

Planning the future physicians and nurses in Portugal

Diana Fernandes Lopes, Ana Dias, Jorge Simões, Eduardo Anselmo Castro

Universidade de Aveiro

Human health resources (HHR) are the keystone of any health system, by delivering health services to the population. According to the WHO, a shortage of the health workforce (physicians and nurses) in the future is expected. On the one hand, ageing populations will need more and different healthcare; on the other hand, the physician's age average in Europe is increasing. The perspective of the sudden retirement of large groups of professionals in a short time is a main problem to address. Moreover, the training of a physician is a long process, which makes it impossible to cover the needs of those health professionals at short notice. Furthermore, there are health workforce imbalances that should be addressed. On the one hand, the nurse to physician ratio varies significantly across European countries, from below one nurse to every physician in Greece to between four and five per physician in Denmark and Finland (OECD, 2017). The Portuguese ratio, 1.5, is below the European Region average (2.2) and the OECD average (2.8) (OECD, 2017). On the other hand, the proportion of general practitioners among all physicians should be increased, in order to strengthen primary health care (this ratio varies from 0.5 in France to 0.13 in Portugal; 0.2 is the European Region average). The complexity of this topic is highlighted by the WHO, with the process of planning, regulating and managing the HHR being recognized as the heart of the Health 2020 policy.

The planning process aims to streamline decision-making to ensure that the right number of HHR is available in the right time and in the right places to meet the population's needs and to guarantee their equitable access to healthcare as well as high quality services. Although this issue has been present on the public health agenda for many years, it remains nowadays a major concern in several countries. This situation may affect not only the productivity and the overall socio-economic development, but the quality of the healthcare services delivered to patients. In the past 40 years, the planning of the health workforce in Portugal was conducted in a reactive way, lacking a foresight vision based on an integrated, comprehensive and rigorous analysis. Understanding imbalances on the HHR is therefore, essential for the improvement of many outcomes, such as equity access to health care services targeted by the United Nations sustainable development goals for 2016-2030 (WHO, 2016). The health workforce planning is even more critical

in the context of limited resources and the hard-to-predict changes such as: (i) in the roles and responsibilities of different health providers, (ii) in the structure and organization of the health service delivery, and (iii) in the demand for health services (Ono et al., 2013). These issues are affected by uncertain factors, namely demography, epidemiology, technology, policy and economy (Dussault, 2015).

A lot of research has been devoted to the health workforce planning, from various perspectives: supply-based approaches, demand-based approaches, needs-based approaches and benchmarking (Roberfroid et al., 2009). As far as we know, no one has addressed this problem by using an integrated tool in a rational and transparent way. The project HEALTH_2040 - Future Needs of Human Resources for Health in Portugal, funded by Calouste Gulbenkian Foundation, attempts to tackle these limitations. In particular, this study exploited the use of a panel data analysis with country-fixed effects by following a socio-technical approach to forecast the health workforce needs in Portugal, concerning physicians and nurses till 2040. Departing from this knowledge, it was possible to infer about the training needs of these HHR, both in medium and long run. These results can be used as a starting point to test the impact of different governmental policies. Further research is still needed to geographically distribute the HHR in order to overcome regional inequities.

Keywords

Health workforce planning; Human health resources planning; Health economics

References

Dussault, G. (2015). Planning capacity evaluation. In Michelutti, P. & Van Hoegaerden, M. (Eds.), *Handbook on health workforce planning methodologies across EU countries* (pp. 273–277). Bratislava: Ministry of Health of the Slovak Republic.

OECD (2017). *Health at a Glance 2017: OECD Indicators*, OECD Publishing, Paris (Available: http://dx.doi.org/10.1787/health_glance-2017-en).

Ono, T., Lafortune G., & Schoenstein M. (2013). Health workforce planning in OECD countries: A review of 26 projection models from 18 countries (Available: <http://dx.doi.org/10.1787/5k44t787zcwb-en>).

Roberfroid, D., Leonard, C., & Stordeur, S. (2009). Physician supply forecast: better than peering in a crystal ball? *Human Resources for Health*, 7(10), 1–13.

WHO. (2016). Global strategy on human resources for health: Workforce 2030. (Available: <https://www.who.int/hrh/resources/globstrathrh-2030/en/>).