

Improve Maternal and Newborn Health and Nutrition

Facts, Solutions, Case Studies, and Calls to Action

OVERVIEW

Providing quality healthcare and nutritional support for all women and babies is vital for a healthy generation. In spite of substantial advances in maternal and newborn health over recent decades, roughly 300,000 women still die due to pregnancy-related complications every year.^{1,2} There is widespread evidence and agreement within the global community on what needs to be done to prevent these deaths and improve the health, nutrition, and wellbeing of women and babies.

Clinical interventions and health services need to be delivered across a continuum of care – before, during, and after pregnancy.³ There must also be an enhanced focus on the role that nutrition plays in saving lives and safeguarding the health of women, men, girls and boys – including newborns.⁴ Good nutrition is essential for physical growth, mental development, performance, productivity, health, and wellbeing across the entire life-span, making nutrition a sound investment for any country.⁵

The interventions discussed in this policy brief not only address the leading causes of maternal and newborn death and disabilities, but they also explore solutions and overall health and wellbeing, encompassing good nutrition and the prevention and treatment of maternal injuries.

SECTION 1: FRAMING THE ISSUE

Over the past 25 years, great strides have been made in maternal and newborn health – the number of maternal deaths has dropped by nearly half since 1990,⁶ and the number of newborn deaths fell 47% between 1990 and 2015.⁷ However, of the nearly 127 million women who give birth every year in developing regions, 28% (35 million women) do not deliver their babies in a healthcare facility and 37% (47 million women) do not receive the recommended minimum of four antenatal care visits, jeopardizing their health and the health of their newborns.^{8,9}

For every woman who dies of pregnancy- and childbirth-related complications, another 20 women experience a form of morbidity – such as an obstetric fistula or uterine prolapse – that carries long-term consequences, which can encumber health, wellbeing, and even social and economic status.¹⁰ Therefore, efforts to improve maternal health need to look beyond maternal death. While a decrease in maternal mortality is a useful indicator, simply surviving pregnancy and childbirth does not necessarily mean improved maternal health.¹¹ The burden of maternal morbidity can have severe impacts on the health and wellbeing of women throughout their life. Embracing a human rights framework for universal health requires the provision of high-quality care, not only during pregnancy and labor, but also before pregnancy and during the postpartum period.¹² To attain health for all, it is important to expand the focus on mortality to include morbidity.

Every year, an estimated 2.6 million stillbirths occur¹³ with more than 7000 deaths a day.¹⁴ Every day, some 830 women die from pregnancy- or childbirth-related complications, which equates to about one woman every two minutes.¹⁵ In some countries, a woman's lifetime risk of dying in pregnancy is as high as 1 in 17, while in high-income countries, on average, it is 1 in 3300.¹⁶

The major causes of maternal death include severe bleeding, infection, pre-eclampsia and eclampsia (hypertensive disorders during pregnancy), complications from delivery, and unsafe abortion. Combined, these causes account for roughly 73% of all maternal deaths.¹⁷ However, causes of maternal mortality and morbidity are becoming increasingly diverse. Taking into account the effect of non-communicable diseases, as well as environmental and demographic shifts – these diverse needs require responsive policy and care.¹⁸ Weak health systems also contribute to maternal mortality rates, particularly when facilities lack essential medical supplies and equipment, basic services such as reliable, accessible water and sanitation, and healthcare workers, including skilled birth attendants.^{19,20,21}

A number of issues further contribute to increased vulnerability to maternal death and disability:

- **Low-income, rural, and marginalized women have less access to quality care:** Due to limited access to comprehensive maternal healthcare, low-income, rural, and other marginalized women are most likely to experience pregnancy- and childbirth-related complications.²² Fifty-three million women worldwide, primarily from poor countries or at the lowest income levels in their countries, give birth each year without a skilled birth attendant present, which jeopardizes their health and the health of their newborns.²³ Studies show a clear link between low income and births in inadequate environments that lack the basic services for infection prevention, which is critical for a safe delivery. A World Health Organization (WHO) report looking at assessments from more than 66,000 healthcare facilities in low- and middle-income countries found that 38% did not have access to clean water.²⁴ This finding reinforces the need to ensure adequate support to women and their

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Improving maternal and newborn health and nutrition is linked to the achievement of multiple SDGs and targets, including:

SDG 1: End poverty in all its forms everywhere

- **1.1** By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day
- **1.2** By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

SDG 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

- **2.1** By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.
- **2.2** By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons

SDG 3: Ensure healthy lives and promote well-being for all at all ages

- **3.1** By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births



newborns, who are particularly susceptible to diseases associated with poor water, sanitation, and hygiene that sicken and kill millions each year. These needs can be especially acute in emergency, fragile, and conflict-affected contexts, where the specific hygiene needs of girls and women are often overlooked.²⁵

