Global Health BSc 2011-2 Module 3

Introduction to Module 3
Mariam Shaiti

Module 3 Introduction and Overview

9.30-10.30: Module 3 Introduction

- structure of the Module
- activity on TB Policy

10.30-11.00: Break

11.00-12.30: Module 3 Overview

Overview of Week 1BREAK

- Overview of the Module

Module 3 Introduction

- Intended Learning Outcomes
- Assessments: ICAs 1 and 2
- Structure of Module 3 by week
- Introduction to Policy

Module 3 Intended Learning Outcomes

- Analyze a given health problem from diverse perspectives (demographic, developmental, economic, cultural, health systems, and organizational)
- Propose multidisciplinary approaches to address GH problems and describe the strengths and weaknesses of these possible approaches
- Evaluate the tools used to assess health needs
- Discuss the relevance for GH of an eco-social approach to determinants of health
- Describe current issues around the production and use of evidence in GH, including in resourcepoor settings
- Describe the components of a health system and the main challenges in measuring its performance
- Interpret the evidence on access to healthcare and the implications for policy, with reference to different financing mechanisms
- Critically appraise the potentials and threat represented by new technologies for advances in GH
- Illustrate the potential of intersectoral collaboration for GH advances (e.g. research on sustainable livelihoods)
- Discuss the role of different actors in GH governance
- Describe and appraise the main arguments around aid effectiveness
- Search and review the literature including print, library, and online resources across disciplines, to develop a critical discussion on topical dilemmas within the GH academic field.
- Prepare and deliver a short formal group presentation on a GH issue

Definitions of Global Health (GH BSc students 7 October 2011)

Collaborative trans-national research and action for promoting health for all

GH advocates the importance if health and the BoD on the progress and future stability of each country and the world as a global transnational body through action fuelled by evidence-based MDT working in partnership with well-defined, accountable policy to tackle inequality and inequity worldwide.

GH is a concept of transnational research and policy, inspired by increased awareness of health issues worldwide, with the aim of providing health equity and equality.

Collaborative transnational research and action for improving health for all.

Definitions of Global Health (GH BSc students 7 October 2011)

Concepts:

- Health
- Collaboration/partnership
- Trans-national
- Research
- Action
- Health for All/Equity
- Burden of Disease/health issues
- Accountability
- Policy

Module 3 Assessments

- ICA 1: Group presentation answering the following question:
 - Question: "How could health systems around the world use new health technology to reduce health inequalities?"
 - presentations should be maximum 10 minutes long
 - additional 5 minutes for questions
 - Date: Wednesday 18 January
- ICA 2: Short essay (2500 words max):
 - "Discuss the role of the World Health Organisation in the new global health architecture"
 - to be written individually
 - Deadline for submission (Balckboard): Thursday 2.February

Week 1: Defining and Assessing Health Needs and Determinants

Tues 3 Jan	9.30- 10.30	Mariam Sbaiti	Introduction to Module 3 structure	MSc room
	11.00- 12.30	Mariam Sbaiti	Module overview and introduction to Week 1	MSc room
	14.00- 16.00	Helen Ward and Laura Robertson	Lecture: Introduction to Social Epidemiology theoretical frameworks	MSc room
			Seminar: Causal pathways to health in orphans	
Wed 4 Jan	10.00- 11.00	Simon Gregson Laura Robertson	Empirical Data for Assessing Public Health Needs Lecture: Demographic Methods	MSc room
	11.15- 12.15	Simon Gregson Laura Robertson	Lecture: Epidemiological Methods	MSc room
	12.30- 13.00	Simon Gregson	The Research Process – A Fieldwork Perspective	MSc room
	14.00- 14.30	Simon Gregson	Exercise Based on Fieldwork Experiences in Rural Zimbabwe	MSc room
	14.30- 16.30	Simon Gregson	Practical Aspects of Field-Based Research - Case Studies	MSc room
Thur 5 Jan	9.30- 10.30	Majid Ezzati	Lecture: Measuring the health of populations	MSc room
	11.00- 11.50	Majid Ezzati	Seminar: Measuring the health of populations	MSc room
Fri 6 Jan	9.30- 11.30	Majid Ezzati	Lecture: Global Health Inequalities	Roger Bannister
	13.30- 16.00	Richard Horton	Controversies in health statistics	Rothschild LT
	16.00- 17.00	Coffee and tea		Committee Room

Week 2: Health Systems I

Mon 9 Jan	9.00- 9.45	Mariam Sbaiti	Summary of Week 1 and Introduction to Week 2	External – CXRB Seminar room R1 Reynolds building
	10.00- 11.30	Peter Smith	Lecture: Health systems	External – CXRB Seminar room R1 Reynolds building
Tues 10 Jan	9:30- 11:00	Peter Smith	Lecture: Measuring health system performance	Rothschild LT
	11.30- 12.30	TBC	Seminar: What is a health system?	
Wed 11 Jan	9:30- 11.00	Peter Smith	Lecture: Governance and accountability	Clinical LT
	11.30- 13.00	Fred Martineau	Interactive lecture: 'Free Health? Access to paediatric health services in Sierra Leone.'	Clinical LT
Thursd 12 Jan	9.30- 11.00	Bruce Mackay	Lecture: The consumers' perspective on private health services	Cockburn LT
	11.30- 12.30	Bruce Mackay	Seminar: The consumers' perspective on private health services	Cockburn LT
Fri 13 Jan	9.30- 10.45	Chris Millett	Lecture: Primary Care in the World	Clinical LT
	11.15- 12.30	Chris Millett	Seminar: Primary Healthcare	Clinical LT

