I should like to thank the organisers of this meeting and Dr Adrian Hastings in particular for your kind invitation to address one of the most significant matters in health and in the education of health care workers today.

Can you imagine this subject being discussed ten years ago? Of course not. Even five years would be stretching back a long way. Today, however, global health is in the headlines. But surely this term is an oxymoron.

How can we talk about global health when one in seven of the world’s population lives in poverty and when we know that, if the garment of their life has poverty as its warp, health - the weft - is structurally and visibly woven with poverty?

How can we talk about global health when the health related Millennium Development Goals will not be reached by the countries of sub-Saharan Africa¹?

How can we talk about Global Health when governments fail to curb commercial exploits which undermine health in poorer countries?

A search through PubMed for global health brings up little until recent years; in parallel, I might ask how much attention has been given to the matter by those who are deeply involved in medical education?

In tackling this subject I want to ask three questions.

First, why is the subject important?

Second, why is the subject important for medical schools?

Third, why is global health essential for students as individuals?

And, finally why must we, and I deliberately use the word must, why must we, as those who will have responsibility to make this happen, be alert and ready to move? But, before we consider its range, let me briefly consider what global health is and why it is important.
First, Global Health is more than International Health. Since international travel has moved organisms, people, armies, health care professionals and manufactured medicines, we have become aware that health is no longer parochial. While John Snow’s work and observations showed how the parish pump could spread cholera, it was parochial work. We have subsequently applied its lessons internationally. Those who use the term international health are primarily concerned with international disease, its management and its prevention, but its boundaries are imprecise. Thus, while it is reasonable to include supplies of vaccine against H5N1 strains of influenza virus, or cases of imported malaria in unprotected travellers, and even the basic treatment of HIV/AIDS, for example, within international health, global and policy issues thrust themselves forward as soon as the cost of antiretroviral drugs is confronted. And again, while the treatment of onchocerciasis with ivermectin is reasonably clear cut, the use of the drug, and its free supply by a drug company in a control campaign by WHO, UNDP, FAO and the World Bank, immediately goes beyond distinct therapeutic boundaries.

No medical school will fail to have these basic subjects in its twenty-first century curriculum although some may not include onchocerciasis, excellent model though it is. Regrettably, in the limited pursuit of technical knowledge, it’s the wider issues of any disease, whether onchocerciasis or HIV/AIDS, which may well be passed over. Therefore in considering global health, it is important not to be encumbered with a lot of baggage about exotic infections, their prevention and their treatment, although any student who wishes to go to an unusual place will have to be responsible for learning basic facts about exotic disease. This is the province of international health and travel medicine, important and always taken very seriously with thoroughly professional action.

Global health is more than this week’s big campaign or this new initiative, although it may indeed benefit from both. A campaign is fixed on a short term goal, a campaign promotes an idea. Global health is bigger than both as it demands long term commitment and single minded engagement; it may indeed have a new and excellent idea, but this will only be part of the whole, a watering station on the marathon run. It can never be squeezed into a short term goal or reduced to a donor’s desire.

Global health must stride the globe, rather than merely cross national boundaries. It places health outside the limitations of cause, effect, diagnosis, treatment and prevention; and it demands an approach that reaches beyond a Medical Faculty or a College of Health Sciences. Health is now as much a part of foreign policy as is the posting of diplomats overseas. Health can improve global security, enhance development and trade, create
knowledge of global value and, indisputably, promote human rights. Indeed health can move foreign policy away from a debate limited to the constricted field of vision that is national self interest to one that is about global altruism².

Global health is deeply concerned with global altruism, but while this is the ultimate motive and drive behind global health, its practice and its expression are very wide³. For all of those who are engaged in its pursuit, a global altruism is indeed a vital and valid motivator. Yet, if we are limited to fine motives, we are in danger of campaigning rather than changing; of pontificating rather than planning; and of debating rather than doing. Indeed I will go further, we must look out rather than look in, and be ready to learn from poorer countries because our own health system in the United Kingdom is failing, often through its complexity, as Lord Crisp has emphasised and as is discussed below.

If we are to be responsible to our students and visionary towards the health care that they will provide, the social determinants of health will be our beginning. We shall act confidently so that our minds, governed as they should be by equity and fair play, and unashamedly allied to hard science and economic realism, will shape what we do.

Let me ask? How broad minded are we as medical teachers prepared to be when global health takes its necessary place in the medical education of the twenty-first century?

