

Uses and presentation of statistical information to support decision making

Overview

Studies, surveys, censuses and other research findings on human resources in health systems can play a key role in guiding policy and resource allocation decisions. But even timely, relevant and good quality information will not help policy- and decision-makers if they cannot understand and use it. How information is presented, and what story it helps to tell, can affect the decisions based upon it.

There is an interaction between perceived challenges and ways of organizing and presenting information to support decision making for policies and programmes. A critical aspect of human resources for health (HRH) assessment is the identification and critical review of data from the most appropriate source(s), and synthesis and presentation based on the construction of a few relevant indicators. The final presentation will vary depending on the users' needs in terms of the level of detail and technical specificity required. Using data and information well in decision making should lead to better health workforce performance, strengthened health systems and, ultimately, improved health outcomes.

Key characteristics of useful information: relevance, quality and presentation

Among the identified key first steps in ensuring meaningfulness of information for decision makers are personal contact, timely relevance, and the inclusion of summaries with clear recommendations. A number of tools and resources exist to assist in interpreting and disseminating data to a variety of audiences that may not be familiar with statistics. A common message that emerges from such tools includes the following essential steps in organizing an effective oral or written presentation:

List your communication objectives

- Why do you want to give this (oral or written) presentation?
- What do you hope to gain?

Identify the audience and focus on their needs

- Who are they – e.g. policymakers, programme managers, practitioners or a mix?
- Consider the audience's technical knowledge, motivations and interests.
- Focus on the decision at hand and on what they need to know, not on what you know. Different decisions require

"Data should be captured once and used numerous times."

Audit Commission, 2008

different information, and judging what information is relevant for a decision is not easy. For example, HRH policymakers may prefer data from sources that offer sub-nationally valid results, such as routine staffing reports from health facilities, which are available locally and continuously.

- Decide what you hope they will do as a result of the presentation. Make effective use of the media for communicating HRH information in formats more palatable for policymakers and civil society.

Determine the message

- Identify a small number of points (no more than three) that you want the audience to remember. Build your presentation around these points.
- Tailor the points to the audience's technical level, information needs and interests.

Organize your information

- Determine the length of the presentation (in time or pages).
- Establish an outline that matches your objectives.

Examine the evidence

- Check for data accuracy, consistency, confidentiality, relevance and timeliness. Good quality data are the foundation of good quality information.
- Check for variety. Using a range of information from different sources (both quantitative and qualitative) will generate a fuller picture. Reconciling values from different sources and measurement techniques should be a standard part of all analysis, presentation and dissemination endeavors.

Create and assemble the presentation

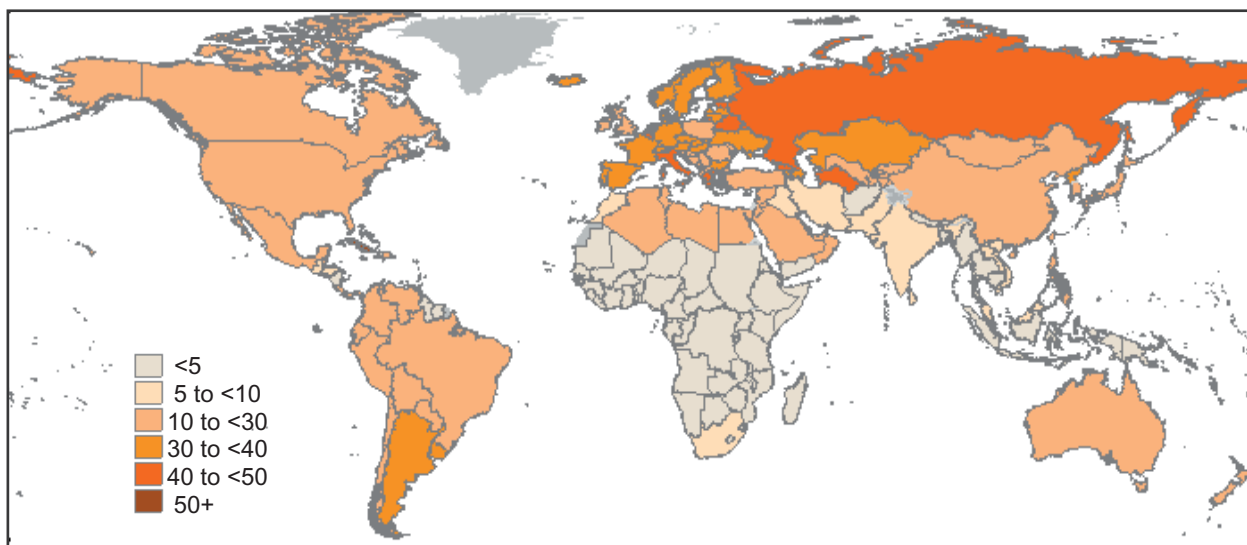
- Design the best way to display the information (e.g. text, tables, graphs, maps). Charts and maps can often display information in a form more easily understood among non-specialist audiences. For instance, if imbalance in the geographical distribution of health personnel is considered a constraint to health systems strengthening - as it is in almost all countries - the information should show the nuances of that distribution, such as by mapping areas with higher versus lower densities of health workers.
- Highlight key points, harmonize style, make sure the presentation fits in the allotted time/space.
- Design an effective summary: have the last word!