Week 3: Technology and Access

	9.00- 9.45	Mariam Sbaiti	Wrap up for week 2 and Introduction to Week 3	Rothschild LT
Mon 16 Jan	10.00- 11.30	Nathan Ford (MSF)	Lecture: Is access to Medicines a human right?	Rothschild LT
	12.00- 1.00	Nathan Ford (MSF)	Seminar: Access to Medicines	Rothschild LT
Tues 17 Jan	9.30- 12.30	Aulo Gelli (Partnership for Child Development)	Lecture/Seminar: School Feeding/agriculture Programmes	MSc room
Wedn 18 Jan	9.00- 12.30	Majid Ezzati Mariam Sbaiti	In-Course Assessment 1: Group presentations	SK SAFB – 119 Seminar room
Thur 19 Jan	9.30- 11.00	Judith Cherni	Lecture: Development and Sustainable Livelihoods	Clinical LT
	11.30- 12.30	Judith Cherni	Practical: Sustainable Livelihoods	Clinical LT
Fri 20 Jan	9.30- 11.00	Angela Burnett (Freedom from Torture)	Lecture: Globalisation and Migrants' health	3 rd floor seminar room
	11.30- 12.30	Angela Burnett (Freedom from Torture)	Seminar: Globalisation and Migrants' health	3 rd floor seminar room

Week 4: Global Health Governance

Mon 23 Jan	9.00- 9.45	Mariam Sbaiti	Summary of Week 3 and Introduction to Week 4	Rothschild LT
	10.00- 11.30	Sid Wong	Lecture: Global Health Governance	Rothschild LT
	12.00- 13.00	Sid Wong	Seminar: Global Health Governance	Rothschild LT
	14.00- 15.30	Fred Martineau	Practical: 'Global Health Governance: Making Health Policy'	Cockburn LT
Tues 24 Jan	9.30- 11.00	Judith Cherni	Lecture: Globalization and problems of equitable development	MSc room
	11.30- 12.30	Judith Cherni	Practical: Globalisation and problems of equitable development	MSc room
Wedn 25 Jan	9.30- 11.00	Sidney Wong Bev Collins	Lecture: Global health and humanitarian policy	Peart room
	11.30- 12.30	Sidney Wong Bev Collins	Practical: Case Studies: Food policy and conflict in Somalia and On-going access to	Peart room
			HIV care in Bukava (DRC)	
	13.30- 15.00	Sidney Wong Bev Collins Robin Shattock Tim Allen (TBC) Mariam Sbaiti	Panel discussion and plenary debate: This house believes international aid is necessary for advances in Global health	Clinical LT
Thur 26 Jan	Self-direct			
Fri 27 Jan	9.30- 11.00	Mariam Sbaiti	Lecture: Generating political priorities – women's health	3 rd floor seminar room
	11.30- 13.00	Mariam Sbaiti	Student-led seminar: Generating political priorities: the case of maternal mortality	3 rd floor seminar room

Week 5: Health Systems II

Mon 30 Jan	9.00- 9.45	Mariam Sbaiti	Summary of Week 4 and Introduction to Week 5	Roger Bannister LT	
	10.00- 11:00	Bayard Roberts	Lecture: Conflict and Health	Roger Bannister LT	
	11.30- 13:00	Bayard Roberts	Seminar: Bomalia - group work based on a case study on priority setting	Roger Bannister LT	
Tues 31 Jan	9:30- 10:30	Lesong Conteh	Lecture: Understanding the Market for Community Health Workers	Clinical LT, St Mary's	
	10:45- 11.45	Lesong Conteh	Lecture: IPTi From RCT to policy	Clinical LT, St Mary's	
	13:00- 15:00	Alejandro Reig TBC	Providing a health service to vulnerable populations: the case of indigenous populations in Southern Venezuela	Cockburn LT, St Mary's	
		(Amazonic Centre for Research and Control of Tropical Diseases)			
Wedn 1 Feb	9:30- 13:00	Lesong Conteh	Lectures: Health Care Financing Part I and II	Cockburn LT	
Thurs 2 Feb	9:30- 13:00	Lesong Conteh	Methods for Economic Evaluation	Rothschild LT	
	In-Course Assessment 2: Essay To be submitted via Blackboard as per instructions, by 11.59pm on Thursday 2 nd February.				
Fri 3 Feb	9.30- 11.00	Mariam Sbaiti	Plenary: Module Evaluation	Clinical LT	
	11.30-	Mariam Sbaiti	Plenary: Preparing for Part B revision and	3 ^{ra} Floor Seminar	

Introduction to Policy

Walt & Gilson's framework for policy analysis

Context

- Situational factors
- Structural factors
 - Cultural factors
 - Global factors

Process:

- Why do issues reach the agenda?
- Who formulates policy?
- How is policy implemented?
- What makes policies change?

