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INVESTING IN HEALTH WORKERS TO SAVE MATERNAL AND NEWBORN LIVES

Briefing Note

Cover: Amilia Mathew holds the newborn baby of one of the mothers whom delivered at the local health clinic Nana As'mau, Nigeria, where she works as a health worker. The baby's mother, Halima Mohammed, is 19 years old and has just delivered her first baby. She says: "I am happy I could deliver like other women. I decided to give birth in a health facility because they take care of mother and child here. There are women who I know have had problems. My uncle's daughter bled and died; she bled to death when she did not give birth in the health facility. I want my baby to become a doctor."

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1. INTRODUCTION

The problem: Newborn and maternal mortality and the need for quality care

The birth of a baby should be a moment of joy, but for many families around the world, this is not the case especially during the challenging times that lay ahead as the world responds to the COVID-19 pandemic. Without the right care, becoming a mother can be a stressful and, in the worst cases, tragic, event even before COVID-19 was declared a global pandemic. An estimated 2.8 million pregnant women and newborns die every year, or 1 every 11 seconds, mostly from preventable causes. Newborn and child mortality modelling assuming reduced coverage and increase in wasting indicates that these numbers could significantly increase due to the indirect impacts of COVID-19 - the diversion of resources for essential health care and the decreased accessibility to health professionals, lifesaving vaccines and medicines, and disease prevention and surveillance as a result of a country's response to COVID-19 containment.[1] The majority of maternal and newborn deaths occur during pregnancy, childbirth or the immediate postpartum period. Globally, 2.5 million babies die each year before turning 1 month old. More than 80 per cent of newborn deaths are the result of premature birth, complications during labour and delivery, and infections. More than 2 million stillbirths occur additionally each year.[2] Each of these deaths is a tragedy, especially because most are preventable. With the complexities posed by the challenging times ahead, the urgency to tackle preventable newborn deaths will be evermore prescient.

While much has been done to reduce newborn and maternal mortality, progress is not occurring fast enough. Between 1990 and 2018, the global newborn mortality rate declined 52 per cent.[3] The number of women and adolescents who die each year due to complications of pregnancy has decreased 38 per cent, from 451,000 in 2000 to 295,000 in 2017.[4] Yet progress across regions is undermined by the poor quality of care and high levels of inequity which is at risk of being exacerbated further as countries respond to the pandemic. Almost all maternal and newborn deaths occur in low-resource settings. Sub-Saharan Africa and South Asia account for 80 per cent of all maternal deaths.[5] A child born in sub-Saharan Africa is 10 times more likely to die in the first month than a child born in a high-income country; the region had the highest newborn mortality rate at 28 deaths per 1,000 live births in 2018.[6]

A country's income level explains only part of the story. Political will to invest in strong health systems that prioritize mothers and newborns and reach the poorest and most marginalized can make a significant difference, even when resources are constrained. Millions of lives could be saved every year if mothers and babies had access to timely, affordable, quality health care during these critical periods.

UNICEF appeals urgently to governments, foundations, businesses, health-care providers, communities and individuals to accelerate efforts to fulfil the promise to universal health coverage and keeping every child alive, especially as the response to COVID-19 risks the diverting of resources to maintain essential health. The global focus aims to strengthen and safeguard commitments to provide every mother and every baby affordable, quality care as a key consideration in how countries respond even in these challenging times.

Saving lives is never simple, and no single Government or institution, acting alone, will meet the challenge of ending preventable newborn and maternal deaths especially in the COVID-19 pandemic. Before and after the pandemic, providing affordable and accessible quality care for every mother and baby, starting with the most vulnerable, will require investment in four key areas:

- Place: Guaranteeing clean, functional health facilities equipped with water, soap and electricity within the reach of every mother and baby;
- People: Recruiting, training, retaining and managing sufficient numbers of doctors, nurses and midwives with the competencies and skills needed to save maternal and newborn lives;
- Products: Making life-saving drugs and equipment available for every mother and baby;
- Power: Empowering adolescent girls, mothers and families to demand and receive quality care.

The focus of this brief is on **people**. Ensuring adequate numbers of doctors, nurses, midwives and other health workers in the communities where they are needed with the competencies and skills required to save maternal and newborn lives is an urgent priority for every Government. It will drive forward progress towards a world with universal health coverage, where no mother or newborn dies from a preventable cause.