Global health and development
It is trite to state that tomorrow's world will be very different from today's world, both politically and environmentally. The division of the world into first, second, and third, used to be convenient; now it is wrong. Old political certainties have been blown away, the cold war, the Berlin wall, them and us, the Arab Spring, the fall of unchallengeable regimes. Such regimes have left behind a savage and a wholly unnecessary legacy. Failed states fail in health too; states that are at war, or which have a warring neighbour⁴, spend their limited funds on arms but not on health workers. If the Government of Sudan had tried to develop Darfur with roads, schools, clinics, basic services and a loyal police force, its agony might well have been spared. Jeffrey Sachs has commented⁵ how these would have built a stable and developing society and would have been a catalyst for peace,

While international diplomacy [is] focused on peacekeeping and on humanitarian efforts to save the lives of displaced and desperate people, peace in Darfur can be neither achieved nor sustained until the underlying crises of poverty, environmental
degradation, declining access to water, and chronic hunger are addressed. Stationing soldiers will not pacify hungry, impoverished, and desperate people.

Only with improved access to food, water, health care, schools, and income-generating livelihoods can peace be achieved. ... The way to sustainable peace is through sustainable development. If we are to reduce the risk of war, we must help impoverished people everywhere, not only in Darfur, to meet their basic needs, protect their natural environments, and get onto the ladder of economic development.

Health in poorer countries will not only be greatly influenced politically, but also environmentally, by climate change and the relentless rise of population so that there will be failed or precarious water supplies, tumultuous rainy seasons and interminable dry seasons. There will follow a lack of food security with aggressive food prices; thus people will move to flee flood or famine, or seek to find somewhere for their children to grow up with hope and in peace. Finally, economic hopelessness in rural areas which have no access roads will cause urban migration to the biggest cities, which will sprawl acres of urban migrants without services, the very crucible for urban deprivation, transmission of disease and potential social unrest. This will be the frame for the many coloured canvas of global health.

By contrast, a healthy society will be less of a burden economically, its women will have fewer children, and it will be a vehicle for development.

**Global Health and health systems**

Now if health is to be truly global, the privileged in wealthy countries will need to develop deep humility so that they can learn from their partners and colleagues in poorer countries. Much has been written about the clinical, cultural and operational benefits of working in poor countries but, valuable though these benefits indeed are, such experiences do not go far enough. There is an unhealthy assumption that the system on which the “northern” person bases their experience is all right. This is fundamentally wrong. Lord Crisp, in his provocatively titled book *Turning the World upside down* has strongly emphasised that the rich Northern countries, whose health care systems are not proving to be good enough, have much to learn from the South. Southern countries, which have long been unable to depend solely on doctors because their single or perhaps their two medical schools could not produce enough, have had to develop staff who were trained with the basic competences to do specific tasks, whether the *Tecnicos di Cirurgia* in Mozambique or the psychiatric
clinical officers of Uganda. Northern countries may want to be active players in global health, but equally, northern countries must be active learners in global health. Only when they identify where they need to learn to improve their own health care systems, and then when they apply the lessons learned, will they demonstrate the humility which is so critical in any partnership.

**Why is global health important for medical schools?**

First, this question is easily answered by the students themselves. In December the global health teaching at Bart’s and the London/Queen Mary College will be enlarged; the stimulus and the demand for the initial course came from the students, and so it is in other schools, a demand from students, aware through international travel, aware through the internet, aware through *Medsin* and other agents of advocacy on their campuses. New global health courses are attracting more and more students. If global health is not part of medical education this century, the aspiration and desires of students will not be met.

It is a privilege to be able to work with those who are so globally aware; last month I was in Boston at the Massachusetts General Hospital where over three hundred people, the majority trainees and students, attended the inauguration of a global health and primary care residency training programme. If for no other reason, these interests have to be met.

But how can we answer this question from the point of view of a medical teacher; why is global health important in a medical school?

Why should our students be encumbered with yet another demand on their time? What is there about today which demands this?

Think back fifteen years; the Millennium Development Goals (MDGs) had not been formulated; only one London Medical School offered a course in international health; *Medsin* and *Alma Mata*, organisations by which medical students and doctors in training engage in advocacy and activity in poorer countries did not exist; UNAIDS had only just been founded, GAVI was still 5 years away and the Gates Foundation had yet to change so much about health in Africa.

During the last ten years interest has grown and the responsibility of the United Kingdom towards poorer countries has been expressed more clearly. First there was the Commission for Africa and its 2005 Report, *Our Common Purpose*, now followed up in its 2010 Report⁹, in which Myles Wickstead, the Secretary of the Commission, presented an elegant apologia for a measured and disciplined use of United Kingdom people and resources in Africa. Next,
in 2007, Lord Crisp, in a persuasive and seminal report\textsuperscript{10}, showed that partnerships between overseas hospitals and medical schools and their counterparts in poorer countries was an effective means of promoting health and of strengthening health systems; and finally, in 2008, our Government committed itself to an interest in Global Health through its Health is Global Report\textsuperscript{11}. Significant new funding has been allocated to THET for partnerships by the Departments of Health and of International Development because such partnerships are seen as effective for reaching the MDGs.