Content:

- Objectives & aims
 - Assumptions
 - Values
 - Distributional impact

Case Study Excercise (20min) Global Policy on Tuberculosis

The extract on the handout, on the rise and fall of policies on tuberculosis by Jessica Ogden and colleagues (2003), describes the different stages of the policy process, looking at context and actors as well as process. As you read it, apply the health policy triangle by Walt et al (2003):

- 1 Identify and write down who were the actors.
- 2 What processes can you identify?
- 3 What can you discern about the context?
- 4 What part did content play in determining policy?

Actors can include

- a) Karel Styblo, Halfdan Mahler, Arata Kochi (and the organizations within which they worked, which provided the base for their influence: IUATLD, WHO, UNICEF)
- b) World Bank; Ad Hoc Committee on Health Research
- c) networks: of PH community, TB specialists; technical and scientific experts interested in new drugs and vaccines research for TB

Processes

Different stages are suggested:

- -stage of neglect in the 1970s
- -1980s: a problem was recognised through a combination of improved research and experience
- -1990s: agenda-setting

Context

Points include:

- -Complacency in industrialised world up to end of 1980s
- -"Health for All" vision of integrated healthcare

Content

You may have noted references to the technical content of TB policy such as short-course drug regime. You may also have noted what DOTS stood for and differences over what it should be.

Global Health BSc 2011-2 Module 3 (Overview and Introduction to Week 1)

REVISITED FACTS FROM PREVIOUS MODULES AND NEW QUESTIONS

Outline

- Case study: MDG 6
- Week 1: evidence for Global Health
- Week 2 and 5: Health Systems
- Week 3: Technology and Access
- Week 4: Global Health Governance

Millennium Development Goals - Targets for TB

Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases

- 6.9 Incidence, prevalence and death rates associated with tuberculosis
- 6.10 Proportion of tuberculosis cases detected and cured under DOTS

Progress on MDG 6 – TB targets

- halting and reversing the incidence of TB:
 - global rates on track to achieve this
- halving 1990 death rates by 2015:
 - could be achieved at the global level
- halving 1990 prevalence rates by 2015 (Stop TB Partnership):
 - trends remain uncertain (only Western Asia appears to be on track to achieve this)

The Millennium Development Goals Report 2011

http://mdgs.un.org/unsd/mdg/Resources/Static/Products/Progress2011/11-31339%20%28E%29%20MDG%20Report%202011 Book%20LR.pdf

Week 1 Defining and Assessing Health Needs and Determinants

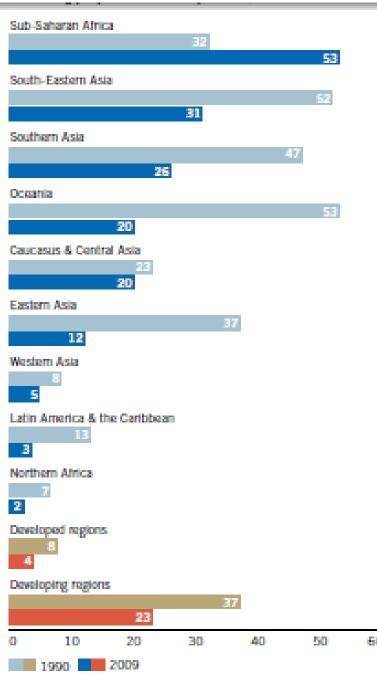
Questions for the Week

- Where does evidence for Global health come from?
- How do we assess the occurence, burden, causes and causes of the causes of disease?
- How do we evaluate interventions?
- What is the significance of how research is produced and funded for GH practice?

Evidence for GH Monitoring Health-related MDGs

- Available data are often not aggregated
 - Only 2-3 SSA countries have high standard vital registration systems
- Each disease monitored through a wide range of indicators
- Investments in health information systems are donor-driven, not system building

Health Metrics Network seeks to address these deficiencies www.healthmetricsnetwork.org

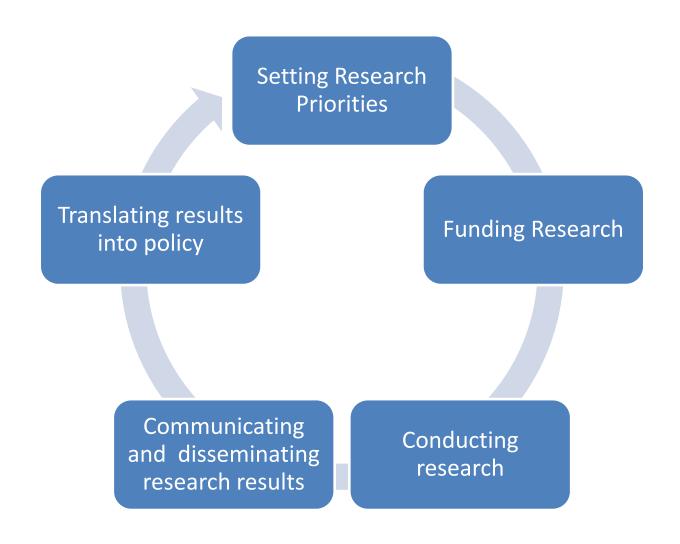


Evidence for GH Monitoring Health-related MDGs MDG 6

Figure: Number of tuberculosis deaths per 100,000 population (excluding people who are HIV-positive), 1990 and 2009