> ***Quality of care*** *is defined as the extent to which health-care services improve desired health outcomes. To achieve quality care and improve outcomes, doctors, nurses and midwives must have the training, resources and incentives to provide timely, effective and respectful treatment for every mother and every child. To drive progress on quality of care, reduce preventable maternal and newborn illness and death, and improve every mother's experience of care, the World Health Organization, UNFPA and UNICEF in 2017 launched the Quality of Care Network, dedicated to improving the quality of care for maternal, newborn and child health.*

2. THE SOLUTION: HEALTH WORKERS

As countries expand and strengthen their primary health-care systems towards achieving universal health coverage, both access to care and quality of care are critical for ending preventable maternal and newborn deaths by 2030.[7] Health-care workers have a crucial role to play in the provision of quality care to prevent maternal and newborn mortality and stillbirths. When complications arise during labour and delivery or when a baby is born small or sick, a trained health worker can mean the difference between life and death for mothers and babies. Building and maintaining a sizeable force of health workers with the skills to care for mothers and newborns can drive significant gains in maternal and newborn health. Health workers, including physicians, midwives, nurses and community health workers, are the safe pair of hands that deliver maternal and newborn care. A skilled health provider not only ensures women and newborns survive, but provides sexual and reproductive health information and counselling on proper nutrition, supports early and exclusive breastfeeding, and provides postnatal care and vaccination. Ring-fencing or increasing investments in health workers will be just as critical to how countries respond to COVID-19 as it is to safeguarding access to essential primary and quality health care for every mother and child.

Midwives and nurses play a particularly critical role in the delivery of primary health-care services related to pregnancy, labour and postnatal care for women and newborns around the world. In many countries, nurses and midwives also provide most of the care for small and sick newborns.[8] Midwives are uniquely capable of providing essential services to women and newborns in humanitarian, fragile and conflict-affected areas and crises like COVID-19 because they work across the continuum of care, from hospitals to communities.[9] They are often respected members of the community and provide advice and evidence-based information on a range of health issues, including care of newborns and young children.[10]

The need to professionalize and scale up maternity and newborn care is urgent. If a sufficient number of properly trained and well-supported nurses and midwives were available, 83 per cent of maternal deaths, stillbirths and neonatal deaths could be prevented.[11] Good quality midwifery care improves multiple other health outcomes, such as increased breastfeeding initiation and duration, and reductions in caesarean sections, maternal infections, postpartum haemorrhage and preterm births.[12] Prior to the pandemic, investing in an educated and well-trained midwifery workforce had the potential to yield a 1,600 per cent (16-fold) return on investment resulting from improved maternal and newborn health. Indeed, investing in the education of midwives is a 'best buy' in primary health care and will be critical to any country's response to COVID-19, and safeguarding the lives of newborns, women and children.[13]

Primary health care *provides a foundation for health systems designed to achieve health for all. It includes a focus on three pillars:*

- *Integrated individual and public health services, of good quality, delivered close to where people live and work;*
- *Empowerment of people, and engagement of communities, including young people, in designing and overseeing these health services, ensuring accountability;*
- *Multisectoral action to ensure that all sectors – not the health sector alone – contribute to promoting the health of individuals and populations.*

SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Agenda recognizes universal health coverage as key to achieving the other Sustainable Development Goal (SDG) health targets, including reducing maternal mortality (SDG 3, target 3.1) and ending preventable newborn deaths (target 3.2). SDG 3, target 3c aims to "substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries".[14] While countries have made progress in increasing health personnel, those with the highest levels of maternal and newborn mortality still fall below the minimum standard. There is an urgent need to increase political commitment and mobilize resources to increase the health workforce in countries that are below the minimum standard as part of a broader effort to strengthen health systems.[15]

3. CHALLENGES: QUANTITY AND QUALITY OF HEALTH WORKERS

A. Availability and accessibility of health workers

Countries around the world are facing severe health workforce shortages. Despite current trends projecting the global supply of health workers to grow, the need remains for an estimated 18 million more health workers by 2030 to reach the SDG targets on universal health coverage.[16] Health worker shortages, particularly of nurses and midwives, are most widespread in low- and middle-income countries.[17] The largest global shortages of health workers in 2013 were in Southeast Asia (6.9 million) and Africa (4.2 million).[18] World Health Organization (WHO) standards call for a minimum of 44.5 doctors, nurses or midwives for every 10,000 people.[19] The world's richest countries have 116 skilled health workers per 10,000 people, almost three times the WHO threshold.[20] By contrast, in sub-Saharan Africa, there are 12 skilled health workers per 10,000 people, far below the recommended minimum. Taking its projected population growth into account, Africa as a whole will need to quadruple its health workforce over the next decade to reach the WHO standard by 2030.[21] The COVID-19 pandemic has magnified the stark gaps in numbers of quality trained health care workers – and the urgency to prioritize prevention of newborn deaths is evermore prescient.

