Spotlight on Statistics

Global efforts for strengthening the information and evidence base on human resources for health

Overview

Many countries lack the human resources needed to deliver essential health interventions for a number of reasons, including limited production capacity, migration of health workers within and across countries, poor mix of skills and gender imbalances. It is being increasingly recognized that challenges with the health workforce are the single most important obstacle to improving the performance of health systems and achieving key health objectives, particularly in low and middle income countries. At the same time, the global evidence base to support decision making on human resources for health (HRH) remains weak. The formulation of national policies and plans in pursuit of health workforce development goals requires sound information and evidence. Precisely describing HRH can help to identify opportunities and constraints for scaling up health interventions.

Against the backdrop of increasing demand for information, building knowledge and databases on the health workforce requires coordination across sectors. The World Health Organization (WHO) is working with countries and partners to strengthen the global evidence base on the health workforce - including gaining consensus on a core set of indicators and minimum data set for monitoring the stock, distribution and production of health workers.

International technical cooperation on HRH statistics

The WHO Department of Human Resources for Health works with countries, research and academic institutions, and other partners to strengthen the HRH information and evidence base, both within countries and across regions. This includes supporting and organizing venues for sharing experiences and building capacity in monitoring the health workforce, in managing and sustaining HRH information, and in using data to guide policies and inform decisions.

Among the recent international activities and events on monitoring human resources in health systems are:

- International meeting on monitoring health systems strengthening, 17-18 April 2008, Dar es Salaam, Tanzania
- Berkeley conference on the global health workforce: from evidence-based research to policy, 3-4 April 2008, Berkeley, USA
- Skills building workshop on monitoring and evaluation of the health workforce at the First Global Forum on Human Resources for Health, 2-7 March 2008, Kampala, Uganda
- Technical meeting on monitoring health systems metrics, 28-29 September 2006, Glion, Switzerland

A common theme of these and related events was the need for prioritizing strengthening of information on the health workforce. Better knowledge of the composition and distribution of the workforce, the behaviour of health workers and their determinants, as well as the regulatory and policy environment in which they operate, is a prerequisite to designing effective interventions aimed at improving workforce performance. Practical and affordable strategies exist for generating timely and reliable statistics on the health workforce and for developing the capacity to collect, manage, analyse and disseminate them. The cost of not improving workforce statistics is much higher than that of investing in these strategies: poorly informed decisions and unmonitored interventions can have long-term social and economic effects. This is critical, since impacts of interventions and effects of adjustments can take several years to be observable (for instance, up to eight years in the case of producing physicians).

Towards a common approach for HRH monitoring and reporting

Effective monitoring and evaluation of HRH requires the development of and agreement upon a core set of indicators - and their means of measurement - that will inform decision making among national authorities and other stakeholders. The most commonly reported indicator internationally on HRH is health worker density, that is, the number of health workers per 10 000 population, by cadre. When measured systematically, this indicator provides information on the stock of health workers relative to the population, and can be used to monitor whether, for example, the size of the current workforce meets a critical threshold that should allow the most basic levels of health care coverage to be achieved across the country. In particular, the World Health Report 2006 estimated that countries with fewer than 23 physicians, nurses and midwives per 10 000 population generally fail to achieve adequate coverage rates to attain the health-related Millennium Development Goals.

Another core dimension for improving the global evidence base on HRH is the setting of standards for disaggregation of health workforce statistics. Imbalance (or maldistribution) in the supply, deployment and composition of HRH, leading to inequities in the effective provision of health services, is an issue of social and political concern in many countries. At least four typologies for monitoring the distribution of
health workers should be considered: profession/specialty imbalances, geographic imbalances, institutional and services imbalances, and demographic imbalances. The impact on the health system varies for these different types of imbalances. As a consequence, there is a need to monitor and assess each of these dimensions of workforce distribution. In practical terms, this implies that the collection, processing and dissemination of HRH data should enable disaggregation by:

- occupation (and within a given occupation, for example by medical specialization),
- geographical typology (e.g. urban/rural, within/outside the capital city, by province/state or by district),
- place of work (e.g. hospital/primary health care facility, public/private),
- work activities (e.g. preventive/curative health care provision versus other such as teaching or research),
- demographics (age, sex).

A number of potential complementary indicators can be used for assessing the financing, education, management and policy context for HRH planning. One commonly reported indicator is the annual output (or number of graduates) of health professions education and training institutions. Not all indicators necessarily require a numerical answer; for example, the existence of a documented human resources management and retention plan could be a relevant indicator for providing information on a particular strategic direction.

A number of sources can potentially produce the required information for monitoring health workforce metrics - including population based sources, health facility assessments, and routine administrative and management records. Some types of disaggregation (for example, reliable statistics on the private sector) may depend on data from special sources such as population censuses or labour force surveys. Given the diversity of information sources, it is especially important that data dissemination include metadata descriptors for each data point, including details on its nature and coverage. This would be crucial for efforts to analyse and synthesize figures across multiple sources. The use of information from a variety of sources should, in principle, increase the options for measuring and validating core health workforce statistics.

**Selected statistics**

In many countries, information on the health workforce is fragmented or incomplete. Moreover, even in countries where high quality data are available, the information is not always used for decision making. Among the challenges for strengthening HRH information systems include: lack of political will and leadership; differences in roles and definition of health workers, as well as in data categorization; paucity of data for some countries, and for specific professions (e.g. public health workers); completeness and timeliness of available data; and, in many low and middle income countries, lack of resources and technical capacity (including access to new information and communication technologies).

Presented here are selected statistics on the timeliness and completeness of available data on the health workforce, as reported in the *World Health Report 2006*, WHO's leading publication on human resources for health.


**Suggested further readings**


**Next issue**: Uses and presentation of statistical information to support decision making

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