MDGs Report 2011

The research cycle for Global Health



The research cycle for Global Health

Setting Research
Priorities

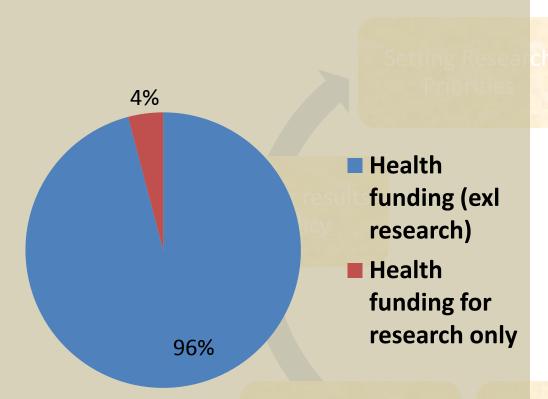
- -a gap between research needed and research conducted?
 - -E.g. Underfunding of Health Systems Research (WHO 2004)
- Most research in health is carried out according to criteria that do not follow a predefined set of priorities (Sharan et al 2007)

Communicating

Conducting

- Guidance on priority-setting methodology for health research is lacking according to most researchers (Viergever 2010)

Estimated Health Investment Worldwide (Total = US \$ 160.3 bn)



The research cycle for GH

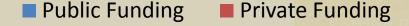
Funding Research
How much?

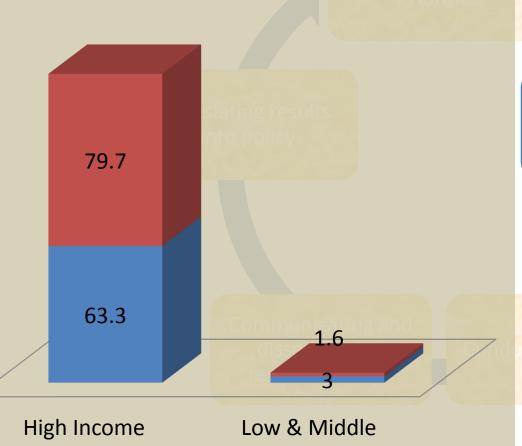
Conducting research

Burke et al 2008

Of the total research budget for health in 2005, 3% went to research in LMICs

Relative Contributions of Public and Private Funding for Health Research Worldwide by country group in 2005 (in US\$ billion)





Income Countries

Countries

The research cycle for GH

Funding Research

Relative Contributions

Proportion of global research funding for health originating from the for-profit sector

(2005):

48% in 2003

51 % in 2005

Burke et al 2008

Inequities in access to evidence

Recent upheaval regarding the Influenza AH1N1 pandemic brough to public attention the deep inequities in access to valuable data

The Lancet 2007

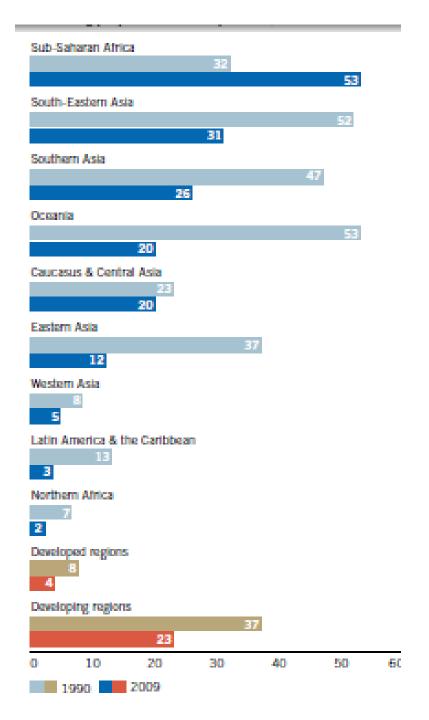
QUIZ

What is the title of the world's first peerreviewed, open-access journal devoted to the NTDs?

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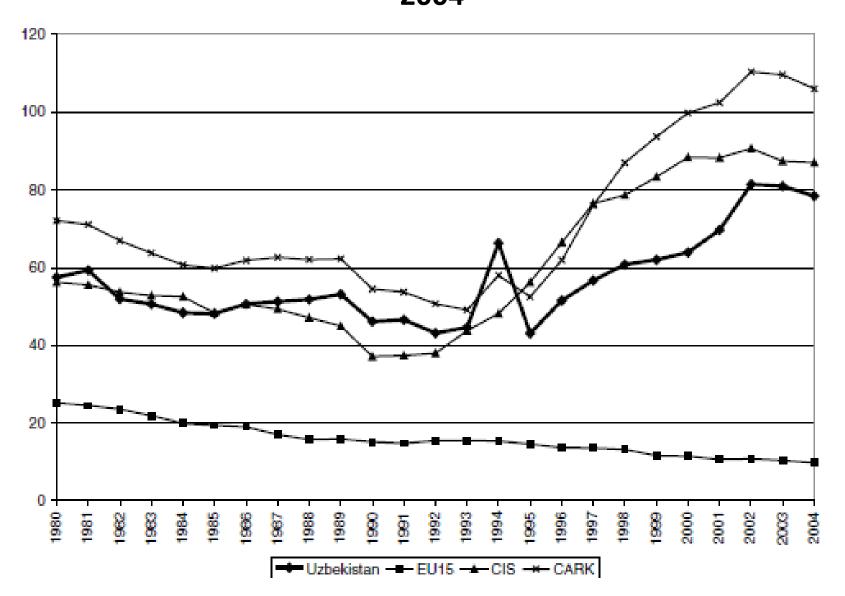
Evidence on the causes

Explaining different rates of morbidity and mortality from TB in different population groups?