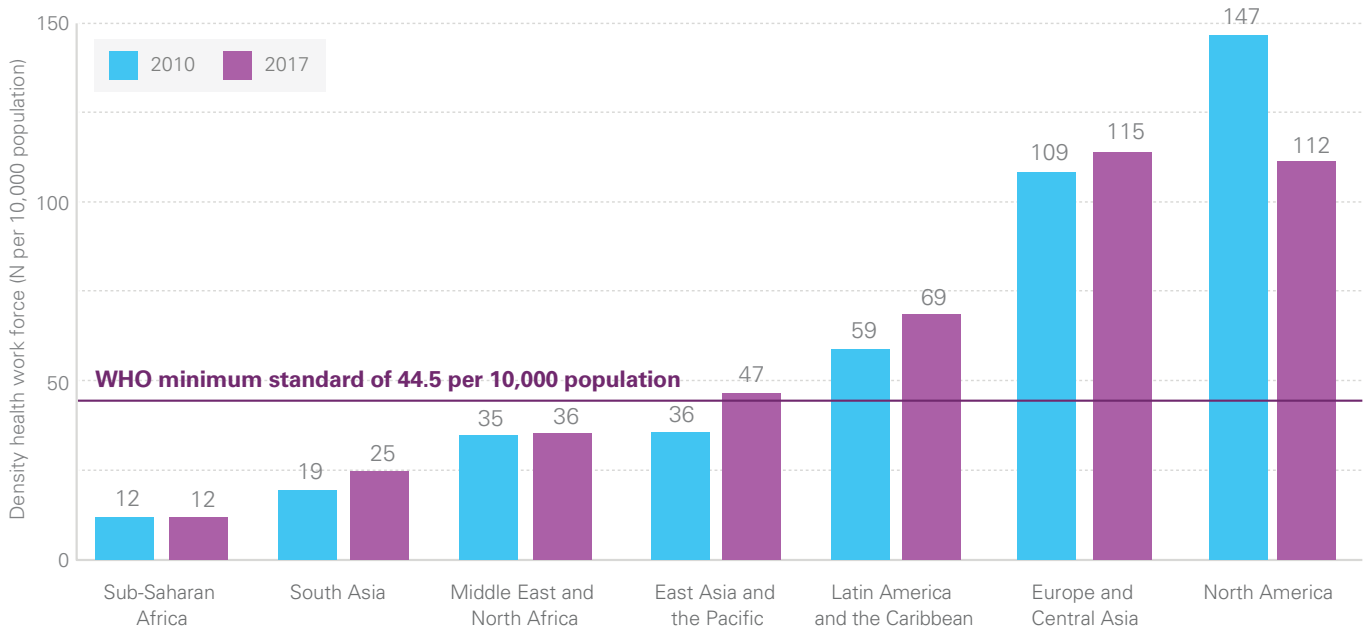
In Africa, the number of annual births is expected to increase by 14 per cent between 2019 and 2030, making the demand for health workers even greater. Barring any drastic changes, by the middle of the twenty-first century, approximately 42 per cent of all births are expected to occur in Africa. Based on the projected number of births and current coverage levels of skilled health workers in Africa, approximately 217 million births will not be attended by skilled health providers between 2019 and 2030 if current levels of intervention coverage persist. Almost all these non-attended births (97 per cent) will occur in sub-Saharan Africa. To meet the needs of pregnant women and newborns, African countries must invest in increasing the number of health workers trained to provide pregnancy, labour and postnatal care.[22]

The uneven distribution of health workers leaves the majority of low- and lower-middle-income countries with significant shortages.[23] The international migration of health workers, especially doctors and nurses, seeking new careers in other countries exacerbates the workforce shortage. The reasons health workers leave their country of origin include to obtain better salaries, training opportunities and more desirable working conditions in high- and upper-middle-income countries.[24] For many countries, the 'brain drain' of their trained health professionals can be costly, especially when the education system in those countries is unable to replace the health workers who have left.[25] The capacity to educate new health workers and retain them is therefore critical, particularly in low- and middle-income countries.

The impact of the scarcity of health-care workers is also exacerbated by a maldistribution of the workforce within countries. Health workers are often concentrated in urban

In sub-Saharan Africa, the health workforce remains four times below the recommended WHO standard

FIGURE 9. Density of doctors, nurses and midwives per 10,000 population, by UNICEF region (2006-2010 and 2013-2017)



Source: Calculation based on the 2018 update, Global Health Workforce Statistics, World Health Organization, Geneva.

settings, leaving rural, remote and vulnerable communities without access to health services.[26] This fact will pose even greater consequences as countries move to restrict or limit movements of their populations, or cancel public transportation altogether, to contain COVID-19, risking access to essential health care for mothers and babies in remote areas. Addressing geographical disparities and barriers in the density of health workers and achieving equitable deployment of the health workforce require improvements in the planning and allocation of health personnel based on population level, types of facilities that exist, and level of core health needs that may be created by the secondary impacts of COVID-19.[27] The foundation for a strong health workforce requires effectively matching the supply and skills of health workers to the needs of the population.[28] The distribution of health workers directly impacts the health of women and children. Indeed, maternal and child health outcomes correlate to health worker density.[29]

B. Quality health workers

The mere availability of health workers is not enough. Health workers must not only be equitably distributed and accessible by communities especially in challenging times, they need to possess the required training, skills and competencies, and be motivated, protected and empowered to deliver quality care that is appropriate and acceptable to the sociocultural expectations of the population.[30] To retain and increase the number of health workers needed to meet the needs of women and newborns, and to ensure women seek care, providers need to be supported by the health system to provide quality care. Competent, motivated health workers are reliant on many factors. These include high-quality pre-service training (education), in-service training (continuing education), staffing levels, resources and work environment.

