

Strengthening investments in human resources for health to ensure quality care for women, children, and adolescents

Background

The ability of health systems to provide quality, respectful, safe, and gender and culturally-sensitive care depends on a well-trained and robust health workforce. However, globally, a critical shortage of health workers, underinvestment, and poor working conditions continue to hinder the delivery of essential care. Greater investment in human resources for health (HRH) is urgently needed to improve services for women, children, and adolescents.

Despite progress, a projected shortfall of more than 11 million health workers by 2030 – especially in low- and lower-middle-income countries – will increase pressure on health systems. (1) Poor working conditions – such as low wages, burnout, lack of benefits, high turnover rates and high instances (38%) of health workers experiencing verbal or physical violence – further exacerbate the issue. (2,3) Broader factors, such as geopolitics, legislative frameworks, economic challenges, and inequities in education, also impact the workforce's capacity to respond to emerging diseases, climate disasters, and crises, affecting access to reproductive, maternal, newborn, and adolescent health services.

In 2023, the health workforce included 29.9 million nurses, 14.1 million physicians, 2.1 million midwives, and millions of others critical to sustaining health systems. (4) Strengthening HRH, particularly at the primary health care (PHC) level, where up to 80% of health needs can be met, is



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crucial.(5) Investment in midwives, nurses, and community health workers, alongside improvements in district hospitals, will support progress toward universal health coverage (UHC) and global health equity, as outlined in the UHC Political Declaration of 2023.(6) Similarly, investments into education and health sectors have the potential to enhance human capital development as a prerequisite to ensure a stable economic growth.(7)

Why is urgent action needed?

Delivering for women's, children's, and adolescents' health is crucial for PHC, as it addresses vulnerable populations' needs through preventive and life-saving care, the foundation of health systems resilience. Investments in WCAH (women, children, and adolescent health) strengthen equity, improve long-term health outcomes, enhance system efficiency, and build a sustainable PHC system for all.(8)

Effective dialogue, partnerships, and collaboration in education, regulation, financing, and support for health workers improve access to quality MNCH (maternal, newborn and child health) services.(9) However, disparities in the availability, distribution, and performance of physicians, nurses, and midwives, especially in low-resource settings, impact the quality of care.(8)

Investing in HRH fosters a healthier, more resilient society, promoting social cohesion, equity, and economic growth and is pivotal to achieving the Sustainable Development Goals (SDGs) [Figure 1].(10)

According to the International Labour Organization, the health workforce accounts for 3.4% of global employment, from 1% in LMICs (low and middle-income countries) to 10% in highincome countries. (11)

In the past 20 years, there has been a growing focus on intersectoral interventions and efforts to improve maternal and newborn health, aligned with the SDGs. (12) Sustained investments into multi-disciplinary teams of health workers, including physicians, nurses, midwives and community health workers has the potential to significantly impact women's, children's and adolescents health. (13)



Figure 1. Benefits of investing in the health workforce (14)

Key issues to address

Achieving UHC requires significant investment in the health workforce. (15) The global shortage of health workers leads to stress, burnout, and job dissatisfaction, weakening retention and quality of care. This shortage is critical in SRMNCAH (sexual, reproductive, maternal, newborn, child and adolescent health), where over 1.3 million dedicated SRMNCAH equivalent (DSE) workers, primarily midwives and nurses will be needed by 2030. (16) In addition many countries face challenges in recruiting, deploying, and retaining well-trained health workers due to poor working conditions, including low pay, heavy workloads, long hours, and limited career prospects. (17)

Currently, the SRMNCAH workforce can meet 75% of global needs, but in low-income countries, it only meets 41%, creating service gaps. This issue is most acute in the African and Eastern Mediterranean WHO regions, worsening health disparities. (16)

Distribution of health workers is another critical issue. Nearly half the world's population lives in rural areas, but most health workers are in urban centers, leaving rural communities underser-

ved.<u>(18)</u> This uneven distribution hampers UHC, leaving rural areas with inadequate SRMNCAH services.<u>(19)</u> Even with available staff, care quality suffers due to equipment shortages, unskilled personnel, limited emergency care facilities, and unreliable funding,<u>(20)</u> further hindering MNCH progress and community health.