During the last five years, alongside this world consciousness, some Universities have embraced global health and have formed an Institute (Imperial College), a Consortium (the Bloomsbury Schools) or developed global health within their policy (King’s Centre for Global Health). It follows therefore that, unless medical schools are to paddle in the safe and shallow waters of parochial respectability, they must strike out into the deeper, stronger and at times darker waters of global health. Only then will they meet some of the demands of The Lancet’s Commission on Medical Education for the 21\textsuperscript{st} Century with its call for an education that is based on competencies and is interprofessional, interdisciplinary and international\textsuperscript{12}.

The King’s initiative is a good example of why global health has to be part of medical students’ training. King’s Health Partners categorised its approach to global health within three themes: education and training, service delivery and capacity building in partner countries, and research and policy development. King’s uses the enormous capacity and breadth of all nine Schools within King’s College London, so that Clinical Academic Group engagement forms an essential part of its global health strategy.

Global health is needed because it relates medical education to matters of world significance; global health is needed because it is an ideal forum for interdisciplinary education; global health is needed because it can equip students with the skills and competencies to be at ease in different cultures, to work within fragile health systems and to contribute to the practical and intellectual demands of development. Thus global health will bring a new generation of peace makers who, through their professionalism, will be a powerful force for good in the developing world. And in addition, these students should be positioned to learn from colleagues in poorer countries – something that previous generations have not always been sensitive to and indeed have often failed to do. But this force for good will have to be on the terms of the overseas country and within its health care system. If the days of certainty have gone, so too have
those days when the arrogance of wealth, derived from short term funding or a research grant, led some of those from the North to dictate their terms for engagement with the South.

If students can indeed take part in work which is so evidently developmental, it should surely not be necessary to have to argue the case that any twenty first century medical school should give global health its rightful place in the education of its medical students. Consider the Latin root of the word education; global health will be a wonderful way of leading students out and in preparing them to be medical professionals in the world.

Global health is important for all students, even those who will be practising in South East London or North West England! Global issues, for example the health and well being of those who have fled from conflict, and are now seeking asylum or are refugees, are now local issues. When climate change starts to take its toll on people who live in regions where rainfall will be vulnerable, where water will be prized and thus where conflict may follow, there will be more people on the move; global health practitioners will be needed as never before.

Finally, why is global health important for medical students as individuals?

I have already given some of the reasons; but, in addition, there are obvious answers to this question. Any work in a poor country overseas, if it is properly planned, will enrich a student in experience of a different culture, in different problems in health and disease, in a different system of health care in which those who are not medically qualified may carry much responsibility, and in the need, perhaps as never before, to consider how society and environment profoundly affect health. Or there may be, again, if planned carefully with colleagues overseas, an opportunity to take part in an established research study. There is less evidence that such experience for students from the North is of any direct value to students and teachers in the host country, but this could be made to change.

Let me give a current and pressing example. The Government of Ethiopia is establishing a number of new medical schools; the curriculum in this New Medical Education Initiative is described as hybrid, a mixture of the old and the new – traditional lectures and plenty of opportunity for self directed learning and problem based work. I know that the new Schools want help for their students because these students, all too familiar with a dreary didacticism, will be vulnerable and wholly unfamiliar with self-directed learning. Indeed they could become disheartened, unless they could get help from a friend, and that friend was a mature student on an elective from a Northern Medical School where problem based
learning was established. What better use of an elective for northern students than to work alongside their southern colleagues. What an astonishing means to express a core principle of global health - international inter-professional education. Why not!

Second, our students, and we their teachers, are part of a global profession. This word profession is fundamental in global health; forget for a moment nice tidy competencies, explicit skills and easy conventional attitudes. Instead let us celebrate our profession and what professionalism demands, the dedication of the professional’s life to the service of humanity\(^\text{13}\). This has to be the starting point for students for global health; this has to be the rock on which they build their global commitment, far removed as it is from the sinking sands of mere intellectual assent.

I have argued that global health is broad in its embrace, here it is overwhelming in its application. It is critically important therefore that students should be equipped, not only with an awareness of disadvantage, but also an awareness of talent and opportunity; with the necessary skills to be able to function as a twenty first century doctor; and with a flexible sensitivity to the many facets of global health.

Lastly, as students will be functioning in health teams with those of very different training in very different disciplines, it is important that our medical students should learn at some time with and from fellow students in other disciplines, certainly within but also outside the health professions. If global health is to be attained, there will have to be contributions from, for example, education, law, agriculture, economics and any other subject which profoundly affects health. But the means by which this will be done will be a challenge to any forward looking medical school.

Conclusion

I have ranged widely because global health is itself wide and deep and because it requires a rare commitment, a hunger to contribute and a resolve to continue. Then and only then will there be a chance for the disadvantaged to be relieved and for the marginalized to be brought into the main stream. What an opportunity for twenty first century education for health professionals!

References


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