Figure: Number of tuberculosis deaths per 100,000 population (excluding people who are HIV-positive), 1990 and 2009

MDG Report – UN, 2011

TB incidence /100 000, Uzbekistan, EU15, CIS, CARK 1980– 2004



Source: WHO Regional Office for Europe, 2007. Notes: EU15: European Union Member States before May 2004; CIS: Commonwealth of Independent States; CARK: Central Asian Republics and Kazakhstan.

Evidence on the causes of the causes

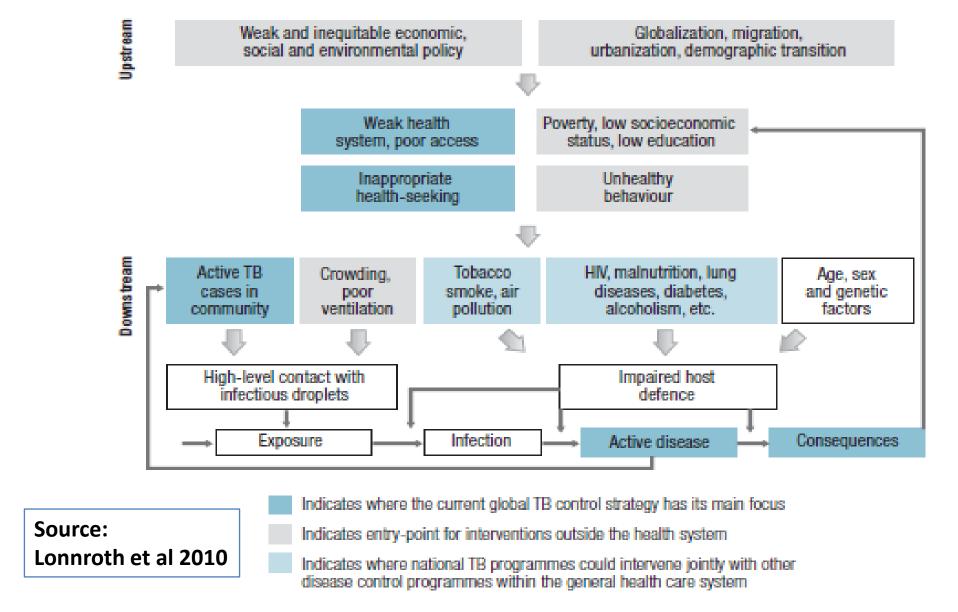
Explaining different rates of morbidity and mortality from TB in different population groups?

The following are differentially distributed across the social gradient within and between countries:

- exposure to TB bacteria
- the likelihood of becoming ill once exposed
- the likelihood of receiving timely diagnosis and completing treatment
- the impact of having had TB

(Lönnroth et al., 2010)

Framework for downstream risk factors and upstream determinants of TB, and related entry-points for interventions



From evidence to global TB policy

DOTS strategy:

- created in the mid-1990s
- based on a mathematical model fitted to historical data for HICs suggesting a 5–10% p.a. reduction in incidence if 2 targets achieved:
 - detecting at least 70% incident cases of highly infective TB

AND

- treating at least 85% of them successfully
- DOTS-based TB treatment is a highly costeffective intervention (Laxminaravan et al 2007)

From evidence to global TB policy DOTS and Stop TB Partnership

DOTS (and Stop TB Strategy) have a mainly *curative* emphasis:

- improve equitable delivery of quality-assured medical technologies
- a few exceptions of preventive approaches (e.g. isoniazid prophylaxis in high risk groups)

Commission for Social Determinants of Health's approach to determinants of TB

TB is one of the 13 Priority Public Health Conditions identified by the PPHC Knowledge Network of the WHO CSDH because they:

- represent a large aggregate BoD
- exhibit significant disparities across & within populations
- affect certain groups disproportionately
- exist in epidemic-prone conditions

(WHO 2010)

Possible PH action on the determinants of health for Tuberculosis:

- Programmatic PH actions
- Health system strengthening
- Upstream interventions

Health Systems and Health inequities

Health systems can:

- exacerbate
- have no impact on or
- lessen

health inequities, including those that exist in relation to TB.

Weeks 2 and 5 Health Systems

Some questions:

- What is a Health System?
- How can a Health System be financed and run sustainably?
- How is research translated into health policy?

The WHO definition of a health system

"... all the activities whose primary purpose is to promote, restore or maintain health."

