

# Gender equity in the health workforce: Analysis of 104 countries

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## Health Workforce Working paper 1

March 2019

## Acknowledgements

The present working paper was prepared by the WHO Health Workforce Department under the coordination of Mathieu Boniol, with contributions from Jim Campbell, Khassoum Diallo, Michelle McIsaac, Tana Wuliji and Lihui Xu. The authors would like to acknowledge Sonali Reddy for the production coordination.

WHO/HIS/HWF/Gender/WP1/2019.1

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**Suggested citation.** Boniol M, McIsaac M, Xu L, Wuliji T, Diallo K, Campbell J. Gender equity in the health workforce: analysis of 104 countries. Working paper 1. Geneva: World Health Organization; 2019 (WHO/HIS/HWF/Gender/WP1/2019.1). Licence: CC BY-NC-SA 3.0 IGO.

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Design and layout by L'IV Com Sàrl, Switzerland

Printed by the WHO Document Production Services, Switzerland

# Gender equity in the health workforce:

## Analysis of 104 countries

### Key messages

- 1 Women form 70% of workers in the health and social sector.
- 2 Women's representation in the most highly paid health occupations has been improving steadily since 2000.
- 3 Women are less likely than men to be in full-time employment.
- 4 Overall, an average gender pay gap of around 28% exists in the health workforce. Once occupation and working hours are accounted for, the gender pay gap is 11%.
- 5 Although the sector performs well regarding women's participation, gender transformative policies are needed to address inequities and eliminate gender-based discrimination in earnings, remove barriers to access to full-time employment, and support access to professional development and leadership roles.

# Background

The health and social sector, with its 234 million workers, is one of the biggest and fastest growing employers in the world, particularly of women.<sup>1</sup> Women comprise seven out of ten health and social care workers and contribute US\$ 3 trillion annually to global health, half in the form of unpaid care work.<sup>2</sup>

Underinvestment in the health and social workforce undermines the prospects of achieving the Sustainable Development Goals (SDGs). The WHO SDG health price tag study finds that almost half of the investment required to achieve the health SDGs relates to education, training and employment of health workers. The WHO Global Strategy on Human Resources for Health: Workforce 2030 (GSHRH) estimates a global shortfall of almost 18 million health workers by 2030, primarily in low- and lower middle income countries.<sup>3</sup> The GSHRH also calls for strengthening data and progressive implementation of National Health Workforce Accounts (NHWA). Investing in the health and social workforce not only contributes to the achievement of universal health coverage and to global health security, but, as the United Nations Secretary-General's High-Level Commission on Health Employment and Economic Growth found, investments in the health and social workforce have a powerful multiplier effect on economic growth and can contribute to maximizing women's economic empowerment and participation.<sup>4</sup>

WHO, together with the International Labour Organization (ILO) and Organisation for Economic Co-operation and Development (OECD), adopted the Working for Health

programme in 2017, a joint inter-agency multi-SDG programme to accelerate the expansion and transformation of the health and social workforce. The programme embraces gender as a core tenant and seeks to utilize workforce plans, investments and actions to seize the opportunities to realize the gender dividend. In November 2017, WHO established the Global Health Workforce Network which includes a Data and Evidence Hub and a Gender Equity Hub, which both bring together key stakeholders for strengthening data and evidence and supporting gender transformative actions and investments.

While gender issues have been at the top of the global agenda, few comprehensive studies on gender in the health and social workforce have been conducted at the global level. This brief is based on an analysis of WHO NHWA data<sup>5</sup> for 104 countries over the last 18 years.

## Key findings

### Occupational segregation by gender

The analysis confirms previous findings<sup>6</sup> that women's share of employment in the health and social sector is high, with an estimated 67% of the health workforce in the 104 countries analysed being female. Nevertheless, systematic differences exist in gender distribution by occupation across all regions. In most countries, male workers make up the majority of physicians, dentists and pharmacists in the workforce, with female workers comprising the vast majority of the nursing and midwifery workforce (Figure 1).

<sup>1</sup> ILO. Report for discussion at the Tripartite Meeting on Improving Employment and Working Conditions in Health Services. Geneva: International Labour Organization; 2017.