Box 1: Implementing programs to address health workforce shortages in rural areas in Nigeria (21)

Nigeria's northern regions face high maternal and child mortality rates, worsened by insurgency. Since 2012, the Women for Health (W4H) initiative, supported by the UK's Foreign, Commonwealth & Development Office, has partnered with 22 training institutions and health ministries to train and deploy female health workers to rural areas across six northern states. Key achievements include better management systems, school accreditation, rural midwife housing, and enrolling thousands of female students in health training. In the extension phase from 2018 to 2020, the program adopted a "building back better" approach in two conflict-affected states while ensuring sustainability in the other states. The extension is also facilitating institutionalization of commitment by Federal agencies.

Interprofessional collaboration and community engagement

Interprofessional collaboration among health workers enhances awareness of each other's expertise, leading to better decision-making and higher quality care.(18) This collaboration involving midwives, nurses, primary care physicians, and specialists, ensures safe, patient-centered care, particularly for women and families. (20,22) Despite these advantages, such collaboration is not being effectively and consistently implemented in health facilities, with key barriers including hierarchical structures, lack of respect and trust amongst professions, and unclear areas of responsibility and authority.(19) Evidence warns that without sufficient strategies in place to foster these collaborative environments, communication gaps can contribute to higher maternal and neonatal mortality rates.(23)

Community health workers (CHWs) are vital for reaching marginalised populations, improving health literacy, and empowering communities, complementing rather than substituting the specialised roles of nurses and other health professionals. To be effective, CHWs need thorough training, supervision, and support. Community-based interventions, including those led by midwives, have been shown to reduce neonatal mortality by 25%, increase pregnancy-related referrals by 40%, early breastfeeding rates by

94%, and healthcare seeking for neonatal illnesses by 45%, improving maternal and neonatal outcomes. (24)

While community health workers can connect communities effectively with health services, telemedicine can help in this regard too; but many countries lack the needed policies and training. Even in HICs (high-income countries), resources in the health sector are mostly channeled into secondary and tertiary care (hospitals) and not primary care (the community).(25)

Box 2: Strengthening networks of community health workers in Senegal (26)

Senegal launched the National Community Health Policy in 2014, which formally established five categories of CHWs with distinct roles:

- approximately 25,000 community-based health care workers:
- · home health care providers;
- · community liaisons;
- · matrons, and
- · the Bajenu Gox.

Each play a distinct role in linking communities to the country's growing health system. For example, the Bajenu Gox represent a unique Senegalese cadre of female community health workers who promote MNCH programming, advocate for women's health, mobilize communities, and refer women to care with the goal of reducing maternal and infant mortality. The National Community Health Policy Overall as well as other policies have coordinated community interventions, promoted citizens' participation in the health care system, and made services easier to access across the country – especially in rural and remote areas.

Leadership and equity

Health workers in female-dominated professions, like nursing and midwifery, are often underrepresented in high-level policy and financing discussions. Despite their critical role in improving maternal and newborn health, this lack of representation hinders equitable policy development and impacts overall health outcomes. Increasing women's leadership in science, medicine, and public health can significantly improve women's health.(27)

Though women make up 67% of the global health workforce, (28) they hold only 25% of leadership roles (29). This is especially concerning given high maternal mortality rates. (30) As primary healthcare providers, women are most affected by gaps in maternal health services. Closing this leadership gap is essential to prioritise female health workers' needs, improving recruitment, retention, and WCAH policies. Upholding the rights of all health workers and empowering women in leadership not only promotes

gender equity but also improves global health outcomes and reduces maternal mortality (31).