WHR 2000:5

Health Service Equity

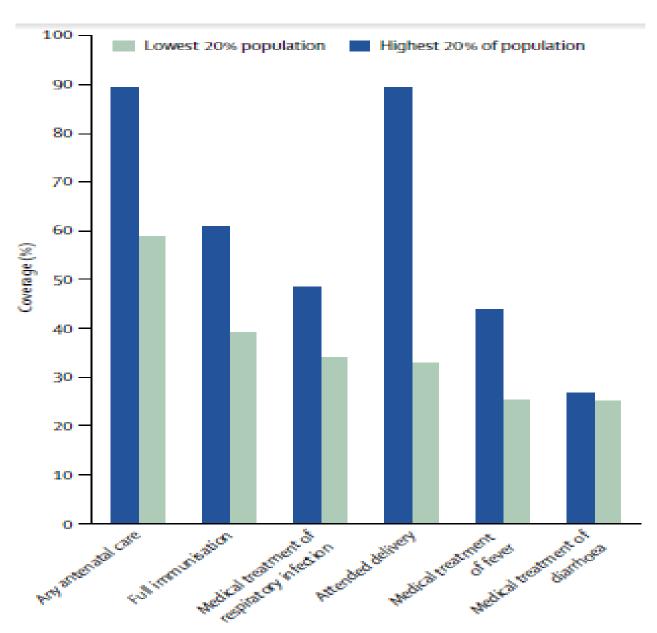
Access to services should correspond to the need for them

"Health systems around the world are consistently inequitable, providing more and higher quality services to the well-off, who need them less, than to the poor, who are unable to obtain them. In the absence of a concerted effort to ensure that health systems reach disadvantaged groups more effectively, such inequities are likely to continue."

(Gwatkin et al 2004)

Regressive healthcare: MCH

health Use of services by lowest highest wealth quintiles, developing and transitional countries Vertical bars unweighted averages for 51-56 countries by service Source: Gwatkin et al. 2004



Regressive healthcare: disease-specific programmes for adults

- Only patchy information on coverage rates attained
- Evidence that many are regressive in a similar fashion to MCH, eg:
 - Access to counselling or testing for HIV/AIDS
 - Access to treatment amongst hypertensives
 (see Gwatkin et al. 2004)

Social & Economic Burden of TB

Cost of TB disease and treatment can be devastating, especially for the poor:

- High average total cost incurred by TB patients:
 - 20- 40% of annual family income
 - up to 70% of annual p.c. income
- Catastrophic health expenditure:
 - 40-70% of poor patients become indebted as a result of TB and its treatment
- Much of the cost is incurred in the private sector
- Access to health services:
 - The very poorest often access the for-profit private sector and incur large costs unless these providers are linked with national TB programmes

(see WHO 2010b)

Week 3 Technology & Access

Determinants of past declines in TB rates (E&W)

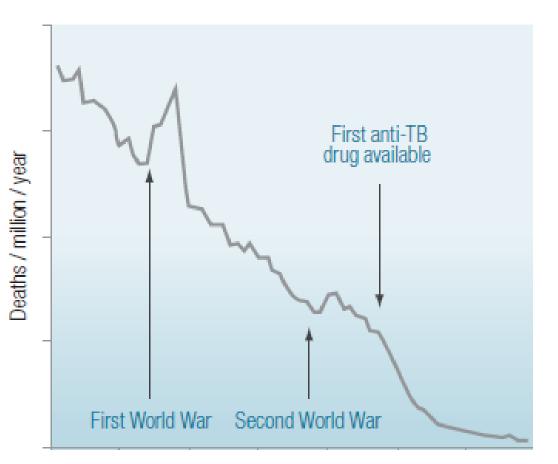


Figure: Decline in TB mortality in England and Wales, and its association in time with the two world wars, and the introduction of chemotherapy against TB (Source: WHO 2010)

McKeown & Record (1962): declines due to reduction in poverty and improved living conditions

Alternative theories (Szreter 2003, Wilson 2005, Grundy 2005): declines due to Public Health interventions including sanatoria, pasteurisation of milk

The analysis of TB determinants should combine biomedical with social analytical frameworks (Grange et al 2001)

Diagnostic & Treatment Technology for TB

- Diagnosis uses a combination of:
 - sputum
 - smear microscopy
 - chest X-ray
 - Culture of bacteria in sputum samples
 - drug susceptibility testing
 - clinical assessment.
- The diagnostic procedures: complex, time consuming and expensive for both health system and patient

DOTS: "Prevention Starts with Cure"

DOTS strategy:

- developed in the mid 1990s as a response to the suboptimal (or lack of) use of essential medical technologies for appropriate diagnosis and treatment in most parts of the world
- Aim to ensure that the key elements of a good basic health care system were in place to enable the effective delivery of those technologies

(WHO 1994 and Raviglione & Pio 2002)

QUIZ

What single innovation in TB care could prevent 625,000 deaths annually and have a greater impact than any other single intervention?

- >> An ideal new diagnostic tool to bring diagnosis closer to point of care
- >> Development of new tools for TB diagnosis and treatment now part of Stop TB Partnership Strategy

Newer challenges:

What are the main barriers to eliminating MDR-TB

- Financing control and care
- Improve financing systems to reduce costs
- Improve integration with other services to implement best practice
- Improve case detection and treatment
- Improve TB diagnostics
- Strengthen lab support for diagnosis
- Restrict availability of TB drugs
- Give priority to infection control, particularly in healthcare settings
- Improve surveillance systems
- Strengthen global health workforce

Week 4 Global Health Policy/Governance

- GH architecture at the end of the 20th c.
- The new GH architecture

Scientifically excellent public health guidelines and other reliable information sit inert in journals and databases unless there is political commitment...to turning knowledge into action that will get results on the ground.'