<sup>2</sup> Langer A, Meleis A, Knaul FM, Atun R, Aran M, Arreola-Omelas H et al. Women and health: the key for sustainable development. *Lancet*. 2015;386:1165–210.

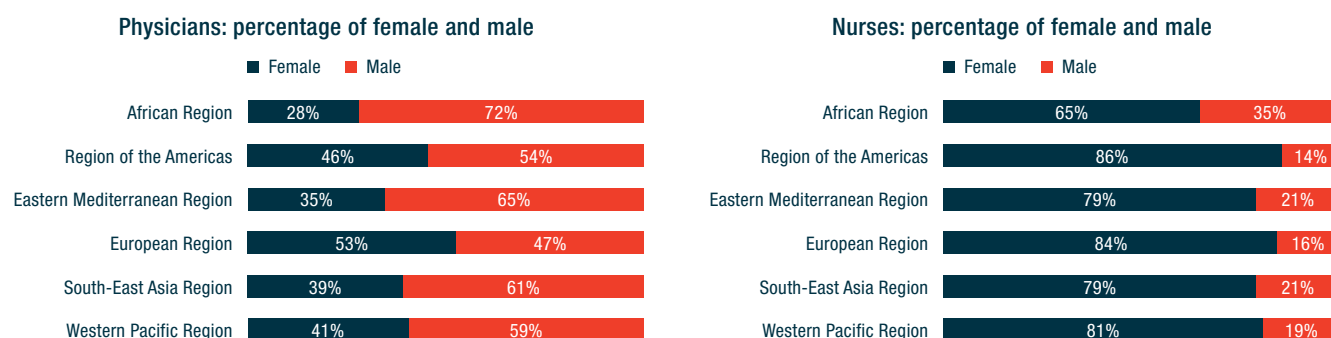
<sup>3</sup> WHO. Global Strategy on Human Resources for Health: Workforce 2030. Geneva: World Health Organization; 2016.

<sup>4</sup> United Nations High-Level Commission on Health Employment and Economic Growth. Working for health and growth: investing in the health workforce. Geneva: World Health Organization; 2016.

<sup>5</sup> National Health Workforce Accounts data include country reported indicators, OECD statistics, Labour Force Survey (LFS) data compiled by ILO, census data compiled by the Minnesota Population Center in their Integrated Public Use Microdata Series (IPUMS).

<sup>6</sup> Magar V, Gerecke M, Dhillon IS, Campbell J. Women's contributions to sustainable development through work in health: using a gender lens to advance a transformative 2030 agenda. In: Buchan J, Dhillon IS, Campbell J, editors. Health employment and economic growth: an evidence base. Geneva: World Health Organization; 2017 ([https://www.who.int/hrh/resources/health\\_employment-and-economic-growth/en/](https://www.who.int/hrh/resources/health_employment-and-economic-growth/en/), accessed 6 March 2019).

