

Costs of eliminating critical shortages in human resources for health

WHO-OECD Hosted Dialogue on migration and other
health workforce issues in a global economy

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What is to be costed?

- minimum number of health workers required to supply health care to the population in developing countries: 2.28 per 1,000 population
- need to:
 - increase the production of health workers whether for employment in their home country or for trade in services.
 - take into account not only numbers but also the diversity and competencies of the necessary HW
 - include augmentation of financial rewards and improving the working environment

Methods

- General approach: costing by country using Quantities x Prices (2004)
- Review of literature and databases
- Indexing of costs to GDP to get costs of education by cadre
- Estimation of the HW gap by cadre
- Calculation of costs of production and retention of HW
- Building scenarios

Results 1: Quantities needed:

Table 1.3 Estimated critical shortages of doctors, nurses and midwives, by WHO region

WHO region	Number of countries		In countries with shortages		
	Total	With shortages	Total stock	Estimated shortage	Percentage increase required
Africa	46	36	590 198	817 992	139
Americas	35	5	93 603	37 886	40
South-East Asia	11	6	2 332 054	1 164 001	50
Europe	52	0	NA	NA	NA
Eastern Mediterranean	21	7	312 613	306 031	98
Western Pacific	27	3	27 260	32 560	119
World	192	57	3 355 728	2 358 470	70

NA, not applicable.

Data source: (3).

Results 2: Education costs:

- Range from a low of US\$ 1.6 million per country per year to almost US\$ 2 billion in a large country like India.
 - average cost per country is US\$ 136 million per year
- Financing would require health expenditures to increase by US\$ 2.80 (US\$ 0.40 to US\$ 11) per person annually in the average country
 - Increase of approximately 11% on 2004 levels

Results 3: Costs of employing additional HW

Per country by 2015 with full scale-up

- minimum of US\$ 311 million per year at US\$ 7.50 per person per year
- If 2x salary: US\$ 20 per person (increase of over 75% on 2004 levels)

Caveats:

- Assumes in-country capacity to produce required health workers; no investment costs included to build faculties
- Simplistic assumptions on level of salaries to retain HW
- Also does not include
 - on the job training for existing health workers
 - complementary support of 1.8 worker per HW
 - building and upgrading existing health infrastructure and equipment and recurrent costs
- Broader consideration of costs required to scale-up MDGs and other priority diseases in the country

How much is currently being spent on HRH?

Table 1.2 Proportion of government health expenditure paid to health workers

WHO region	Wages, salaries and allowances of employees as percentage of general government health expenditure (GGHE)	Number of countries with available data
Africa	29.5	14
South-East Asia	35.5	2
Europe	42.3	18
Western Pacific	45	7
Americas	49.8	17
Eastern Mediterranean	50.8	5
World	42.2	64

Note: Grouped proportions are simple averages of the country proportions, showing the ratio in a typical country in the region.

Reflections:

- Scaling up HR should not be considered as a stand-alone exercise. HR planning takes into account the plans of scale-up of the disease-control programmes. HR planning is part of health system scale-up.
- Focus is not just on scaling up or adding HWs but at the same time, need to improve the productivity of existing health workforce – task shifting.
- Other considerations: alignment with civil service, professional regulatory commissions
- The costs are considerable: fiscal space concerns, economic slowdown

- Systems change has a long term perspective with a sense of urgency; major challenges require sharp focus and sustained efforts.

- http://www.who.int/hrh/documents/whr06_background_papers/en/index.html