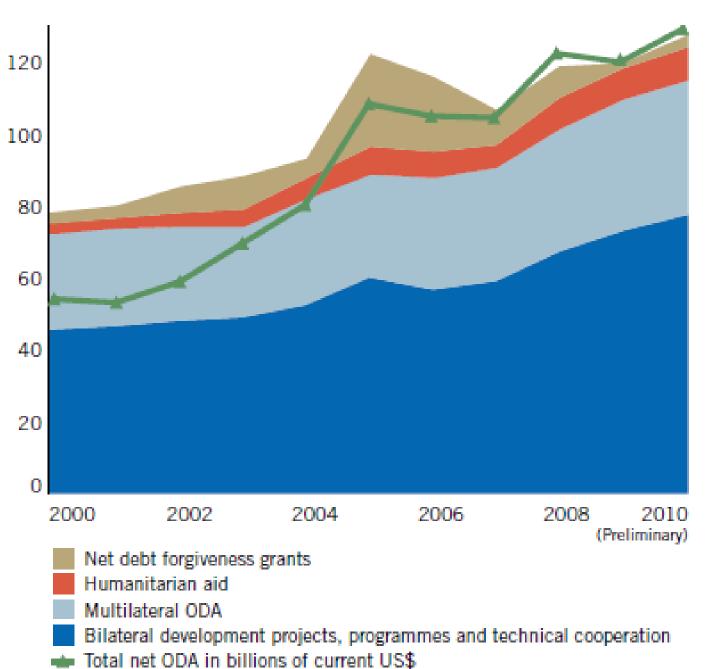
Lee Jong-Wook, 2003

Development assistance for health by health focus area (Global), 1990-2009

http://www.healthmetricsandevaluation.org/tools/data-visualization/development-assistance-health-health-focus-area-global-1990-2009-interactiv

Question: which receives more funding?

- a. Disease specific programmes
- b. Basic health programmes
- c. Health System strengthening activities



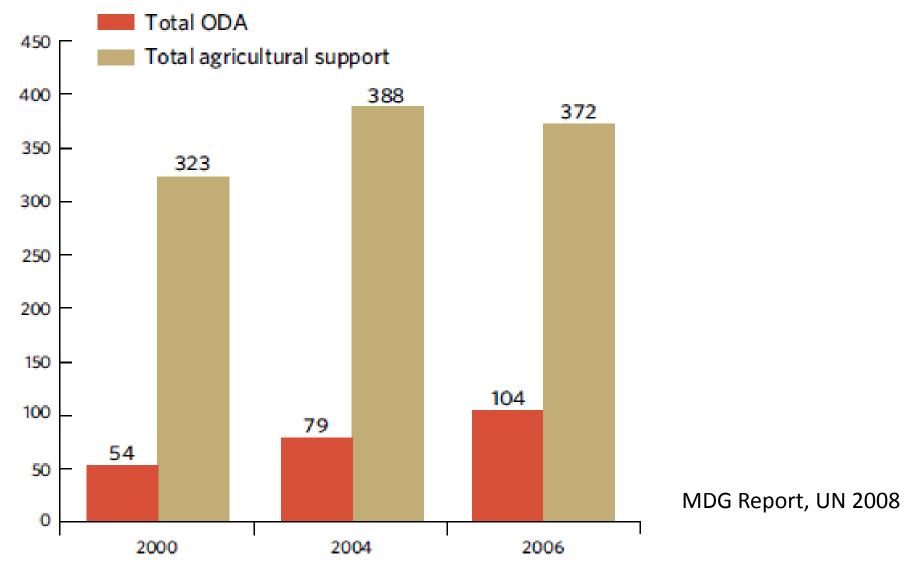
Official development assistance (ODA) from DCs, 2000-2010 (Billions constant 2009 US\$, current US\$)

MGD Report, UN

2011

MDG: Goal 8: Develop a global partnership for development

Target: Develop an open, rule-based, predictable, nondiscriminatory trading & financial system



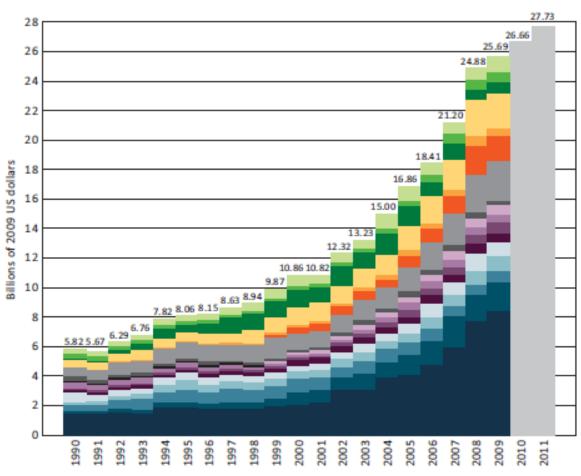
Who funds GH? DAH by source of funding, 1999-2011

Funds from channels for which we were unable to find disaggregated revenue information as well as interagency transfers from non-DAH institutions are included in "unallocable." "Other" refers to interest income, currency exchange adjustments, and other miscellaneous income.



Source: IHME DAH Database 2011

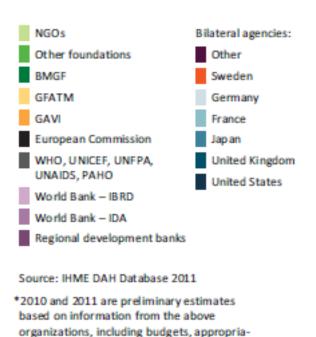
Notes: 2010 and 2011 are preliminary estimates based on information from channels of assistance, including budgets, appropriations, and correspondence. Data were unavailable to show total DAH by source of funding for 2010 and 2011.