Financing

Achieving the SDGs requires a sustainable HRH agenda with strategic resource allocation, including emphasis on domestic resources. In 2017, the annual financing gap for HRH in LMICs had been valued at between US\$ 92 billion and US\$ 150 billion.(32) Historically, approximately 5% of official development assistance (ODA) for health is allocated to the workforce, of which the largest share (over 42%) is spent on short-term training (33). In parallel, despite high disbursements for neonatal and child health in 2019, ODA for SRMN-CAH declined by 14% from US\$ 6.2 billion in 2019 to US\$ 5.3 billion in 2021.(34) In 2025, the world is faced with increasing threats to global public health with major donors, France, Germany, the United Kingdom, and the United States all cutting their ODA for the first time in nearly 30 years, while ODA for health in 2027 is projected to fall below 2020 levels (35), prompting calls to shifts to bolster domestic resource mobilization for health and health workers.

To improve health systems, health workers must be involved in resource planning. Evidence-based allocation, transparency, optimised financial systems, and strategic management of health products and services are crucial. In addition, shifts to long term, sustainable investments - including domestic resources - can be complemented by multilateral and bilateral funding, blended financing, grants, loans, and private sector investments.(36)

Box 3. Increasing and supporting HRH to improve quality maternal health care in Sierra Leone (*37*)

In Sierra Leone, midwifery is integral to the national strategy of expanding quality SRMNCAH to all districts. Sierra Leone has significantly increased the number of trained midwives in the country from less than 100 in 2010 to approximately 1579 in 2023 (35). Government plans aim to employ 3500 midwives by 2025.

The Ministry of Health, supported by regional and global partners, has implemented key initiatives:

- developing a national nursing and midwifery policy and curriculum aligned with international standards set by the International Confederation of Midwives;
- launching emergency obstetric and newborn care training;
- increasing midwife leadership in maternal death investigations; and
- assessing midwifery schools against global standards.

How do we address these issues at hand?

CONSTITUENCIES ACTIONS Governments and Ensure ethical recruitment practices, especially in HICs hiring from LMICs, with transparency, fair renumeration, appropriate working conditions compensation and protection of rights. parliamentarians Promote a cadre/posts for "trained" primary care physicians in public sector healthcare facilities. · Involve health workers including nurses and midwives in leadership and health policy discussions, such as appointing a chief nursing officer and a chief midwifery officer. · Strengthen data collection and ensure recurring funding for safe, well-resourced health systems to support health worker recruitment and retention. • Set and adhere to global health workforce standards to ensure timely, accessible care by optimising workforce distribution, patient proximity and emphasising interprofessional · Develop a "One Health" investment case integrating policies, enterprise models, and selfcare innovations to enhance SRMNCAH outcomes. Improve HRH data by tracking factors like cadre, region, race, gender, and specialty. Implement fair financing for transparent and efficient resource allocation for HRH. Donors and · Align development assistance with country priorities to support long-term HRH goals. foundations Allocate funds to support the health workforce in marginalised communities. Prioritise ethical recruitment, retention, and cost-effective health expenditure, including transparency on funds expenditure and accountability on funds misuse. · Invest in innovative funding for health workforce curricula, leadership development, and communication skills training for health workers. Private sector · Regulate workloads and support health workers by upgrading infrastructure and creating conducive, women, children and adolescent-centered environments through legislative action. Partner with non-profit institutions for financial aid, training, and technology to enhance recruitment, retention, and development. • Develop evidence-based global and country-specific guidance to strengthen HRH. **United Nations** · Promote bilateral and multilateral partnerships among Member States, monitor their progress agencies and report on promising practices on health workforce strengthening. Engage global health worker representatives to address workforce issues Health care Provide evidence and learnings, and advocate for clear roles and skills among health providers, professional promoting interprofessional collaboration and referrals, while avoiding role conflation. associations · Gather and amplify youth health workers' voices and promote leadership development with diverse representation. · Strengthen health professional associations as experts to enhance training, education, mentor- ship, research, and normative guideline formulation. · Advocate for recruitment, training and development opportunities for health workers in rural • Advocate for better working conditions and care models via global campaigns for HRH. Civil society organizations (CSOs) • Support accountability for health worker needs and rights and resource mobilisation, especially in communities. · Secure government funding for staff and operations in civil society organisation-run rural health facilities, including opportunities for training, upskilling and access to local job market. · Promote government and healthcare professional accountability to communities using evidence-based dashboards, community scorecards, and document learnings. • Invest in quality pre-service and continuous education for health workers. Academic, research · Undertake research for detailed workforce data on recruitment and retention factors. and training Update curricula and adopt innovative, evidence-based training for the health workforce, institutes tailored to evolving diseases and their socio-economic and environmental context. · Conduct medical education research to support workforce growth, skill mixes, inter-professional collaboration, and sector-wide approaches. Adolescents and • Implement initiatives to destigmatise gendered professions for youth, promoting inclusivity. • Create platforms and advocate for young health workers in decision-making. youth • Establish tailored mentorship programs for youth career growth. · Highlight challenges faced by the global health workforce, incorporating professional views. Media · Use media platforms and other tactics for advocacy to address health workers' needs. · Partner with professional organisations to campaign for recruiting and retaining a youthful workforce.

















