Capturing and analysing migration health data.

What can we learn from current sources and initiatives?

Dr Dominik Zenner, Regional Office Brussels

https://migrationhealthresearch.iom.int

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The small print…

1. *I have no conflict of interest.*
2. *I would like to acknowledge support of the IOM research unit, particularly Dr Kolitha Wickramage*
3. *The opinions expressed in this talk are those of the author and do not necessarily reflect the views of the International Organization for Migration (IOM). The presentation does not imply the expression of any opinion whatsoever on the part of IOM concerning the legal status of any country, territory, city or area, or of its authorities, or concerning its frontiers or boundaries.*

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outline

1. Why are we here?
2. What do we need?
3. What do we have?
4. What do we make of this
5. Where do we need to go?

3

Why are we here?

4

"Making the invisible visible"

Dr Robert W Aldridge, UCL

Charity claims migrant with terminal cancer was 'denied treatment' at the Royal Derby Hospital

He died on Sunday

Global Compact for Migration

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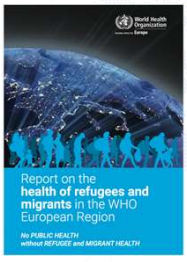
Mandate…



"creating migrant-sensitive health systems that are financially sustainable, culturally sensitive and linguistically appropriate and delivered by a professional workforce aware of health issues associated with migration "

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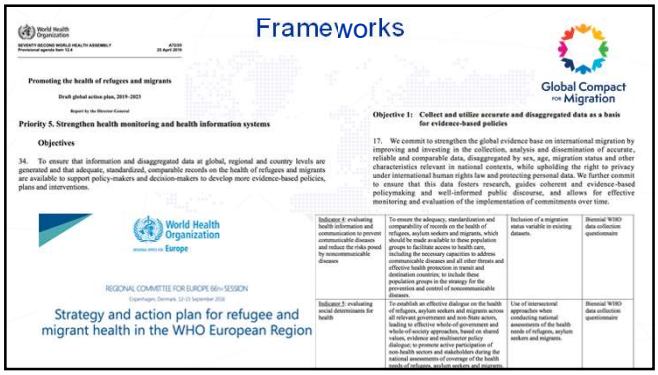
Frameworks



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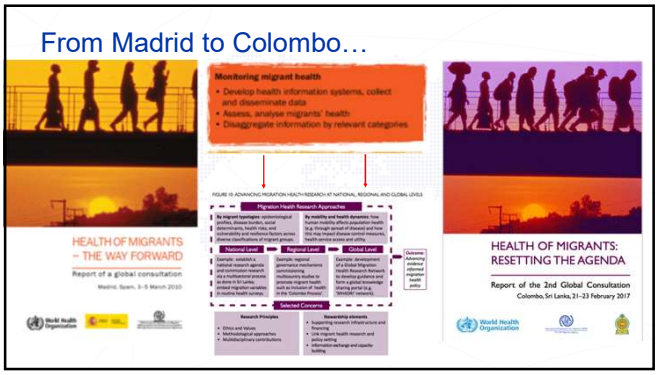
From Madrid to Colombo…



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What do we need?

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2nd Global Consultation research questions

- **National:** What are the experiences of migrants in accessing health care systems? How do these differ along migration trajectories/ journeys, and by migrant typology, by age of migrant, by gender, by country of origin? What are their beliefs, understandings, values and health literacy? How (and in what direction) does health vulnerability and resiliency change across the four phases of the migration cycle (pre-departure, during transit, at destination and upon return)?
- **National:** Beyond Member States' obligations under international human rights law, does providing access to regular primary health care services including preventive services such as immunization for migrants in an irregular situation (rather than only allowing them access to select emergency healthcare) be cost-saving for national healthcare systems? What are the short- and long-term economic effects of restrictive versus integrative approaches/policies?
- **National/Regional:** Does "low-skilled" labour migration (especially from low-income countries) cause negative health and social consequences to those 'left-behind' migrant households? Or, do such migrants and their families thrive by use of remittances to purchase better food, health care and education? Do such risks/rewards change over time? What interventions are effective in reducing health vulnerabilities of such migrant families?
- **Regional/Global:** What role does human mobility play in globalization of health risks, and for the reintroduction of diseases such as Malaria in elimination or near elimination settings? To what extent have countries enshrined the right to health for migrant populations within preparedness and response plans for disease outbreaks or other public health events?