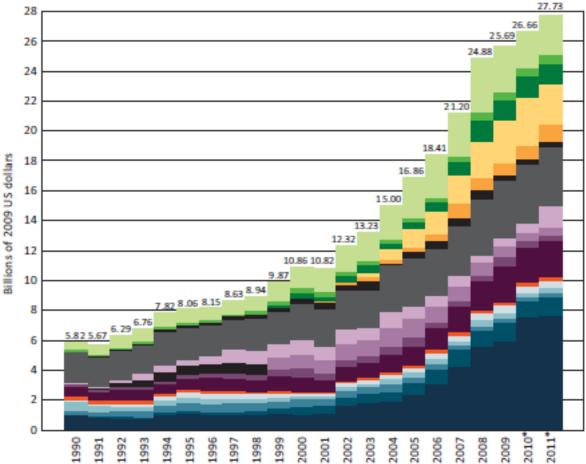
Source: Institute For Health Metrics and Evaluation URL:

http://www.healthmetricsandevaluation.org/sites/default/files/policy_report/2011/FGH_2011_chapter_1_IHME.pdf

Who channels DAH? DAH by channel of assistance, 1990-2011



tions, and correspondence.



Source: Institute For Health Metrics and Evaluation URL:

http://www.healthmetricsandevaluation.org/sites/default/files/policy_report/2011/FGH_2011_chapter_1_IHME.pdf

Financing for GH in financial recession

WEB FIRST

By Katherine Leach-Kemon, David P. Chou, Matthew T. Schneider, Annette Tardif, Joseph L. Dieleman, Benjamin P.C. Brooks, Michael Hanlon, and Christopher J.L. Murray

The Global Financial Crisis Has Led To A Slowdown In Growth Of Funding To Improve Health In Many Developing Countries

DOI: 10.1377/hlthaff.2011.1154
HEALTH AFFAIRS 31,
NO. 1 (2012): ©2011 Project HOPE—
The People-to-People Health F
oundation, Inc.

GH governance – what can be learnt from tracking financial flows

- Actors: Increase in number of GH actors and change in institutional landscape of GHG:
 - Less funding channelled via UN agencies/WB
 - More funding mobilised and channelled via GFATM, GAVI and NGOs
- Financial Flows: Substantial rise in Total Development Assistance for Health (DAH):
 - DAH more than doubled 2001-2008 largely accounted for by increased DAH from USA & philanthropic donations
 - Since financial recession: slower growth rate (3-4% /yr, largely accounted for by WB)

(Inst for Health Metrics and Evaluation 2011)

 Consensus that GH financing is overcomplex, fragmented and inadequately tracked, leading to inefficient environment for governments and CSOs in LMICs

(WB 2007 and DFID 2007)



UK aid review: Southern Yemenis wave flags during a protest in Radfan in Lahj province. Yemen will see an increased aid budget from the UK (Guardian 2011)

References

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http://www.healthmetricsandevaluation.org/publications/policyreport/financing global heal th 2010 IHME

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Answer to question arising from the lecture

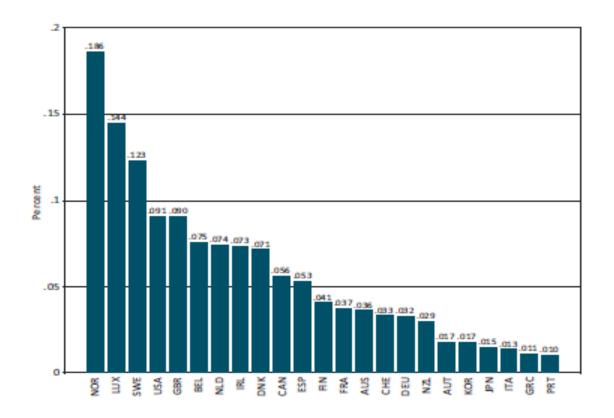
QU: does USA give most aid as a percentage of its GDP?

A1: USA is 4° country to give largest share of its GDP to DAH (see Institute for Health Metrics & Evaluation Report 2011).

http://www.healthmetricsandevaluation.org/sites/default/files/policy_report/2011/FGH_2011_chapter_1_IHME.pdf |

FIGURE 6: DAH as a percentage of gross domestic product, 2009

The countries included are the 23 members of the OECD-DAC. AUS = Australia AUT = Austria BEL = Belglum CAN = Canada CHE = Switzerland DEU = Germany DNK = Den mark ESP = Spain FIN = Finland FRA = France GBR = United Kingdom GRC = Greece IRL = Ireland ITA = Italy JPN = Japan KOR = South Kore a LUX = Luxembourg NLD = the Netherlands NOR = Norway NZL = New Zealand PRT = Portugal SWE = Sweden USA = United States



Sources: IHME DAH Database 2011 and World Bank World Development Indicators

Note

- UN General Assembly Resolution: 0.7% of GNP of each signatory (developed) country should be donated as ODA. This target was reaffirmed at:
 - 1992 UN Conference on Environment and Development, Rio de Janeiro,
 - 2002 UN International Conference on Financing for Development in Monterrey,
 - and as the underpinning of UN's MDG 8
- 5 countries met target: Denmark, Luxembourg, the Netherlands, Norway, and Sweden