Perspectives on Current and Future Issues facing Medical and Health Professions’ Education in the Developed and Developing Worlds

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Presentation Overview

- Part 1: Global Perspectives
- Part 2: Shifting Paradigms
- Part 3: Implications for Medical/Health Care Education

Questions, please
1. Global Perspectives
Pre 2008

Post 2008:

A turning point in how we view the financial, institutional socio-political and ethical stability of the 21st century world?
The global village

If you could fit the entire population of the world into a village consisting of 100 people, maintaining the proportions of all the people living on Earth, that village would consist of:

- **57 Asians**
- **21 Europeans**
- **14 Americans** (North, Central and South)
- **8 Africans**

- **52 women, 48 men**
- **80 - live in poverty**
- **70 - illiterate**
- **50 - hunger & malnutrition**
- **1 - university degree**
- **1 - computer**

2013 Africa
540 mill mobile phones!
A view of downtown Beijing on a clear day. At right, the same view...
1.3 billion people in developed world
Over 5.7 billion in developing
Need for re-balancing and addressing global inequities
Mobility of Health Professionals

Poor Sending Countries

- India
- Pakistan
- Philippines
- Angola
- Egypt
- Ghana
- Morocco
- Kenya
- South Africa
- Lithuania
- Poland
- Bulgaria
- Romania
- Ukraine
- Russia

Rich Receiving Countries

- Austria
- Germany
- France
- Ireland
- Netherlands
- Portugal
- Sweden
- United Kingdom
- United States
- Canada
- Australia

March 2012
Geographical distribution of the health workforce: ‘too little here, too much there’

Disease burden vs health expenditure; size of dot proportional to expenditure levels (WHR 2006)

• 2420 medical schools; ~389 000 graduates; 7 billion people
Territory size shows the proportion of all physicians that work in that territory (Cartography-one variable – 12 regions)

2004 there were 7.7 million physicians working around the world

The most concentrated 50% of physicians live in territories with less than a fifth of the world population.
NCDs:-Lifestyle – claim c. 63% of all deaths (34 mill in 2010)
Highest diabetes prevalence …North America.
4% are in Canada,
33% are in Mexico,
62% are in the United States.

Largest population of diabetics in 2001…India: 56 million people
Medicalisation of Society?

A pill for every ill!

Almost 4 billion prescriptions for medications were written in the United States in 2011.

UK
In 2010: 927 M; 2011: 961 M prescriptions Cost: £8.8 bill up 70% in a decade!

2012: 50M prescriptions for anti-depressants (vs 20M in 1999)
Health spending
Per capita spending on health and life expectancy*

WHO 2011*
The Global Economic Burden of Non-communicable Diseases (2011)

‘over the next 20 years, NCDs will cost more than US $30 trillion, representing 48% of global GDP in 2010, and pushing millions of people below the poverty line.’
Health and well-being

‘the greatest inequalities today are found within countries rather than between countries and the largest number of people living in absolute poverty is now to be found in middle-income countries’
Health challenges in the developing and underdeveloped worlds

• Two billion people do not have access to surgical procedures of any kind as opposed to four billion who are able to have surgery.

• Close to a billion are undernourished

• Those who are overweight or obese have increased to over a billion ‘in countries from Columbia to Kazakhstan,’ leading to ‘diabetes, heart disease, and high blood pressure.’

• SS Africa has c. 24% of the world disease burden but only 3% of the world resources and 1% of the doctors.

1. Eradicate extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
5. Improve maternal health
6. Combat HIV/AIDS, malaria and other diseases
7. Ensure environmental sustainability
8. Global partnership for development

Some successes in key areas

Raised profile of global health politically

Funding increased

Need to address broader concepts post 2015!

Basic human rights, equity, democracy, and governance…
Universitas 21 UNMDG Initiative
www.u21mdg4health.org

- **Universitas 21**: network of 27 research-intensive universities across the world.

- **Main focus of U21 UNMDG**: incorporate the UNMDGs into health care curricula through the use of case-study pedagogy.

- **Eight case studies** developed and used to facilitate interprofessional UNMDG student workshops across the globe. Student participation in workshops:

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- **Evaluations** of the workshops showed that the workshops had significantly enhanced students’ understanding of the UNMDGs.

- **Dissemination** work includes presentations in conferences, posters, newsletter articles and a submission to the UN consultation on post-2015 agenda (The World We Want).

- **Future activities**: support to students’ projects focusing on achievements of UNMDGs; networking with similar groups; to post-2015 agenda from academia.
2. Shifting Paradigms
Summary of key global health challenges

- Environmental threats
- Inequities and inequalities
- Lifestyle related epidemics (e.g. obesity and addictions),
- Non-communicable diseases
- Population growth and ageing
- Poverty
- Unemployment and well-being
- Gender-based violence
- Anti-microbial resistance
- Conflicts, bioterrorism, human security
- Pandemics…
‘Wicked’ issues and the ‘ingenuity gap’

- many stem from problems created by modernity
- highly resistant to resolution
- often have many interdependencies
- are multi-causal
Emerging Paradigm Shifts in Environment and Population Health

‘Exponential growth is unsustainable on a finite planet; inevitable change looms.’

Without change, our health systems will not be able to meet our future needs.

A new paradigm is required– a new worldview…

‘compatible with our needs as human beings but also an outer world that is compatible with the needs of our ecosystem.’
20th Century Healthcare Assumptions vs 21st Century Healthcare Needs

Factors influencing health
- Environment
- Illicit drugs
- Physical Inactivity
- Tobacco
- Alcohol
- Unsafe Sex
- Other

World-wide health expenditures
- Treatment & Overhead
- Prevention < 5%

US $ 5.3 Trillion

Source: Estimated from OECD, WHO, and Prevention Institute data

Public health and environment: Focus on primary prevention
Bridging primary and public health care

20th century—science based

Assess need – treat specific conditions

Disease/Illness-Focused: curing disease (sickness service)

Tertiary, Secondary, Primary Care

Health Care (hospital care dominance)

"patient-centred“ primary/secondary/tertiary health care

Biomedical Model of Health

21st century—population-based

Assess needs – treat whole person

Prevention and Wellness-Focused: improving population health (wellness service)

Self-Care
Primary Care
Acute Care

Health & Social Care Support
(community care dominance)

"person-centred“ primary/public health care

Biopsychosocial Model of Health

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3. Implications for Medical/Health Care Education

Working Differently Means Learning Differently
Systemic failures

- Mismatch of competencies to needs
- Weak teamwork
- Gender stratification
- Hospital dominance over primary care
- Labour market imbalances
- Weak leadership for health system performance
‘By one estimate, roughly 75,000 deaths might have been averted in 2005 if every state had delivered care at the quality level of the best performing state.’
‘Align education outcomes with the changing needs of the health care system.’

Identifying Needs

Re-conceptualising Undergraduate Medical Curricula and Delivery

Update Learning Outcomes
Restructure Undergraduate Medical Education

*e.g., The Lancet Commission Model*

**Models of inter- and trans-professional education**
UK report on early residency (PG) medical education content

- ‘High Quality Generalism’...
- NCD Prevention
- Chronic Care...
- ‘Whole-person’ care
- Mental Health
- Paediatric Care
- Learning Disabilities
- Care of people with life-limiting conditions
- *End-of-life care for patients and their families*

RCGP & Health Foundation. *Guiding Patients through Complexity: Modern Generalism* (Oct 2011)
Integrate inter/transprofessional learning (vs training in silos)
Thinking globally, acting locally

- From academic centres to national, regional global academic systems
- Optimising technology
Foster inquiry-based and blended learning approaches
Thank you!

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