Annex 1

Approach to development

This PMNCH advocacy brief is part of a series. Each advocacy brief is developed by PMNCH partners and experts in the field. The development of the brief was informed by the latest evidence and input from partners across PMNCH constituencies. Relevant WHO departments were consulted and inputted on the content of the brief. PMNCH finalised the brief based on feedback from key partners and disseminates with co-branding from these partners.

Each brief follows an agreed upon format, as approved by the PMNCH leadership and contains the following sections: Background; Why is urgent action needed?; Country case studies; How do we address the issues at hand?

For this brief, Etienne Langlois (PMNCH), Maria El Bizri (PMNCH), and Ilze Kalnina (PMNCH) drafted the outline of the brief based on a scoping of existing evidence on the topic.

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The development of this brief was managed by Maria El Bizri (PMNCH), Amy Reid (PMNCH) and Etienne Langlois (PMNCH).

COI:

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References

- 1. Health workforce Geneva: World Health Organization; [Available from: https://www.who.int/health-topics/health-workforce#tab=tab_1].
- Zarska A, Avgar AC, Sterling MR. Relationship Between Working Conditions, Worker Outcomes, and Patient Care: A Theoretical Model for Frontline Health Care Workers. Am J Med Qual. 2021;36(6):429-40. [https://pmc.ncbi.nlm.nih.gov/articles/PMC10570923/]
- 3. Preventing violence against health workers [Internet]. Geneva: World Health Organization; 2024 [https://www.who.int/activities/preventing-violence-against-health-workers]
- 4. Health and care workforce. Geneva: World Health Organization; 2024 [Available from: https://apps.who.int/gb/ebwha/pdf_files/EB156/B156_15-en.pdf]
- Quality in primary health care. Geneva: World Health Organization; 2018. [Available from: https://www.who.int/docs/default-source/primary-health-care-conference/quality.pdf]
- Political Declaration of the High-level Meeting on Universal Health Coverage "Universal Health coverage: expanding our ambition for health and well-being in a post-COVID world". United Nations General Assembly 78th session; New York: United Nations; 2023. [Available from: https://www.un.org/pga/77/wp-content/uploads/sites/105/2023/09/UHC-Final-Text.pdf]
- 7. Wirajing, M.A.K., Hchofoung, T.N., & Etape, F.M. Revisiting the human capital–economic growth nexus in Africa. SN Business & Economics. 2023;3(7):115. [Available from: https://pubmed.ncbi.nlm.nih.gov/37323762/]
- 8. Transforming women's, children's, and adolescents' health and wellbeing through primary health care. The Lancet. 2023;402(10413):1606-8 [Available from: https://pubmed.ncbi.nlm.nih.gov/37722398/]
- 9. Gupta N, Maliqi B, França A, Nyonator F, Pate MA, Sanders D, et al. Human resources for maternal, newborn and child health: from measurement and planning to performance for improved health outcomes. Human Resources for Health. 2011;9(1):16. [Available from: https://human-resources-health.biomedcentral.com/articles/10.1186/1478-4491-9-16]
- 10. Working for health and growth: Investing in the health workforce. High-level Commission on Health Employment and Economic Growth. Geneva: World Health Organization; 2016 [Available from: https://www.who.int/publications/i/item/9789241511308]