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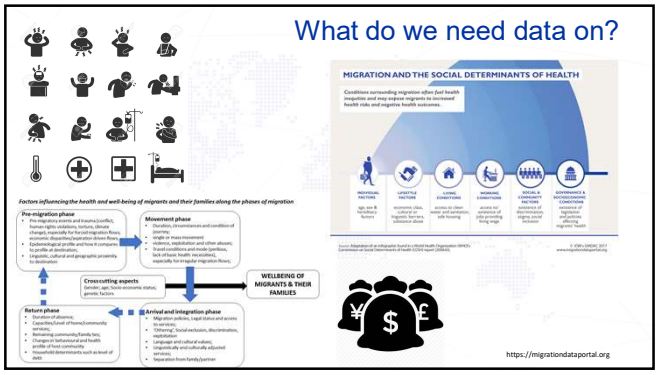
What do we need data on?



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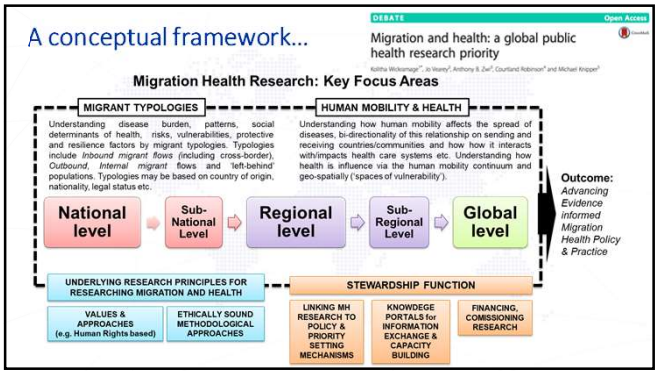
A conceptual framework…



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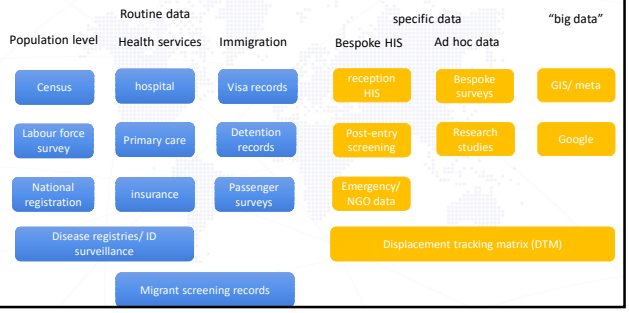
Migrant health data… what is out there?



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What are the problems?

- Routine data
  - "not built for this purpose"
  - No routine "migration markers" in health data
  - Problems with definitions and granularity (e.g. typology)
  - Practical problems with data linkage
  - Information governance/ legal concerns (usage and linkage)
- Specific data
  - Collection depending on funding/ specific projects
  - Often specific to situations, not representative
  - Not sustainable
  - Information governance
- Big data
  - How to interpret. Often unspecific/ need other sources to corroborate
  - Not always easy to access.

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What should we measure?

- Migrants?
  - Definition?
  - Typologies?
- Non-dominant ethnicities?
  - Definition?
  - Many non-migrants
- Persons with migration backgrounds?
  - Captures second generation
- Acculturation and socio-cultural variables
  - Language proficiency
  - Sense of belonging
  - Social support
  - discrimination

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Denominators

ORIGINAL ARTICLE

Reduction in tuberculosis incidence in the UK from 2011 to 2015: a population-based study

Evaluating 17 years of latent tuberculosis infection screening in north-west England: a retrospective cohort study of reactivation

- Very important
  - Calculation of rates
  - Population relevance
- Often poorly recorded
  - Migrant typologies
  - incongruent/ disparate data collections
- Estimates needed
  - Triangulating sources (e.g. visa statistics, census)
  - Use of proxies (ethnicities, names) with multiple imputation and sensitivity analysis
  - Importance of robust and replicable methodology

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What to do?

- Introduce key variables into regular routine sources (e.g. census), such as COB, nationality or previous residence
- Know the strengths and limitations of and maximise use of routine administrative data, including through data linkage
- Collate and harmonise suitable data sources across countries (such as labour force survey).
- Public access to aggregate, even anonymous individual records from surveys and routine data, to widen understanding of strengths and limitations and improve quality of data
- Encourage to systematically include standardised migration-related questions in population/ household surveys

From: Center for Global Development. Migrants count: Five Steps Toward Better Migration Data. Abbreviated and paraphrased

