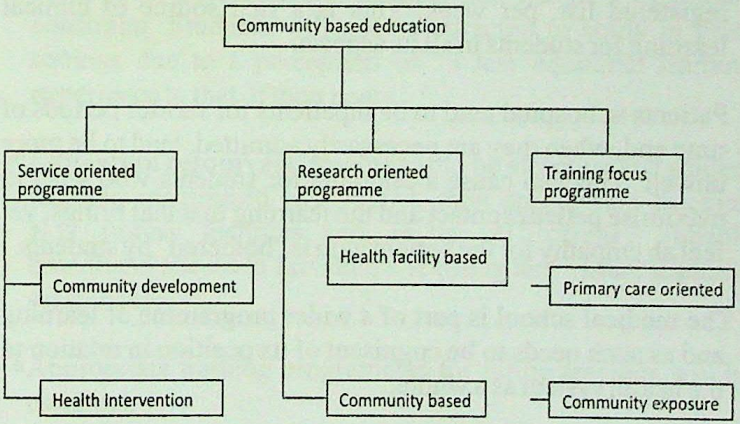
It seems reasonable to assume that an undergraduate experience in rural settings will encourage a future interest in rural practice. It is therefore paramount that the choice of an appropriate education setting in the community provides

- A teacher who has a rural background
- Positive clinical and education experience in rural settings, as part of the undergraduate medical education
- Targeted training for rural practice at postgraduate level

Additionally, to support sustainability and retention of the intellectual factor for physicians in areas with academic involvement (teaching and research), the links to centres of academic excellence need to be established. Mutual respect for the contribution that rural practitioners can offer to academic projects is to be valued and encouraged.

The formalisation of an educational taxonomy to provide structure to community delivered education will strengthen the academic rigour required. Magzoub in 2000, proposed a taxonomy for community based medical education that recognises all the essential streams for a successful programme of learning, that is both academic and practical. Sustainability is more likely to be achieved if the competing tensions are acknowledged and managed proactively. The creation of the taxonomy contributes to the development of a theory of Community based education as well as providing a more systematic way to study Community based education.

The diagram below highlights the links between the service delivery, the research activity and student education that community-based medical education providers need to be aware of.[9]



Varieties of community-based education programmes are classified according to the taxonomy of Magzoub

Challenges of community-based medical education

There are three main challenges to successful implementation and sustainability of community based medical education. I believe these are

- Social attitudes
- The organisation of the health system
- Resources

1) So "are rural activities really 2nd class or of a lesser standard of medical service than those in city settings? In the UK, the role of primary care physicians is highly valued by patients, most secondary colleagues and more recently the Government.

   General practitioners are becoming the key commissioners of care and decision makers about services that are to be prioritised.

   It is recognised that primary care physicians in the UK offer approximately 80 appointments per 1000 patients, on a registered list, per week. This is a rich source of clinical learning for students in all its aspects.

   Patients in hospital tend to be inpatients for shorter periods of time and, when they are necessarily admitted, tend to be more unwell. This can cause a dilemma for students who wish to maximise patient contact and the learning that that brings, yet feel an empathy for the patient who is "bothered" by students.

2) The medical school is part of a wider programme of learning and as such needs to be cognisant of its position in relation to the health system as a whole.

   There is a need for active involvement of the health system --- You now have the support of the university and support from

the government, with the acceptance of the valuable nature of "care closer to home" and this will allow for faster progress.

It is recognised from academic research that patients become more involved and have a greater understanding of their health needs if teaching is seen to take place alongside their care. This will ultimately, accepting that it might take some years, have a beneficial impact on population health.

3) Limited resources are a major challenge particularly in low income countries.

- **Human resource** constraints can simply be shortages of healthcare professionals but also variability in clinical skills and possible teaching skills in the rural practitioner. This will have an impact on what level of teaching and perhaps the quality of delivery of that teaching. Limitation of physical resources, which are of poor quality or non-existent, services with erratic equipment and supplies and lack of suitable housing for student health workers will also be a significant constraint. Students will not be attracted to study in these settings due to a perception of a less equitable learning experience to that of their peers.

- **Education resources**if teaching is to be effective and student learning maximised and valued, then appropriate teaching aids, library facilities and, in the 21st century ,reliable broadband access to facilitate e-learning and virtual teaching sessions etc.