- 11. The gender pay gap in the health and care sector: a global analysis in the time of COVID-19. Geneva: World Health Organization and International Labour Organization; 2022. [Available from: https://www.ilo.org/publications/gender-pay-gap-health-and-care-sector-global-analysis-time-covid-19-0]
- 12. Kuruvilla S, Schweitzer J, Bishai D, Chowdhury S, Caramani D, Frost L, et al. Success factors for reducing maternal and child mortality. Bull World Health Organ. 2014;92(7):533-44b. [Available from: https://pubmed.ncbi.nlm.nih.gov/25110379/]
- 13. Investing in health workers to save maternal and newborn lives, briefing note. UNICEF: 2020. [Available from: https://www.unicef.org/media/71711/file/Investing%20in%20Health%20Workers%20to%20Save%20Lives%202020.pdf]
- 14. Health employment and economic growth: an evidence base. Geneva: World Health Organization; 2017. [Available from: https://iris.who.int/handle/10665/326411]
- 15. The Global Health Observatory [Internet]. Geneva: World Health Organization; 2024 [Available from: https://www.who.int/data/gho/data/indicators/indica-tor-details/GHO/medical-doctors-not-further-defined-(number)].
- 16. The State of the World's Midwifery 2021. New York: United Nations Population Fund; 2021. [Available from: https://www.unfpa.org/sowmy]
- 17. Improving employment and working conditions in health services. Geneva: International Labour Office; 2017.
- 18. WHO guidelines on health workforce development, attraction, recruitment and retention in rural and remote areas. Geneva; World Health Organization: 2021. [Available from: https://www.who.int/publications/i/item/9789240024229]
- 19. More than half of the global rural population excluded from health care [Geneva: International Labour Organization; 2015 [Available from: https://www.ilo.org/resource/news/more-half-global-rural-population-excluded-health-care].
- 20. Homer CSE, Castro Lopes S, Nove A, Michel-Schuldt M, McConville F, Moyo NT, et al. Barriers to and strategies for addressing the availability, accessibility, acceptability and quality of the sexual, reproductive, maternal, newborn and adolescent health workforce: addressing the post-2015 agenda. BMC Pregnancy Childbirth. 2018;18(1):55.[Available from: https://pubmed.ncbi.nlm.nih.gov/29463210/]
- 21. Nigeria—Women for Health (W4H): DAI; [Available from: https://www.dai.com/our-work/projects/nigeria-women-for-health-w4h].
- 22. Busari JO, Moll FM, Duits AJ. Understanding the impact of interprofessional collaboration on the quality of care: a case report from a small-scale resource limited health care environment. J Multidiscip Healthc. 2017;10:227-34. [Available from: https://pubmed.ncbi.nlm.nih.gov/28652761/]
- 23. Yamuragiye A, Wylie L, Kinsella EA, Donelle L. A scoping review of interprofessional collaboration in hospital-based obstetric care with a particular focus on Africa. Journal of Interprofessional Education & Practice. 2021;24:100456. [Available from: https://www.sciencedirect.com/science/article/abs/pii/S2405452621000434?via%3Dihub]
- 24. Lassi ZS, Kumar R, Bhutta ZA. Community-Based Care to Improve Maternal, Newborn, and Child Health. In: Black RE, Laxminarayan R, Temmerman M, Walker N, editors. Reproductive, Maternal, Newborn, and Child Health: Disease Control Priorities, Third Edition (Volume 2). Washington (DC): The International Bank for Reconstruction and Development / The World Bank © 2016 International Bank for Reconstruction and Development / The World Bank.; 2016. [Available from: https://www.ncbi.nlm.nih.gov/books/NBK361898/]