**FIGURE 1.**  
Distribution of physicians and nurses by gender

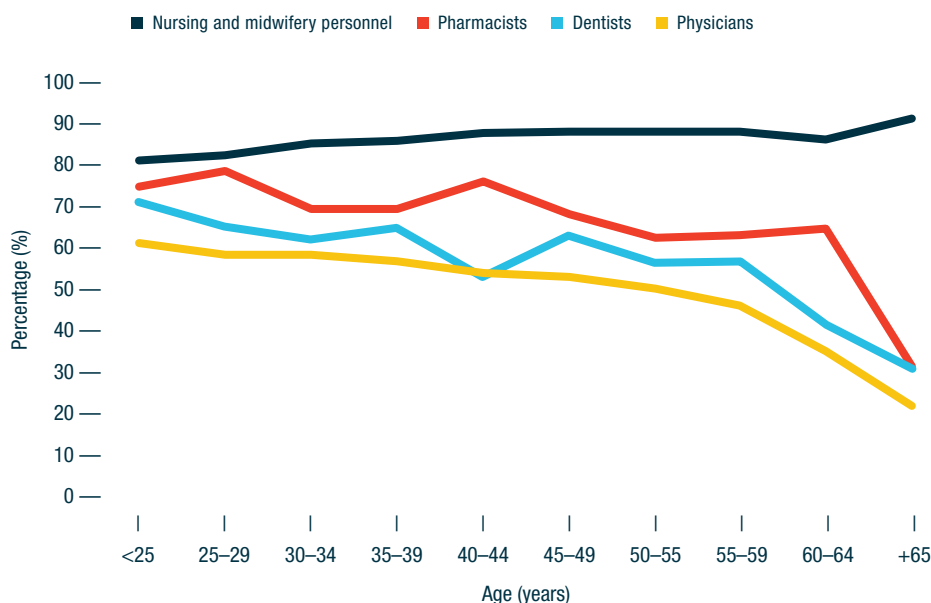


Source: Data from NHWA for 91 countries for physician data and 61 countries for nursing data.

Women's representation in the health sector has increased over time, particularly among the higher wage health care occupations (i.e. physicians, dentists and pharmacists). In OECD countries, the share of female physicians between 2000 and 2017 increased by 13% (an average by 0.58% annually). The Labour Force Surveys (LFS) data from

57 countries confirm this trend. In recent years, the majority of health workers in higher wage health occupations (i.e. physicians, dentists and pharmacists) under the age of 40 are female. Interestingly, there is also an increasing share of male workers in younger age bands in nursing and midwifery (Figure 2).

**FIGURE 2.**  
Share of women health workers by age group for nursing and midwifery personnel, pharmacists, dentists and physicians



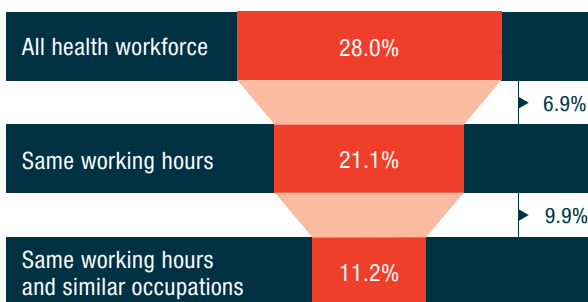
Source: LFS data from 57 countries.

## Gender pay gap

Analysis based on median wages from LFS data from 21 countries showed health workers face gender-related gaps in pay, with female health workers earning, on average, 28% less than males. This is slightly greater than global estimates of gender pay gap data, showing that women are paid approximately 22% less than men.<sup>7</sup> The gender pay gap among health workers can be explained by several factors: different working hours between men and women (6.9%), different occupations between men and women (9.9%), and a remaining unexplainable gap of 11.2% for similar occupation and working hours (Figure 3).

A 13% pay gap for hourly wages was observed for physicians and a 12% pay gap for hourly wages for nurses and midwives. This suggests that a sizeable portion of the overall pay gap is attributable to occupational segregation within the sector. Projecting the changes in the health workforce distribution for physicians and nursing and midwifery personnel indicates the 9.9% gap due to occupational segregation will decrease to 7.0% over the coming 20 years.

**FIGURE 3.** Gender pay gap among health workers as a percentage of men's wages

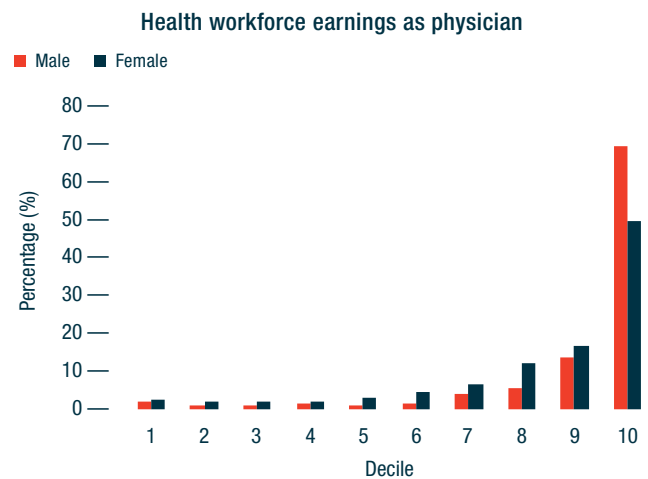


Source: Data from LFS.

<sup>7</sup> ILO. Global wage report 2018/19: what lies behind gender pay gaps. Geneva: International Labour Organization; 2018.

