Monitoring education and training for health workers

Overview

The *World Health Report 2006* estimated a global shortage of 2.3 million physicians, nurses and midwives to meet the workforce levels required to strengthen health systems and accelerate progress towards attaining the health related Millennium Development Goals. An absolute shortage of human resources for health (HRH) was assessed in 57 countries, mostly in sub-Saharan Africa. Recognizing that pressing health needs across the globe cannot be met without a competent, adequate and available health workforce, urgent and sustained scale-up of health workforce production was called upon for both developed and developing countries to address the health workforce crisis.

Scaling up the production of health workers means not only increasing the output of health professions education programmes, but also ensuring that the ‘pipeline’ - from recruitment and selection of students to deployment of new graduates in the health labour market - is functional and effective, and that the education and training programmes are adapted to the changing needs of the population. Given the lengthy periods required to see the effects of certain programmatic efforts (e.g. up to six or even eight years in the case of educating physicians), innovative strategies may be required to rapidly increase the capacity of the workforce, notably among mid-level cadres such as medical officers or nursing assistants, and among community health workers. At the same time, increased production must be placed in the broader context of ensuring that the quality, distribution and skill mix of the health workforce meet national health systems goals.

What needs to be measured

Measuring and monitoring the whole education and training ‘pipeline’ is essential to the planning, management and quality control of the health workforce in a country. This requires timely and reliable data on each of its phases:

- the pool of eligible candidates for education and training programmes (the size and characteristics of the population meeting entrance requirements for advanced education in the field of health);
- recruitment and selection of students;
- capacity of education and training institutions at all levels (including human resources capacity);
- output of education and training programmes;
- quality assurance controls (e.g. accreditation of educational institutions and certification or licensing of new graduates); and
- the recruitment of newly educated health workers into jobs.

Assessing efficiency in the process would also require information on attrition - such as the numbers of students failing, transferring to a non-health programme or migrating - as well as turn-over among teachers.

Monitoring the phases of the education pipeline is not a single measure, but the aggregate of multiple pieces of information depending on the number of cadres in the health system. Where possible, data should be routinely compiled,
updated and disseminated through existing administrative processes among all key stakeholders, including the ministry of health, ministry of education, ministry of labour, individual education and training institutions, accreditation agencies, professional regulatory bodies and the private sector (such as associations of private providers as well as non-governmental or faith-based organizations that provide health services). At certain critical points of HRH planning and monitoring, special surveys or studies may be needed to validate or gather additional data that are not feasible to gather on a routine basis.

Enhancing comparability of education statistics

At the international and regional levels, it is important to have standardized definitions, indicators and measures that can be compared and aggregated across countries for global health workforce monitoring. There are challenges in clearly identifying different types of health worker education and training programmes from different institutions, having different entrance criteria, curricula and durations of training, and then grouping them into categories that are comparable within and across countries and over time.

Comparability of statistics on HRH production can be enhanced through the setting and use of common definitions and classifications. This includes the collection, processing and dissemination of data following or mapped to internationally standardized classifications - notably, the International Standard Classification of Education, a framework for the description and comparison of education statistics according to shared characteristics, adopted by countries under the auspices of the United Nations Educational, Scientific and Cultural Organization.

Selected statistics

Measuring and tracking education and training of health workers is essential to inform decision making for HRH policies and programmes at the national, regional and global levels. The most commonly reported indicator internationally is the number of graduates of health professions educational institutions. The number and type of newly educated health workers is relevant everywhere: in countries which need increased production among all cadres, countries which need more workers in rural and underserved communities, and countries receiving large numbers of in-migrants which are aiming towards national self-sufficiency of health workforce regeneration.

Presented here are some statistics on graduates of medical and nursing educational institutions in the European region, as compiled in the European Health for All Database [www.euro.who.int/hfadb]. Additional data are available from the same source on graduates of pharmaceutical, dentistry and midwifery educational institutions.

Physicians and nurses graduated per 100 000 population, European region

References and suggested readings