- Appropriate training programmes for future teachers will be essential.

- A modular, web based e-learning programme of training could be developed to support the disparately placed clinicians.

- Standards will need to be agreed and maintained, with a robust process for quality assurance. Both teaching methods and assessments need to be robust, equitable and valid for a higher qualification.

- The academic commu nity and programme directors will need to agree approaches to these areas, so that all students understand the expectations contained within a new curriculum.

Benefits of Involvement in Community delivered Medical Education

In my personal experience most family practitioners enjoy sharing their experiences of clinical practice. They recognise the value of the influence of "the role model" in the growth of learners--- now that may be good or bad, so processes are essential for regular appraisal, and ongoing continuous professional development of teachers and, review of student feedback together with peer review of teaching provision. Role models in medicine fulfil their roles in virtually any situation in which a student can observe a clinical teacher.[10]

The ideal teaching attachment would include time set aside between patients, for discussion of the case and, the learning points arising from it, as well as an opportunity for the student to interview patients alone in a separate room and on a regular basis. Students should be observed interacting with patients and given structured feedback to enhance the formative learning achievable.

General practitioners in the UK generally choose this speciality of medicine because they wish to practice a holistic

approach to care. There are also increasing opportunities to follow other dual specialist interests, by becoming general practitioners with special interest.

Rural family practitioners in Sri Lanka will also provide the broader spectrum of care. Perhaps the development of individual primary care specialists for a locality will encourage practitioners to consider careers away from the ivory tower centres. This could offer the joint benefit of both specialist care and primary care provision in rural communities.

Students, who have the opportunity to witness successes in this delivery of healthcare and perhaps become personally involved with service delivery, will gain an experience second to none. Senior students should have the chance to become "part of the team", learn skills of leadership, team working and healthcare management and become apprentices in their trade.

Community placements, with enthusiastic and skilled teachers, will offer all this. Graduands will have a greater appreciation of what is possible and hopefully through their community based training an understanding of what is not, but be able to develop solutions to address the problems.

The changes in medical curricula worldwide have generally involved the introduction of problem based learning approaches, alongside the introduction of a greater part of the core curriculum time taking place in the community. Locally, you have programme directors with a vision of a future undergraduate medical curriculum delivered to a greater extent in the community.

The development of a centre for family medicine gives a setting for the provision of this communitybased care. The opportunity for these two events, together facilitating the

expansion of the undergraduate medical curriculum experience into rural settings, is invaluable.

Utilising the taxonomy proposed by Magzoub, it demonstrates the intricacies involved in the implementation of Community Based Education, in particular the complexity of building a learning environment that is productive for students and, at the same time, responsive to community needs.[9]

Conclusion

The overall evidence base suggests that tutors, students and patients alike believe that the outcomes of community delivered undergraduate education are beneficial. However, the challenges are real and successful curriculum change takes several years to embed.

I believe that the ultimate benefit to the health economy of Sri Lanka of greater numbers of medical graduates choosing community or rural based practice long-term, will help deliver your health service mission- **achieving the highest attainable health status for all.**

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Ann O'Brien qualified from Kings College Hospital Medical School in 1975 and then undertook General Practice Vocational Training, completing this in 1980. She has been a principal in General Practice since then and has had experience of working in the FHSA, FPC, PCT and LMC in Redbridge over the last 25yrs. Ann is a GPSI in Diabetes and was awarded the FRCGP in 2002.

She has worked with mixed groups of health professionals and lay representatives on many different aspects of health care. The work involved various tasks such as manpower issues for primary care, hearings for independent reviews for complaints to working with others on commissioning and strategic planning in a number of areas.

She moved into a more academic role at Barts and the London in April 2004 to follow her interest in undergraduate medical education.

Ann is also working part-time as Medical Director of NHS Redbridge and GP Appraiser for Redbridge PCT since 2002.

Since being a member of the academic staff she has been involved in teaching communication skills across all years of the curriculum. This has been in addition to facilitating PBL groups in years 1 and 2, as well as acting as a mentor to year 3, 4 and 5 students. She has acted as an OSCE examiner for exams across all years and has been involved in the development of exam questions.

Within the Centre for Community-based Medical Education, Ann is the module convenor for Year 5 general practice module.

Ann's interests are in interprofessional education, professionalism in medicine and diabetes.