The remaining pay differential of 11.2% could be attributable to a wide array of factors, including women's underrepresentation in senior positions, fewer opportunities for career advancement, and gender discrimination. Using data from European countries, the analysis showed that male physicians are more than twice as likely as females to be in the highest income category (Figure 4).<sup>8</sup>

**FIGURE 4.** Distribution of physicians in 19 European countries by earning categories in deciles



Source: Data from LFS.

## Divergent working places and conditions

LFS data from 56 countries showed higher average working hours per week for men than women for most occupations and regions. This likely reflects different type of contracts, with more part-time jobs occupied by women. On average, women work 4.2 hours fewer per week than men among physicians, 3.5 hours fewer per week for nursing and midwifery, 3.7 hours fewer per week for dentists, 4.6 hours fewer per week for pharmacists, and 3 hours fewer per week for personal care workers. Census data showed similar patterns.

<sup>8</sup> The likelihood for earning in the highest income category for men as compared with women was OR = 2.10 (95% CI: 1.83–2.40) for physicians; OR = 2.27 (95% CI: 1.76–2.93) for nursing and midwifery personnel; and OR = 3.38 (95% CI: 2.27–5.03) for personal care workers. (OR – odds ratio; CI – confidence interval.)



Data on the share of health workforce by sector (public or private) indicate that for highly paid occupations, such as physicians, men are more frequently employed in the private sector than women (49.2% vs 39.2% respectively,  $P < 0.001$ ). However, the contrary is the case for low paid jobs, such as personal care workers, where women are more frequently employed by the private sector (53.0% vs 81.8% for men and women respectively,  $P < 0.001$ ). This contrast illustrates a gender imbalance, with men more likely to obtain private sector jobs in occupations where public sector wage ceilings often exist, whereas women are more likely to obtain lower paid private sector jobs, which tend to offer less job security and favour part-time employment.

## Considerations for policy

Women represent around 70% of the health workforce, but earn on average 28% less than men. Occupational segregation (10%) and working hours (7%) can explain most of this gap, but even when considering “equal work” an “equal pay” gap of 11% remains. The trend of increasing participation of women in highly paid occupations is predicted to narrow this gap by 4% in the coming 20 years. There is a window for policy to harness this momentum and take concrete action to accelerate participation of women in highly skilled health occupations. To achieve equal pay for equal work, the 11% gap needs to be addressed. In line with ILO’s Convention No. 100 (Equal Remuneration), ratified by 173 countries, labour rights against sexual discrimination should be enforced to ensure equal remuneration for men and women workers for work of equal value.

Although not captured by the LFS data, it must be recognized that much of the work in health done by women is unpaid work. Investments in creating decent work in the health sector can support the translation of informal work into formal sector employment.

Labour market policies should remove barriers to full-time employment for women, support career advancement and support gender parity in leadership positions. These

measures need to form part of a gender transformative policy that can push the health sector into a leading role in empowering women and girls and achieving gender equality.

## Data sources and methods

This new analysis of gender inequities in the health workforce was made feasible by improved data availability for various indicators from NHWA. The establishment of the Working for Health Inter Agency Data Exchange in 2018 enabled the generation of new evidence through analysis of LFS micro-data from ILO and census micro-data from the Integrated Public Use Microdata Series (IPUMS). It is recommended to continue the progressive implementation of the NHWA and expansion of partners and data sources through the Inter Agency Data Exchange.

Data from over 104 countries from 2000 to 2018 were included in this analysis from NHWA data, which combines country reported indicators, OECD statistics, LFS data compiled by ILO, and census data compiled by IPUMS. Micro-data were obtained through collaboration with ILO for LFS data and with IPUMS for census data. Micro-data from LFS and census data were available for detailed analysis and modelling. Occupations were coded using the current International Standard Classification of Occupations 2008 (ISCO-08). For occupations already coded in ISCO-88, correspondence tables from ILO were used. The following occupations were considered: medical doctors, nursing personnel, midwifery personnel, dentists, pharmacists and personal care workers.

For all analysis except temporal trends, data from the latest available year were included in the analysis. The following indicators were used to assess gender topics: demography with age and sex distribution, temporal trends in the share of women, the gender pay gap from individually reported earnings and from distribution of earnings in deciles, individually reported hours of work per week, and employment in the private sector.



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