Selected statistics

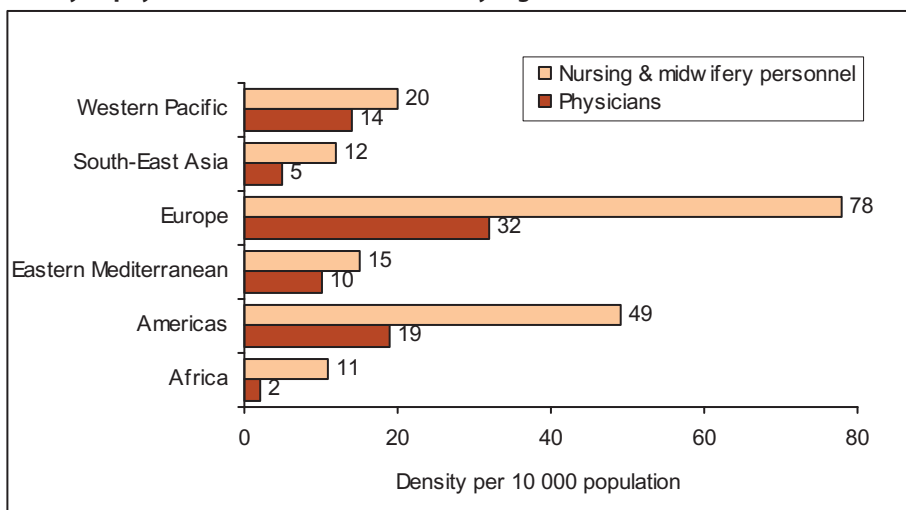
There is increasing interest among those working in health and development in having cross-nationally comparable data and indicators on the health workforce to support decision making for policies and programmes. The [Global Atlas of the Health Workforce](#) includes statistics on the stock and distribution of the health workforce for all 193 WHO Member States. It was constructed by the WHO Department of Human Resources for Health as part of a continuing process to collect and analyse country information in order to obtain a good and comparable picture of the health workforce situation

across countries, regions and around the world. Data are available on the numbers of health workers for up to 18 occupational categories as well as, for some countries, the distribution by age, sex and urban/rural. The contents were compiled from a variety of sources, including population and facility based sources as well as routine administrative information systems. The electronic platform allows data to be presented by means of a table, chart or map. Presented here are selected statistics from this information source.

Density of physicians per 10 000 population, as compiled in the Global Atlas of the Health Workforce



Density of physicians, nurses and midwives by region



References and suggested readings

- MEASURE Program Dissemination Working Group: [Connecting people to useful information: guidelines for effective data presentations](#) [<http://www.measuredhs.com/pubs/pdf/OD41/OD41LG.pdf>]
- Audit Commission: [In the know - using information to make better decisions: a discussion paper](#) [<http://www.audit-commission.gov.uk/reports/>]
- AbouZahr C., Adjei S. & Kanchanachitra C. From data to policy: good practices and cautionary tales, *The Lancet* 369:1039-46, 2007.
- Innvær S. et al. [Health policy-makers' perceptions of their use of evidence: a systematic review](#). *Journal of Health Services Research & Policy*, 7(4):239-44, 2002 [<http://jhsrp.rsmjournals.com/cgi/reprint/7/4/239>].
- Tufte E. *The Visual Display of Quantitative Information*, Graphics Press, 2001.
- The [Global Atlas of the Health Workforce](#) [http://www.who.int/globalatlas/autologin/hrh_login.asp]