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What do we have? Examples…

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Migrant health records

Health records for migrants and refugees: A systematic review

- SR of health records specific to migrants and refugees
  - Screened 1432, found 33 relevant papers on 20 databases.
  - 30% cohort studies, 27% cross-sectional, some only narratives
- Highly variable, scope very different and some one-off or ceased already
  - 5 ePHR, 7 non-ePHR 3eMR, 3 mixed HR, 2 other HR (large imms records)
  - 55% implemented across different settings, e.g. hotspots, reception centres, hospitals and primary care centres.
  - 10 had information on interoperability and 7 on data sharing with other facilities
- Papers report migrant health records improved
  - quality and continuity of care,
  - patient health outcomes,
  - adherence to guidelines
  - patient satisfaction
  - Most evidence is narrative,
  - Subsequently published cluster RCT (Straßner et al) showed better recording and transmission of data

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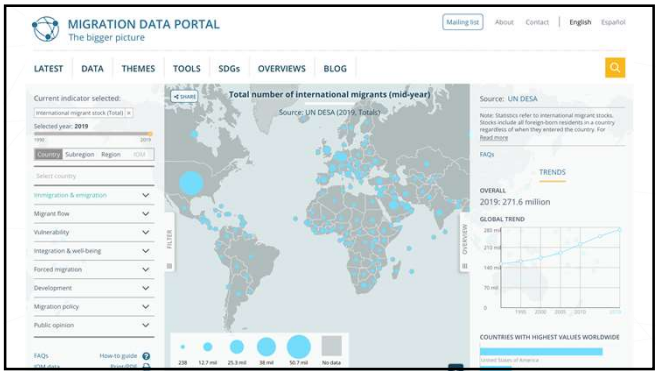

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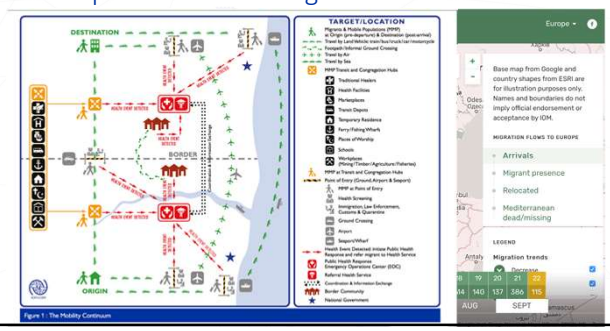
The Displacement Tracking Matrix



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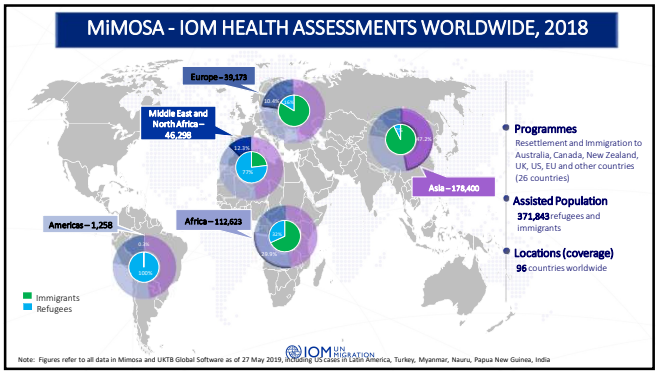

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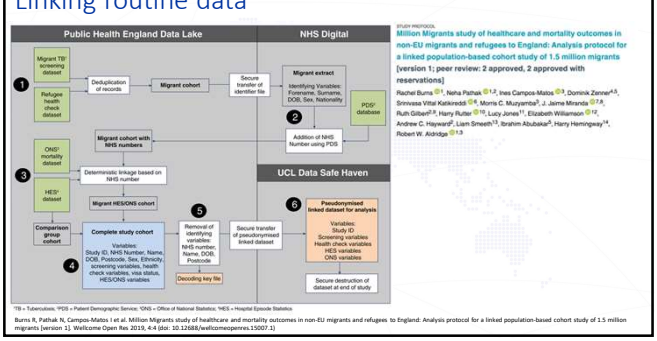
Linking routine data



Million Migrants study of healthcare and mortality outcomes in non-EU migrants and refugees to England: Analysis protocol for a linked population-based cohort study of 1.5 million migrants [version 1; peer review: 2 approved, 2 approved with reservations]

Burns R, Pathak N, Campos-Matos I et al. Million Migrants study of healthcare and mortality outcomes in non-EU migrants and refugees to England: Analysis protocol for a linked population-based cohort study of 1.5 million migrants [version 1] Wellcome Open Res 2019, 4:4 (doi: 10.12688/wellcomeopenres.15007.1)