Pre-service training and recruitment of health workers

Building strong educational institutions is essential to prepare and recruit the number and quality of health workers required by the health system. According to a WHO analysis, the world's 1,600 medical schools, 6,000 nursing schools and 375 schools of public health are not producing sufficient numbers of graduates in the aggregate.[31] Addressing these shortfalls will require building new institutions, particularly public health schools, and ensuring diverse training opportunities.[32] Better access to education at lower cost is also necessary, facilitated by the expanded use of information technologies such as distance education, particularly for those in rural and underserved areas.[33]

> *Midwifery is defined as "skilled, knowledgeable and compassionate care for childbearing women, newborn infants and families across the continuum from pre-pregnancy, pregnancy, birth, postpartum and the early weeks of life".*[34]

The lack of investment in midwifery education and training in many low- and middle-income countries is particularly striking, and few countries educate providers to international standards.[35] The management of midwifery education requires that countries ensure training institutions are of adequate quality.[36] The development of competencies requires consistent, supervised, hands-on practice and an assessment of competencies to ensure that students are ready to practise in clinical settings. In many countries, inadequate investment in faculty education limits the quality of education provided.[37] Clinical practice requirements also vary widely across countries.[38] Inadequate infrastructure, such as poor-quality equipment at teaching institutions and the lack of classroom space, also leads to problems in recruiting and retaining sufficient teaching staff.[39] The number of faculty required to provide adequate instruction and supervision for students is estimated to be a ratio of 1 to 10. However, in many midwifery programmes, it is common for one faculty member to teach 150 students.[40]

Ensuring the quality of health education also involves institutional accreditation and professional regulation, such as licencing, certification or registration. Governmental oversight is necessary in setting standards, protecting patient safety and ensuring quality through the provision of information, financial incentives and regulatory enforcement.[41] For example, a lack of investment in certified midwifery registration in certain countries renders regulatory bodies unable to enforce the licences that ensure quality in training and in practice.[42] This leads to a lack of consistency across countries with respect to services, roles and responsibilities and length of education for midwives.[43]

The recruitment of health personnel requires placing workers in sufficient quantity at the appropriate professional and technical levels.[44] Human resources for health policies need to address the effective deployment of health workers at the right place and at the right time.[45] Data show that in many countries, newly graduated health workers face delays, often longer than one year, in joining the workforce, which can lead to a deterioration of their clinical skills.[46] Recruiting health workers before they graduate, decentralizing responsibility for recruitment to subnational authorities and ensuring better funding to enforce recruitment policies are practical solutions.[47] Additionally, recruiting from the local area to achieve equitable access to services may require decentralizing midwifery schools or providing satellite sites near communities.[48]

Countries that have implemented high-quality midwifery education have transformed outcomes for women and newborns. Countries such as Burkina Faso, Cambodia, Indonesia and Morocco that have developed pre-service education for midwives as part of a strategy to improve

the health of women and newborns have seen substantial, sustained reductions in maternal and newborn mortality.[49] There is also growing evidence of the benefits of expanding rural- and community-based health education and training. For example, a school in the Philippines worked with local partners to educate students from marginalized communities to train as midwives, nurses and doctors through a community-based curriculum. The young people who participated in this programme were more likely to practise in underserved areas, thus increasing the density of health workers in these areas.[50]

In-service training

Health workers need the necessary knowledge and skills, protection, motivation and support to enable them to provide quality maternal and newborn care. Building and maintaining the competencies of existing health-care providers are key. Cooperation between hospitals and universities is needed, as is fostering a learning environment within health-care facilities.[51] To build capacity and maintain quality and motivation among health workers, supervision needs to be supportive and to allow open discussion of clinical practices. Peer support can also help improve the quality of care.[52] Opportunities for continuing education, training and professional development are also motivating factors for health workers and contribute to improvements in service delivery and efficiency.[53] This is especially true of health workers in rural or remote areas who are often isolated from professional colleagues and support. Supervision and management, including feedback on job performance and technical support, help to provide on-the-job training, improve the quality of care and retain health workers.[54]

In many countries multiple health-care personnel provide maternal and newborn care, including doctors, midwives and nurses. To ensure quality of care, their varied competencies should be brought together in an interprofessional team.[55] Interprofessional learning and collaboration also help to overcome institutional hierarchies among health workers.[56] Health workers must be skilled in providing preventive and supportive care and identifying and responding to complications. For midwives, this includes knowledge, understanding and skills in organizing care and providing continuity of care across facilities and communities. Another important aspect includes the ability to combine clinical knowledge with interpersonal and cultural competence.[57]

Compensation

Adequate compensation for health workers is crucial. The method in which workers are paid, for example salaried or fee-for-service, has effects on productivity and quality of

Tanzania, 2019

Every month, 300 babies are delivered in the Mbeya Regional Referral Hospital, including over 40 born premature.

care that require careful monitoring.[58] Financial incentives, such as salary supplements, benefits and allowances, are a motivating factor for health workers, particularly in countries where government salaries are inadequate.[59] In many low- and middle-income countries, for example, midwives have reported receiving wages that fail to meet basic living costs with salaries paid infrequently or late, or sometimes not at all.[60] The salaries of midwives are among the lowest of health personnel in low-and lower-middle-income countries.[61] Female health workers generally tend to be concentrated in lower status, lower paid and, often, unpaid roles.[62]

Working environment

The working environment has a strong influence on job satisfaction among health workers.[63] Decisions by health personnel to migrate are often related to poor working conditions.[64] Health workers require adequate facilities and conditions, including appropriate infrastructure, water, sanitation, lighting, drugs, equipment, supplies, communications and transportation. Safe working and living conditions also contribute to health worker satisfaction.

