FORUM

HUMAN RESOURCES IN HEALTH: A KEY ASSET AT RISK

Chronic underfunding, privatizing services, and political indifference, worsened by the pandemic wave of Covid-19, and the growing shortage of human resources: these are just a few of the problems that assailing health systems worldwide. This crisis in the shortfall of workers has more than one disruptive aspect, between massive hospital admissions, professional migrations, and growing inequality.

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Health systems in Italy and Africa are at a critical crossroads in their histories. Having come out of the Covid-19 epidemic depleted, they are chronically underfunded and are suffering from the privatization of services and political indifference. The most salient feature of this confused situation is the deep crisis in human resources: there are lack of health workers, the givers of care. This phenomenon is complicated due to the different levels of data availability, low adherence to international standards, and the application of different models for simulation and forecasting staff. Keeping all this in mind, let's consider some of the problem's crucial aspects.

STOCK

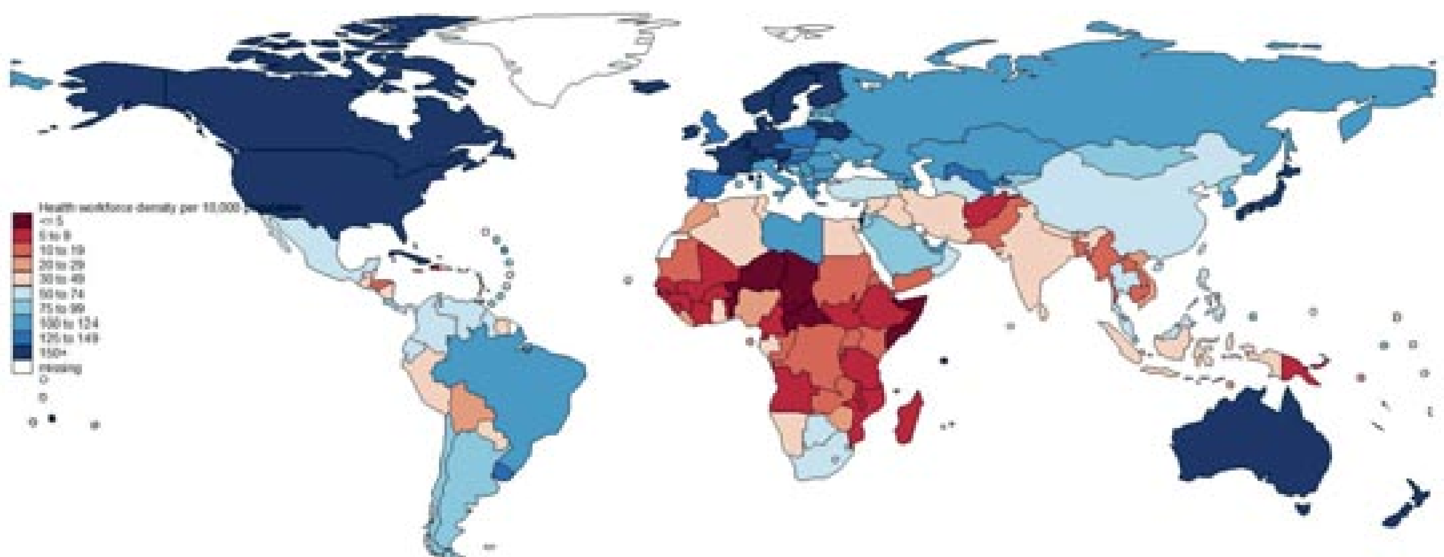
In 2020, the workforce stock employed in the health sector was 29.1 million nurses, 12.7 million doctors, 3.7 million pharmacists, 2.5 million dentists, 2.2 million midwives, and 14.9 million additional occupations, accounting for 65.1 million employed health workers. Since 2013, this stock has increased 29% globally.[1]

DISTRIBUTION

The global health workforce is distributed unequally. High-income countries have a health worker density per 100,000 people that is 6.5 times more than that of low-income countries (see **Figure 1**). Overall, about a fifth of the world population, the high-income part, absorbs 50% of available health workers.

Italy. According to the OECD's *Health at a Glance*, there is an average in Europe of 4 doctors and 8.3 nurses per 1,000 people. Italy is in keeping with the average in doctors but has a severe shortfall of nurses with 6.3 per 1,000, especially locally. The ratio between nurses and doctors is 1.2, one of the lowest in Europe.[2] In recent years, the number of staff with permanent contracts in the National Health Service has dropped precipitously.

FIGURE 1 / HEALTH WORKFORCE DENSITY PER 10,000 POPULATION IN 2020



* Latest available density as of 2020 - incl. medical doctors, nursing personnel, midwifery personnel, dentists, pharmacists

An analysis of the "National Health Service Staff" conducted by the National Agency for Regional Health Services shows a fluctuating trend.[3] On December 31, 2018, it was less than in 2012 by about 25,000 workers (41,400 less than in 2008). In 2020-2021, due in part to the effect of the Covid-19 epidemic, there was an increase in personnel, leading to the number of workers in service in 2021 comparable to that of 2012.

Sub-Saharan Africa. A recent WHO study of 47 countries in sub-Saharan Africa, there are an average of 1.55 qualified health professionals for every 1,000 people with high inequality between urban and rural areas. Fragile countries in conflict, like South Sudan, have an average density of 0.3 health workers per 1,000 people.[4] Seychelles, Mauritius, Namibia, and South Africa are the only countries with health worker densities above the minimum threshold of 4.45 x 1,000 population needed to meet the *Universal Health Coverage* goals.