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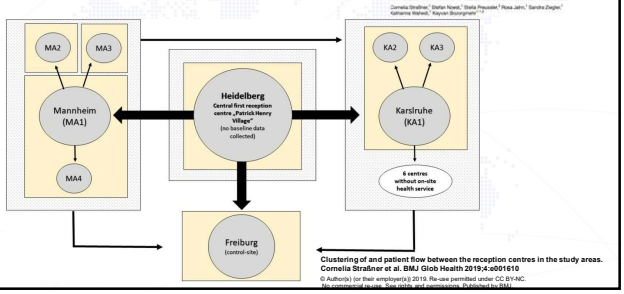
Hand-held records in Germany

The impact of patient-held health records on continuity of care among asylum seekers in reception centres: a cluster-randomised stepped wedge trial in Germany



Clustering of and patient flow between the reception centres in the study areas. Cornelia Straßner et al. BMJ Glob Health 2019;4:e001610

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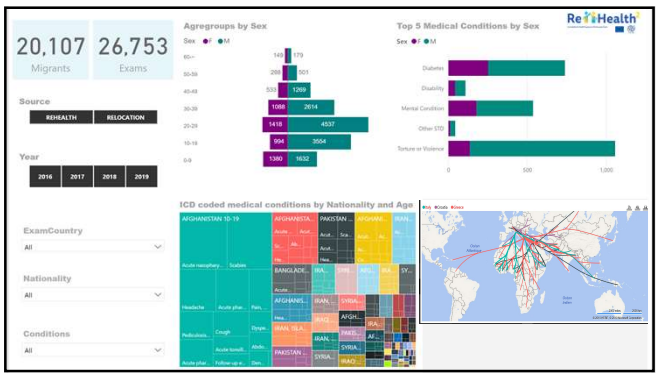

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What do we make of this…?

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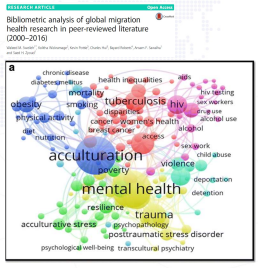
The state of migration health research

Bibliometric analysis of migration health literature (2000-2016) with a total of 21,457 papers retrieved.

Typology
- 25.4% refugees and asylum seekers, 6.2% migrant workers, 2.1% international students, 3.2% victims of trafficking/smuggling,

Topics
- 47.0% psychosocial and mental health, 13.7% infectious diseases, 31.8% health policy and systems, 12.8% maternal and reproductive health, 8.9%non-communicable diseases.

Authors
- Mostly global North, contribution of authors and institutions in Asian countries, Latin America, Africa, Middle East, and Eastern European countries was low.



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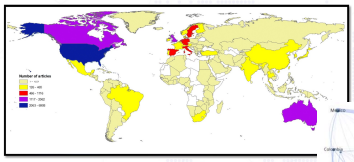
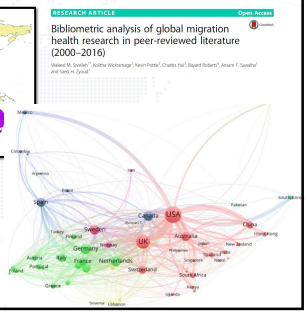
Global North – well represented and connected



Above: Geographical distribution of publications in international migration and health (2000 – 2016)



Right: International collaboration in migration health among countries with a minimum productivity of 10 publications

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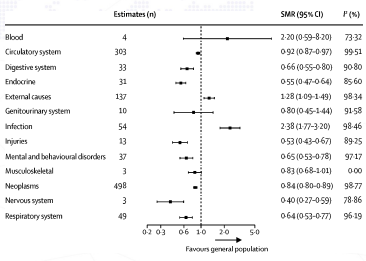
Morbidity and mortality among migrants

Global patterns of mortality in international migrants: a systematic review and meta-analysis

- 96 studies from all global regions and for 92 countries.
- But few from LMIC and few from refugees and asylum seekers
- all-cause SMR for international migrants lower compared with population in destination countries (0·70; 0·65–0·76)
- SMRs for all causes of death lower in migrants compared with population in the destination country across all 13 ICD-10 categories,
- Exception was infectious diseases and external causes (mostly accidents)



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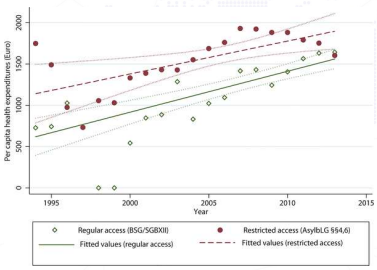
UCH for migrants:…but how can we pay for it?