Inadequate staffing levels and an increasing workload among health workers is an issue in both urban and rural settings. Inadequate staffing and working excessive overtime have been found to compromise the safety of both patients and health workers.[65] The psychological impact of an overwhelming workload that may lead to compromising the care of patients is associated with significant low morale, fatigue and moral distress among health workers.[66]

GENDER CONSIDERATIONS

Women comprise more than 70 per cent of the global health workforce; a greater proportion of women are employed in this sector than in any other.[67] Globally, 24 million of the 28.5 million nurses and midwives are women, while men are more likely to be physicians and specialists.[68] Women are less likely to occupy leadership positions, leaving them underrepresented in senior, higher-paid roles. This leads to a gender pay gap – women health workers earn on average 28 per cent less than men.[69] Gender inequality affects the status of midwives, most of whom are women, and their recruitment, mobility, career development and remuneration. Gender discrimination and a devaluation of women in the health sector are illustrated by the lack of investment in training and in the professionalization of the practice of midwifery.[70] In addition, informal, home-based, unpaid, or otherwise 'off-the-record' health services comprise up to 77 per cent of all health-care interactions in some countries.[71] Globally, women's labour contributes $3 trillion to the health system, roughly half of which goes unpaid. Other barriers disproportionately affecting female health workers include violence and sexual harassment in the workplace, and discrimination in education and training, such as penalizing women who work part-time or take time off for family reasons. Education, labour, wage and social protection policies can help address gender inequalities in the health sector.[72] Investments in the health sector have immense potential to produce significant gains in women's economic empowerment, in addition to an estimated 9:1 return on investment overall.[73]

Nigeria, 2019

Amina Shallangwa, a UNICEF-supported midwife, holds a newborn baby at a UNICEF-supported health clinic in Muna Garage IDP camp, Maiduguri, Borno State, northeast Nigeria.

4. POLICY SOLUTIONS

Reducing maternal and newborn mortality and morbidity requires that women and babies have access to trained and equipped health workers close to where they live. Improving and in the case of the pandemic, safeguarding the quantity and quality of health workers with the appropriate skills working in the right places requires strong health workforce policies tailored to the national health system and a response to the pandemic that prioritizes keeping mothers and newborns alive. Many countries have such policies in place as part of a national health policy, but they have not been fully implemented due to the lack of financial support or political commitment.[74] All countries face difficulties in the education, deployment, retention and performance of their health workforce to varying degrees.[75] To ensure the needs of mother and newborns are met, health workforce polices must also address the provision of midwifery care and the care of small and sick newborns. As countries further develop and implement human resources for policies, they need to address financing, recruitment and management, education and training, and the enabling environment, equipping health workers to provide quality maternal and newborn care. These human resources for health policies need to operate within the context of well-functioning health facilities with the medicines and equipment necessary for maternal and newborn care.

Financing

Investment in a strong health workforce requires an increase in financial resources and more efficient use of these resources. In many countries, greater efforts to mobilize domestic resources are necessary and should be supported by appropriate macroeconomic policies at national and global levels.[76] Some countries will also require overseas development assistance for investments in human resources for health to meet the needs of the population.[77]

Relevant policy solutions include to:

- Establish the national case for investment in human resources for health as vital to realizing the SDGs and universal health coverage and use it as a basis for budget allocations;[78]
- Mobilize greater domestic spending for human resources for health:
    - Ensure dedicated budget allocations for health workers in national health budgets and accounts
    - Develop a costed human resource strategy for providing skilled attendants at birth and for retaining these workers
    - Mobilize resources from both traditional and innovative sources, which may include the general budget, progressive taxation, social health insurance, dedicated earmarked funds and innovative mechanisms of financing[79]
    - Increase investment in domestic health professional education,[80] and fund and prioritize quality midwifery education as part of national health and education plans;[81]
- Increase efforts to mobilize global and regional resources for midwifery education, including through innovative financing mechanisms;[82]
- Make certain that global health initiatives ensure that grants and loans include an assessment of health workforce implications, involving a targeted strategy and accountability mechanism on how programming contributes to capacity-building efforts for human resources for health;[83]
- Ensure that strategies to invest in the health workforce are guided by analyses of the health labour market, requiring reliable current data and capacity to address gaps in the evidence base to inform such investments;[84] the data should be used to plan newborn and maternal care at all levels within the health system.[85]

An increase in overseas development assistance is also necessary to provide support to national governments as they work to strengthen their health systems and address the immediate needs of mothers and newborns. Some countries have begun reducing funding for maternal and newborn health in recent years, right at a pivotal moment when investment can help keep the momentum in the global fight to end preventable deaths.[86] Funding, whether bilateral or multilateral, can be in line with donor government priorities related to child health, system strengthening, sexual and reproductive health and rights, gender equity and the achievement of the SDGs.

