Information Empowerment

Using Data, Tools and Strategies in Global Health



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"... Knowledge is power. Information is liberating. Education is the premise of progress, in every society, in every family."

-Kofi Annan, UN Secretary-General, in an address to the World Bank Conference, 'Global Knowledge' (1997)

United Nations **Human Rights** CLINICS IN CHEST MEDICINE



Independent high-quality evidence for health care decision making



American Journal of



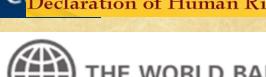
JAMA[®]



National Institutes of Health Fogarty International Center



The Universal





Pregnancy & Childbirth

IDF DIABETES ATLAS National Center for Health Statistics

Working for a World Free of Poverty

STATISTICAL ABSTRACTS

HUMAN DEVELOPMENT THE STATE OF THE WORLD'S CHILDREN 2007

Women and Children: The Double Dividend of Gender Equality

TheLancet.com

Research at the World Rank

The New York Times

environmental change global health interdisciplinary data sources middle resource clinically focused countries worldview Latin America Sub-Saharan low resource health systems health care countries delivery risk reduction public health health promotion Millennium **Development Goals** global perspectives health care health equity migration urbanization

chronic illness

infectious disease gender and health

Overload:

Too many data (e.g. written, verbal and nonverbal, physician's memory) for the clinician to organize, synthesize, draw conclusions from, or act

Erroneous:

Information is incorrect.

Information Chaos

Underload:

necessary information is lacking.

Conflict:

Unable to determine which data correct

Scatter:

Information located in multiple places



Reference: Beasley JW, Wetterneck TB, Temte J, Lapin JA, Smith P, Rivera-Rodriguez AJ, Karsh BT. Information chaos in primary care: implications for physician performance and patient safety. J Am Board Fam Med. 2011 Nov;24(6):745-51.

Today: An Introduction

 Reflect on the significance of information resources in global health

2) Provide an overview of selected data sources

The interdisciplinary nature of global health requires an awareness of diverse information resources.....

- biomedical & public health
- sociocultural
- public policy
- statistics
- regional news sources
- country profiles
- **•**

Investigating Selected Resources – Scratching the surface...

- Just the facts
 - exploring statistics
- Seeing is believing
 - data visualization tools
- Where in the world?
 - country profiles

- Taking it with you
 - mobile apps for global health
- Ear to the ground
 - global news sources
- Making connections
 - social media

Bottom line!

What is your question??

Matching information resource to information need.....

Statistics

"If information and knowledge are central to democracy, they are the conditions for development."

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 Kofi Annan, UN Secretary-General, in an address to the World Bank Conference, 'Global Knowledge' (1997)

- UN Data
- World Bank Open Data
- WHO Statistics
- DHS survey data
- Millennium Development Goals indicators

Data Visualization

"The greatest value of a picture is when it forces us to notice what we never expected to see."

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—Tukey, John W. <u>Exploratory Data Analysis</u>, Reading, Mass. : Addison-Wesley Pub. Co., 1977.

- World Bank eAtlas collection
- STATcompiler
- Google Data Explorer
- Gapminder
- World Mapper
- HealthMap
- World Bank Open Data
- Institute for Health Metrics & Evaluation

Country Profiles

"I have a neighbor who knows
200 types of wine.... I only know
two types of wine — red and
white. But my neighbor only
knows two types of countries —
industrialized and developing.
And I know 200."

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-- Hans Rosling, Professor of Global Health, Karolinska Institute and Gapminder co-finder, as presented in TEDtalk "Hans Rosling's new insights on poverty"

- BBC Country Profiles
- CIA World Factbook
- FAO Country Profiles
- NationMaster
- UN Data
- UNESCO Country & Regional Profiles
- WHO Country Profiles
- World Bank Country Profiles

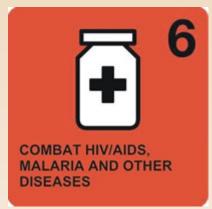
















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Source: United Nations Develop Programme, http://www.unmillenniumproject.org/goals/gti.htm
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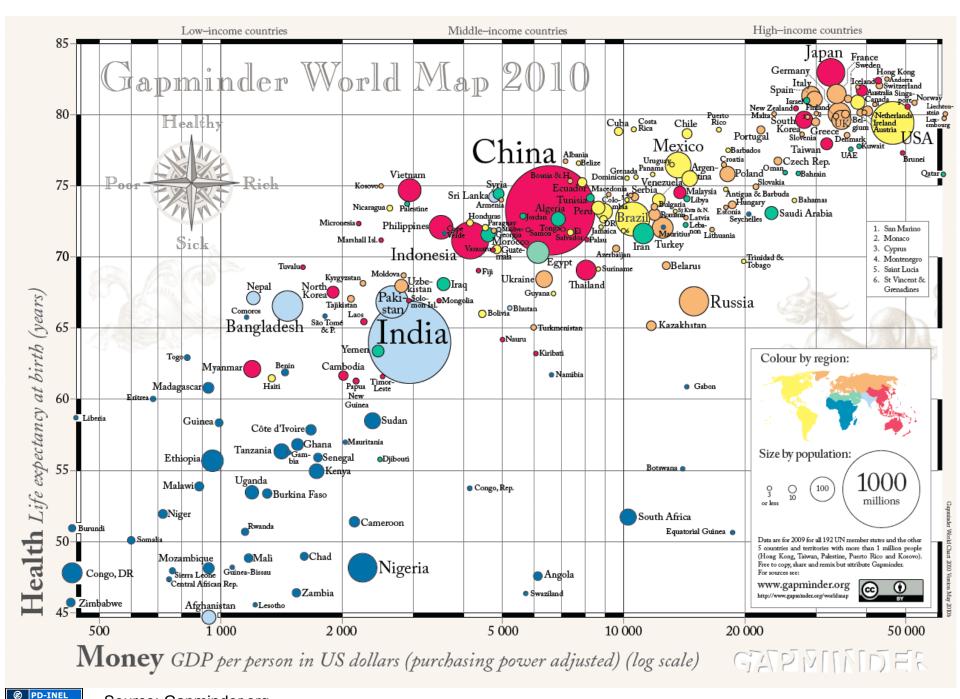
Millennium Development Goals

"The MDGs represent the commitments of United Nations Member States to reduce extreme poverty and its many manifestations: hunger, disease, gender inequality, lack of education and access to basic infrastructure, and environmental degradation."

- Asha-Rose Migiro, UN Chronicle, 1/12/07



- MDG Indicators
- MDG Statistics
- World Bank eAtlas of the Millennium Development Goals
- MDG Report 2011
- YouTube channels
 - UN Millennium
 Campaign
 - UN Development Programme
 - EndPoverty2015



How does the maternal mortality ratio in Ghana and Canada compare?

Resource to investigate: UN Data

(statistics)

I'm having trouble finding reliable country-specific data.

Resource to investigate: World Bank Open Data

(statistics and data visualization)

I am conducting research on births attended by skilled health personnel. How does India compare to the rest of the world?

Resource to investigate:

World Bank eAtlas of Global Development

(data visualization)