RESEARCH ARTICLE

Effect of Restricting Access to Health Care on Health Expenditures among Asylum-Seekers and Refugees: A Quasi-Experimental Study in Germany, 1994–2013

"We found evidence in support of claims that the cost of exclusion from health care and other welfare services among AS&R is ultimately higher (in terms of incident health expenditures) than granting regular access to needed services."

Bozorgmehr K, Razum O (2015) Effect of Restricting Access to Health Care on Health Expenditures among Asylum-Seekers and Refugees: A Quasi-Experimental Study in Germany, 1994–2013. PLOS ONE 10(7): e0131483. https://doi.org/10.1371/journal.pone.0131483

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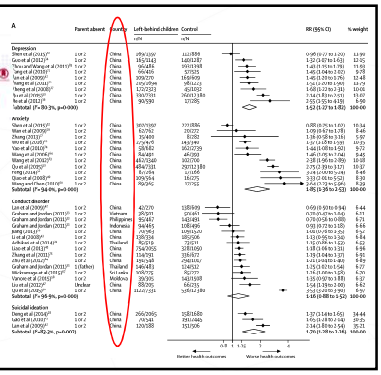
Children left behind…

Health impacts of parental migration on left-behind children and adolescents: a systematic review and meta-analysis

- Appears to show unfavourable outcomes, particularly psychosocial
- BUT
- Methodological issues including…
- 91 of 111 (!) included studies from rural China
- Mostly migration to larger cities



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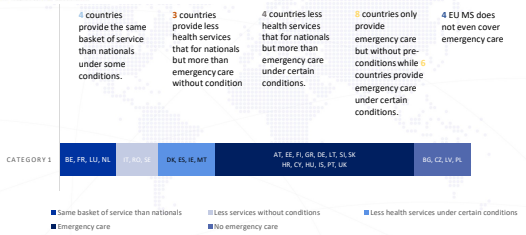
Entitlements to health care for undocumented migrants

The MIPEX Health strand: a longitudinal, mixed-methods survey of policies on migrant health in 38 countries

David Ingleby[1], Roumyana Petrova-Benedict[2], Thomas Huddleston[3], Elena Sanchez[4], The MIPEX Health strand Consortium*



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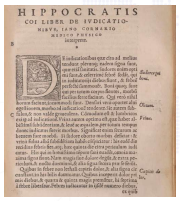
Pitfalls…

- Generic research ethics under a magnifying glass…
- Under-representative studies with overzealous interpretation
- Bias, including cultural, political
- Data-governance aspects
- Unbalanced reporting, unawareness of limitations



Source: PICUM

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" the bidirectional relationship between migration and health remains poorly understood"

Wickramage K et al. BMC Medicine, 2018

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Where do we need to go?

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Next steps

- Maximising use readily available data sources
  - Ensuring robust implementation of data protection frameworks and the 'firewall'
  - Harmonising and ensuring granularity for migration indicators across datasets
  - Improving capacities and training for analysis and linkage at especially at MS level
  - MS Support for National Migration Health Profiles
- Oversight and coordination of specific data collections
  - Greater coordination of research, including through networks and shared learning
  - Collaboration between actors for greater harmonisation and intraoperability of special health information collections
- Systematic and ethical use of "big data"

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MHADRI

Migration Health and Development Research Initiative (MHADRI)

- A global network of scholars which aims to promote research collaborations and capacity building to advance evidence-informed migration health policies and practices
- MHADRI has grown in membership over the past year to cover researchers across all continents
- IOM is the secretariat to MHADRI

Slide modified from original. With thanks to Dr Kolitha Wickramage

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Conclusion

- Good migration health data is the foundation of good public health and adequate and appropriate health service delivery for all
  - Good progress has been made to put this on the international agenda
  - There is now a strong mandate and this is mentioned in multiple frameworks incl. GCM
- This is still the start of the journey…
  - A lot of data is available, but poorly coordinated and utilised
  - There is an urgent need for better coordination and capacity building esp. in MS
  - Special data collection systems should be better coordinated and more interoperable
- We need a good and enforced research ethics framework
  - Research is often dominated by issues important to the global north, including health-security
  - Hard questions are not (sufficiently) addressed
  - Good quality, large, generalisable studies rare

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köszönöm!

I have a neighbour who knows 200 types of wine. … I only know two types of wine - red and white. But my neighbour only knows two types of countries - industrialised and developing. And I know 200.

Hans Rosling, 1948-2017

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