2030 FORECASTS AND THE GAP

Given the current situation of health worker stock production, 2030 forecasts suggest a conservative growth rate of 2.7% annually (with a 0.9% growth in the world population) which would be an increase of 19 million net jobs, bringing the health workforce to 84 million workers. The gap, based on personnel needs determined by WHO,[5] would be around 10.2 million professionals, primarily nurses, which is large enough to be considered a "Global Health Emergency."[6] This number is likely an underestimate that only considers health personnel in the public sector. According to the *Burden of Diseases* study group, if the goal is to achieve 80% universal health coverage (UHC), the human resources gap would be much larger, closer to several dozens of millions of workers.[7]

Based on an analysis by CREA in **Italy**, to align with the other European countries, there is a shortfall of 30,000 doctors and 250,000 nurses.[8] Mountain areas, isolated villages, the most populous regions, and primary care suffer the greatest shortages, and the personnel crisis is most keenly felt in the hospitals. The most affected medical specialties are urgent-emergency medicine, anesthesia, pediatrics, internal medicine and surgery, and all the specialized diagnostic services.[9] The shortage is clear today in competitions with no applicants, the use of "pay-per-use doctors," voluntary resignations, and the closure of essential health services.

Sub-Saharan Africa. In 2030, considering rapid population growth and the shortage of workers, Africa could account for 52% of the global shortage (in 2013, it accounted for a third of it). Sixty-five percent of the workforce shortage would be in 55 countries, mostly in Africa, which WHO put on a red list for active international recruitment.[10] The shortage of nursing staff is especially acute. Some 5.78 million nurses are needed by 2030, but without additional investments and maintaining the current capacity for production and use, only 47% of the demand could be met.[11]

PROFESSIONAL MIGRATION MARKET FORCES, PERSONAL REASONS, AND THE PARADOX OF UNEMPLOYMENT

Aside from reasons related to the lack of or inadequate planning of health personnel (the gap between need and graduates, the turnover problem, the retirement wave, and so on), other major causes of the existing gap and professional migration are the work conditions and compensation. **In Italy**, according to CREA as well, the nursing profession has poor attractiveness. Only 1% of students choose this degree program compared to an average of 3% in other EU countries. Factors include low compensation (40% less than the average of northern European countries), inadequate university training, especially in terms of clinical specialization, stressful work paces, and very limited professional career opportunities. According to the OECD database, almost 180,000 Italian health professionals chose to work abroad between 2000 and 2022.[12] England, Switzerland, Germany, Spain, and Belgium are the countries most attractive to nurses. This phenomenon is partially offset by hiring foreign professionals, which accounted for about 6% of the entire workforce in 2018–19 with an upward trend.[13] Meanwhile, to cover the gaps in the workforce, all players, both public employers like the Regions (e.g. Sardinia, Emilia Romagna, Calabria, etc.), and private ones, such as health companies, the temporary employment companies, and cooperatives are increasingly actively recruiting doctors and nurses from non-European countries, such as Argentina, Brazil, Tunisia, Moldova, the Philippines, and India. The Ministry of Health seems to take the same approach.[14]

In Africa, though the production of health personnel has increased significantly based on developing a university network (with almost 200 universities) and training schools for health workers (2,300 nursing and midwifery schools), there is migration within and outside the continent. African health professionals migrate to countries in Africa with higher wages such as South Africa, Namibia, and Botswana. The gross annual salary of a nurse in Namibia is about USD 50,000 compared to an average in Africa of USD 10,000, and USD 2,196 in the Democratic Republic of Congo.[15] There is also emigration to Western countries (e.g. UK, USA, Australia, Canada, France, and Belgium) whose systems increasingly depend on employees from abroad. In the UK, one-sixth of health workers employed in the NHS have a foreign passport; 15,000 employees come from Nigeria alone.[16] According to a systematic review of low-income countries, covering the last 50 years, people emigrate or intend to do so not only for market reasons but increasingly for personal reasons such as safety, professional satisfaction, quality of life, and family reunification.[17]

Lastly, the paradox of unemployment in health care is noteworthy. In Kenya, there are 5,000 unemployed doctors, and thousands of unemployed nurses from Ethiopia, Ghana, the Democratic Republic of the Congo, Malawi, and even South Africa.[18] The issue is not, as incorrectly suggested, due to excess supply but to restrictive public policies. This supposed surplus

of personnel is tied to rigid budgetary policies, often imposed by financial entities (IMF, WB) that prevent the public administration from absorbing these resources despite the health systems' clear needs.[19]

FUTURE STRATEGIES

The correlation between human resources, actual coverage, and mortality has been long clear.[20] The WHO has made clear suggestions to avoid the collapse of health systems after the Covid-19 epidemic.[21] The mix of suggested actions includes investments in basic and continuing education based on the people's health needs; adequate fiscal, contractual and regulatory spaces for the recruitment and long-term stabilization of health personnel; monetary and other incentives to support allocating personnel to less accessible geographical areas; developing new care models based on task shifting, interprofessional teams, integrating local hospitals, moving to digitization and new technologies. It is still to be seen how much this structural reform agenda will be done by governments and should undergo careful public scrutiny.

Internationally, we need a stronger commitment from the Global North, multilateral agencies, and large funders to train the health workforce in low- and middle-income countries. Global initiatives are already underway, such as the *WHO Roadmap for Building the Public Health and Emergency Workforce, Community Health Workers Delivering Primary Health Care: Opportunities and Challenges*, and various efforts led by the countries that need support. The poaching of healthcare personnel abroad is unethical. The Global Code of Practice on the International Recruitment of Health Personnel is clear: we must take into account the rights, obligations, and expectations of source countries, destination countries, and migrant health personnel; it is essential to share decisions with local authorities and professional associations; we must recognize the reciprocity of interests and the commitment to concretely support the development of human resources, in the medium to long term in countries with low resources. This means truly helping people where they live.

NOTES

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