Recruitment and management

Effective governance and the strengthening of institutional capacities are required to implement a comprehensive health workforce agenda in countries, including increasing the quantity and quality of health workers.[87] Policies need to address various issues, including licencing and certification of health workers; accreditation of institutions; education (pre-service training); recruitment; supervision, compensation and incentives; in-service training; geographic imbalance and skill mix imbalance; human resources management; and leadership.[88] [89] [90]

Policy solutions include to:

- Strengthen human resources for health plans as part of long-term national health strategies, including quantifying health workforce needs, and human resources for health targets and indicators;[91]
- Optimize health worker motivation, retention, performance and equitable distribution by providing job security, a manageable workload, supportive supervision, continuing education and professional development opportunities;[92]
- Ensure that all countries have a human resources for health unit or department reporting to a senior level within the Ministry of Health. Such a unit should have the capacity, responsibility, financing and accountability for a standard set of core functions of human resources for health policy, planning and governance, data management and reporting. These functions include championing better working conditions, reward systems and career structures for health workers; setting policies on the regulation, service provision and education of health workers; leading health workforce planning and development; analysing workforce data and labour economics; tracking the international mobility of health workers; managing migratory flows; and monitoring and evaluating human resources for health interventions and trends.[93]

Education/training

Transformative strategies are needed to scale up health worker education, grounded in competency-based learning.[94] A coordinated approach is necessary to link human resources for health planning and education. Educational investment strategies should be responsive to the current and anticipated needs of the health system and population.[95]

Policy options include to:

- Adopt strategies to scale up health worker education through public- and private-sector investments; ensure education standards and funding for human resources for health are established and monitored in national policies;[96] ascertain that education strategies also focus investment in faculty and trainers, for which there is substantial evidence of a high social rate of return;[97]
- Educate and regulate midwives so they provide the full scope of midwifery skills and the competencies identified by the International Conference of Midwives;
- Ensure countries adopt WHO's seven-step action plan to strengthen the quality of midwifery education, which involves the following components: 1) strengthen leadership and policy; 2) gather data and evidence; 3) build public engagement and advocacy; 4) prepare educational institutions, practice settings and clinical mentors; 5) strengthen faculty, standards and curricula; 6) educate students; and 7) monitor, evaluate and adjust priorities.[98]

Enabling environment

Increasing the number of health workers to respond to the needs of the population and strengthening the quality of care for women and newborns must take place in the context of guaranteeing rights to all health workers, including a safe work environment and freedom from discrimination, coercion and violence.[99] Because women comprise the majority of the health workforce, the socio-economic opportunities that can be realized from health workforce investment depend upon the prioritization of gender equality and women's empowerment.[100] It is critical to address gender biases and societal barriers, such as violence and sexual harassment in the workplace, customs that require women to gain permission from a male family member to work outside the home or access training opportunities in another location, traditional social roles resulting in a greater share of family responsibilities and the lack of paid parental leave.[101]

Policy options include to:

- Set and enforce regulations and standards to provide safe working environments, working hours, minimum staffing levels and adequate pay;[102]
- Collect and make public a systematic review of gender disaggregated data on the health sector workforce, including data on the gender composition of various categories and grades of health workers, educational and other barriers to the recruitment of female health workers, and the proportion of men and women in senior positions to inform human resource for health policies;[103]
- Introduce legislation or update existing legislation and policies that enable midwives to safely and legally provide midwifery care;[104]
- Introduce legislation or update existing legislation and policies that ensure midwives and other female health workers do not experience gender-based discrimination in providing midwifery care.[105]

Universal health coverage *means that all people and communities can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.*[106]

5. CONCLUSION

Mothers and babies need to be cared for by a safe pair of hands. Access to quality care provided by a trained and equipped health worker is critical for ending preventable maternal and newborn deaths. As work continues against the increasing challenges and unmeasurable burdens to health systems and human resources to health caused by COVID-19, health worker shortages, inequitable distribution and access to care, education, training, recruitment and poor working conditions must be urgently addressed. This will require ringfencing investment in a skilled health workforce, particularly nurses and midwives, that ensures they can work in clean, functional health facilities with the proper equipment, vaccines, medicines and nutritional supplements needed to care for mothers and newborns. Action to ensure access to quality care must be an urgent priority for every Government, ensuring progress gained are maintained and continued towards a world with universal health coverage where no mother or newborn dies from a preventable cause.

As work continues towards achieving the SDGs, health worker shortages, inequitable distribution, education, training, recruitment and poor working conditions must be addressed. This will require additional investment in a skilled health workforce, particularly nurses and midwives, working in clean, functional health facilities with the proper equipment and medicines needed to care for mothers and newborns.

ENDNOTES

1 Roberton T, Carter ED, Chou VB, Stegmuller A, Jackson BD, Tam Y, Sawadogo-Lewis T, Walker N. Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. The Lancet Global Health. Published: May 12, 2020. DOI: <https://doi.org/10.1016/S2214-109X(20)30229-1>

2 United Nations Inter-agency Group for Child Mortality Estimation (UN IGME), *Levels and Trends in Child Mortality: Report 2019*, UNICEF, WHO, World Bank Group and United Nations, New York, 2019.