- 25. La Rocca A, Hoholm T. Coordination between primary and secondary care: the role of electronic messages and economic incentives. BMC Health Services Research. 2017;17(1):149.[Available from: https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-017-2096-4]
- How did Senegal Implement? [Website]. Exemplars in Global Health; [Available from: https://www.exemplars.health/topics/neonatal-and-maternal-mortality/senegal].
- 27. Vieira Machado C, Araripe Ferreira C, de Souza Mendes Gomes MA. Promoting gender equity in the scientific and health workforce is essential to improve women's health. Nature Medicine. 2024;30(4):937-9. [Available from: https://pubmed.ncbi.nlm.nih.gov/38519768/]
- 28. Value gender and equity in the global health workforce [Website]. Geneva: World Health Organization; [Available from: https://www.who.int/activities/value-gender-and-equity-in-the-global-health-workforce].
- Delivered by women, led by men: A gender and equity analysis of the global health and social workforce. Geneva: World Health Organization; 2019 (Human Resources for Health Observer Series No. 24). Licence: CC BY-NC-SA 3.0 IGO.30. [Available from: https://cdn.who.int/media/docs/default-source/health-workforce/delivered-by-women-led-by-men.pdf?sfvrsn=94be9959_2]
- Maternal Mortality [Internet]. Geneva: World Health Organization; 2024 [Available from: https://www.who.int/news-room/fact-sheets/detail/maternal-mortality].
- Global strategy on human resources for health: Workforce 2030. Geneva: World Health Organization; 2020. [Available from: https://www.who.int/publications/i/item/9789241511131] Licence: CC BY-NC-SA 3.0 IGO
- 32. Stenberg K, Hanssen O, Edejer TT-T, Bertram M, Brindley C, Meshreky A, et al. Financing transformative health systems towards achievement of the health Sustainable Development Goals: a model for projected resource needs in 67 low-income and middle-income countries. The Lancet Global Health. 2017;5(9):e875-e87.[Available from: https://pubmed.ncbi.nlm.nih.gov/28728918/]
- 33. Health and care workforce Global strategy on human resources for health: workforce 2030, Report by the Director-General. EB156/15. Geneva, World Health Organization; 2024 [Available from: https://apps.who.int/gb/ebwha/pdf files/EB156/B156_15-en.pdf]
- 34. Micah AE, Bhangdia K, Cogswell IE, Lasher D, Lidral-Porter B, Maddison ER, et al. Global investments in pandemic preparedness and COVID-19: development assistance and domestic spending on health between 1990 and 2026. The Lancet Global Health. 2023;11(3):e385-e413 [https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(23)00007-4/fulltext]
- 35. OECD (2025), "Cuts in official development assistance: OECD projections for 2025 and the near term", OECD Policy Briefs, OECD Publishing, Paris, [Available from: https://doi.org/10.1787/8c530629-en.]
- 36. Greater Than the Sum of its Parts: Blended Finance Roadmap for Global Health. Washington, DC: USAID; 2019 [Available from: https://www.convergence.finance-roadmap-for-global-health/view]
- 37. UNFPA celebrates midwives for their roles in saving lives [Internet]. Sierra Leone: United Nations Population Fund; 2023 [Available from: https://sierra leone.unfpa.org/en/news/unfpa-celebrates-midwives-their-roles-saving-lives]

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