3 United Nations Inter-agency Group for Child Mortality Estimation (UN IGME), *Levels and Trends in Child Mortality: Report 2019*, UNICEF, WHO, World Bank Group and United Nations, New York, 2019.

4 *World Health Organization, UNICEF, United Nations Population Fund and The World Bank, Trends in Maternal Mortality: 2000 to 2017, WHO, Geneva 2019.*

5 Ibid.

6 *Levels and Trends in Child Mortality: Report 2019.*

7 World Health Organization (WHO) and United Nations Children's Fund (UNICEF), *A Vision for Primary Health Care in the 21st Century: Towards universal health coverage and the Sustainable Development Goals*, Geneva, 2018.

8 World Health Organization (WHO) and United Nations Children's Fund (UNICEF), *Survive and Thrive: Transforming care for every small and sick newborn, Key findings*, Geneva, 2018.

9 United Nations Population Fund (UNFPA), United Nations Children's Fund (UNICEF), World Health Organization (WHO) and International Confederation of Midwives, *Framework for Action: Strengthening Quality Midwifery Education for Universal Health Coverage 2030*, Geneva, 2019.

10 United Nations Population Fund (UNFPA) and International Confederation of Midwives, *Investing in Midwives and Others with Midwifery Skills to Save the Lives of Mothers and Newborns and Improve Their Health*, 2006.

11 Homer, Caroline S E, et al. 'The projected effect of scaling up midwifery', *The Lancet*, vol. 384, no. 9948, 20 September 2014, pp. 1146-57.

12 *Framework for Action: Strengthening Quality Midwifery Education for Universal Health Coverage 2030.*

13 United Nations Population Fund (UNFPA), International Confederation of Midwives and World Health Organization (WHO), The State of the World's Midwifery 2014, New York, 2014.

14 Sustainable Development Goal 3, <https://sustainabledevelopment.un.org/sdgs>, accessed 7 October 2019.

15 United Nations Children's Fund (UNICEF), *Healthy Mothers, Healthy Babies: Taking stock of maternal health*, New York, 2019.

16 World Health Organization (WHO), *Health Workforce Requirements for Universal Health Coverage and the Sustainable Development Goals*, Background paper No. 1 to the Global Strategy on Human Resources for Health, Geneva, 2016.

17 World Health Organization (WHO), *Health Employment and Economic Growth: An Evidence Base*, Geneva, 2017.

18 *Health Workforce Requirements for Universal Health Coverage and the Sustainable Development Goals.*

19 Ibid.

20 *Healthy Mothers, Healthy Babies: Taking stock of maternal health.*

21 Ibid.

22 Ibid.

23 *Health Employment and Economic Growth: An Evidence Base.*

24 Ibid; *Working for Health and Growth: Investing in the health workforce.*

25 World Health Organization (WHO), *Migration Policy Institute, Social Policy Institute, University of the State of Rio de Janeiro, Migration of Health Workers: WHO code of practice and the global economic crisis*, Geneva, 2014.

26 World Health Organization (WHO), *Global strategy on human resources for health: Workforce 2030*, Geneva, 2016.

27 *The State of the World's Midwifery 2014.*

28 *Global strategy on human resources for health: Workforce 2030.*

29 Henderson, Lyn N., and Jim Tulloch, 'Incentives for retaining and motivating health workers in Pacific and Asian countries', *Human Resources for Health*, vol. 6, no. 18, 15 September 2008.

30 *Global strategy on human resources for health: Workforce 2030.*

31 World Health Organization (WHO), 'Overview of World health report 2006: Working together for health', <www.who.int/whr/2006/overview/en/index1.html>, accessed 7 October 2019.

32 Ibid.

33 Ibid.; *Working for Health and Growth: Investing in the health workforce.*

34 Renfrew, Mary, et al., 'The Lancet Series on Midwifery Executive Summary', *The Lancet*, June 2014, <www.thelancet.com/pb/assets/raw/Lancet/stories/series/midwifery/midwifery_exec_summ.pdf>, accessed 19 November 2019.

35 *Framework for Action: Strengthening Quality Midwifery Education for Universal Health Coverage 2030.*

36 *The State of the World's Midwifery 2014.*

37 Ibid.

38 Ibid.

39 Ibid.

40 Lori, Jody, et al., 'Strengthening Midwifery to End Preventable Maternal, Child and Newborn Health', *Journal of Midwifery and Women's Health*, vol. 60, no. 4, July 2015, pp. 343-347.

41 'Overview of World health report 2006: Working together for health'.

42 Filby, Alex, et al., 'What Prevents Quality Midwifery Care? A Systematic Mapping of Barriers in Low and Middle Income Countries from the Provider Perspective', *PLoS ONE*, vol. 1, no. 5, 2 May 2016.

43 *The State of the World's Midwifery 2014.*

44 'Overview of World health report 2006: Working together for health'.

45 Filby, et al., 'What Prevents Quality Midwifery Care?'.

46 *The State of the World's Midwifery 2014.*

47 Ibid.

48 *Investing in Midwives and Others with Midwifery Skills to Save the Lives of Mothers and Newborns and Improve Their Health.*

49 Van Lerberghe, W., et al., 'Country experience with strengthening of health systems and deployment of midwives in countries with high maternal mortality', *The Lancet*, vol. 384, no. 9949, 27 September 2014, pp. 1215-1225.

50 *Working for Health and Growth: Investing in the health workforce.*

51 World Health Organization (WHO) and United Nations Children's Fund (UNICEF), *Survive and Thrive: Transforming care for every small and sick newborn*, Geneva, 2019.

52 *The State of the World's Midwifery 2014.*

53 'Overview of World health report 2006: Working together for health'; World Health Organization (WHO), *Framing the health workforce agenda for the Sustainable Development Goals*, Geneva 2017.

54 'Overview of World health report 2006: Working together for health'.

55 ten Hoope-Bender, P., et al., 'Improvement of maternal and newborn health through midwifery', *The Lancet*, vol. 384, no. 9949, 27 June 2014, pp. 1226-35.

56 *Framework for Action: Strengthening Quality Midwifery Education for Universal Health Coverage 2030.*

57 Ibid.

58 'Overview of World health report 2006: Working together for health'.

59 Henderson and Tulloch, 'Incentives for retaining and motivating health workers in Pacific and Asian countries'.

60 Filby, et al., 'What Prevents Quality Midwifery Care?'.

61 *The State of the World's Midwifery 2014*.

62 World Health Organization (WHO), Global Health Workforce Network and Women in Global Health, *Delivered by Women, Led by Men: A Gender and Equity Analysis of the Global Health and Social Workforce*, Human Resources for Health Observer Series No. 24, Geneva, 2019.

63 Henderson and Tulloch, 'Incentives for retaining and motivating health workers in Pacific and Asian countries'.

64 Ibid.

65 Filby, et al., 'What Prevents Quality Midwifery Care?'.

66 Ibid.

67 World Health Organization (WHO), *Gender equity in the health workforce: Analysis of 104 countries*, Health Workforce Working paper 1, Geneva, 2019.

68 World Health Organization (WHO), 'Female health workers drive global health', 20 March 2019, <www.who.int/news-room/commentaries/detail/female-health-workers-drive-global-health>, accessed 7 October 2019.

69 Ibid.

70 United Nations Population Fund (UNFPA), *Towards MDG 5: Scaling up the Capacity of Midwives to Reduce Maternal Mortality and Morbidity*, Workshop Report, New York, 21–23 March 2006.

71 Frontline Health Workers Coalition, 'Investing in the Health Workforce: For Women's Economic Empowerment', <www.frontlinehealthworkers.org/sites/fhw/files/womens-economic-empowerment-fact-sheet.pdf>, accessed 7 October 2019.

72 *Working for Health and Growth: Investing in the health workforce*.

73 'Investing in the Health Workforce: For Women's Economic Empowerment'.

74 Ibid.

75 *Global strategy on human resources for health: Workforce 2030*.

76 Ibid.

77 Ibid.

78 Ibid.

79 Ibid.

80 Ibid.

81 *Framework for Action: Strengthening Quality Midwifery Education for Universal Health Coverage 2030*.

82 Ibid.

83 *Global strategy on human resources for health: Workforce 2030*.

84 *Working for Health and Growth: Investing in the health workforce*.

85 *Survive and Thrive: Transforming care for every small and sick newborn*.

86 Viz Hub, 'Flows of Global Health Financing', <https://vizhub.healthdata.org/fgh>, accessed 19 November 2019.

87 *Global strategy on human resources for health: Workforce 2030*.

88 'Investing in the Health Workforce: For Women's Economic Empowerment'.

89 *Survive and Thrive Transforming care for every small and sick newborn*.

90 *Global strategy on human resources for health: Workforce 2030*.

91 Ibid.

92 *Global strategy on human resources for health: Workforce 2030*.

93 Ibid.

94 Ibid.

95 Ibid.

96 Ibid.

97 Ibid.

98 *Working for Health and Growth: Investing in the health workforce*.

99 *Global strategy on human resources for health: Workforce 2030*.

100 *Working for Health and Growth: Investing in the health workforce*.

101 *Global strategy on human resources for health: Workforce 2030*.

102 *Working for Health and Growth: Investing in the health workforce*.

103 Standing, Hilary, 'Gender – A Missing Dimension in Human Resource Policy and Planning for Health Reforms', *Human Resources Development Journal*, vol. 4, no. 1, January 2000; 'Investing in the Health Workforce: For Women's Economic Empowerment'.

104 *Framework for Action: Strengthening Quality Midwifery Education for Universal Health Coverage 2030*.

105 Ibid.

106 World Health Organization (WHO), 'What is health financing for universal health coverage?', <www.who.int/health_financing/universal_coverage_definition/en/>, accessed 7 October 2019.

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