- **Young women and adolescents are at increased risk:** Early pregnancy and childbearing increases the risks of complications for adolescent girls and their newborns. Pregnancy- and childbirth-related complications is one of the leading causes of death for women aged 15-19 globally and results in 17,000 deaths per year.^{26,27} Babies born to girls and women younger than 20 have a 1.5 times higher risk of death compared to babies born to mothers in their 20s or 30s²⁸ – these newborns are also more likely to be pre-term and have low birthweight.^{29,30,31} Studies show that if all women in low-income countries had a secondary education, 26% fewer children would be stunted, or too short for their age, making the need for investments into girls' education more critical.³²

- **Nutritional status:** Boosting girls' and women's nutritional status is critical to improving maternal and newborn health. Malnutrition is both a cause and effect of gender inequality, making nutrition investments one of the soundest investments to make today. Undernutrition among pregnant women leads to increased risks of infection, anemia, lethargy and weakness, lower productivity, poor birth outcomes, maternal complications, and even death.^{33,34}

Poor nutrition is also a significant risk to women and their newborns. Anemia – or iron deficiency – affects about 500 million women of reproductive age (15-49), with as many as half of all pregnant women in low-income and middle-income countries diagnosed with the condition.³⁵ The odds of maternal death are doubled in mothers with anemia.³⁶ Poor maternal nutrition also increases risk of premature delivery, low birthweight, and birth defects.³⁷ Because of inadequate nutrition during pregnancy, in 2017, more than 50 million children were wasted – or had body mass indexes that were too low – and approximately 150 million children around the world were stunted, which hampers the possibility of children being able to grow into healthy, active, and productive members of their families, communities, and countries.³⁸

Overnutrition and obesity are also growing risks in most regions, for children and adults.³⁹ An estimated 6%, or 41 million, children under 5 around the world were overweight in 2016.⁴⁰ Undernutrition and overnutrition can result in obesity and Gestational Diabetes Mellitus (GDM), or the onset of diabetes during pregnancy, which is associated with higher incidences of maternal and newborn health complications.^{41,42} Maternal obesity is also associated with a higher risk of pre-eclampsia (hypertensive disorders during pregnancy),⁴³ the second leading cause of maternal death,⁴⁴ which can also lead to newborn and infant death.⁴⁵

- **Unsafe abortion:** One of the leading causes of maternal mortality, unsafe abortion results in at least 22,800 deaths annually.^{46,47,48} Unsafe abortions are more likely to occur where abortion is illegal.⁴⁹ In these contexts, women risk unsafe methods, such as obtaining an abortion from an unqualified provider, self-medicating to induce abortion, drinking toxic fluids, and self-injury.^{50,51} Women who survive these procedures often suffer serious – if not permanent – injuries.⁵²

- **HIV:** HIV is a significant factor in maternal deaths, particularly across the developing world. In 2015, of the roughly 4,700 AIDS-related maternal deaths worldwide, sub-Saharan Africa accounted for 85%, or 4,000 deaths.⁵³ When compared with HIV-negative women, HIV-positive women are eight times more likely to die during pregnancy, childbirth, or in the period immediately after childbirth.⁵⁴ Early infant diagnosis is crucial to reducing the persistently high AIDS-related mortalities among children. Without treatment, newborns with HIV progress rapidly to AIDS because their immune systems are underdeveloped.⁵⁵ Half of newborns with HIV die before reaching the age of two, and the highest number of deaths occur between six and eight weeks of life. The majority of these deaths are preventable by treating opportunistic infections with antibiotics or through antiretroviral therapy.⁵⁶

- **Humanitarian Emergencies and Displacement:** Girls and women make up at least 50% of any displaced or stateless population and face increased maternal health risks during emergencies and displacement.⁵⁷ During humanitarian emergencies, health workforce shortages, weak health systems, and deteriorating access to water and sanitation facilities are particularly acute. These challenges are often compounded by additional barriers to accessing quality reproductive and maternal health services, such as violence against healthcare workers,⁵⁸ collapsed infrastructure, and heightened mobility constraints.⁵⁹ Studies have found that countries with recent armed conflicts experience higher maternal mortality ratios than countries without recent armed conflicts.^{60,61}

When girls and women are displaced from their homes, risks to maternal health are also exacerbated. When forced to flee and resettle, women may be forced to give birth in temporary shelters, roads, or other places with hazardous conditions.⁶² In camp settings, the lack of qualified health workers who speak the same languages of displaced populations also makes providing quality maternal and newborn care challenging.⁶³ Even in urban settings, most refugees and internally displaced persons live in areas that lack adequate access to public services, including inadequate water and sanitation facilities and overcrowding. An absence of identification papers or unrecognized legal refugee status can also bar pregnant women from accessing publicly available maternal health services.⁶⁴



- **3.2** By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births
- **3.7** By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
- **3.8** Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
- **3.c** Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States

SDG 5: Achieve gender equality and empower all women and girls

- **5.1** End all forms of discrimination against all women and girls everywhere
- **5.2** Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation



Women are also more likely to be food insecure than men in every region of the world. For the first time in decades, more and more humanitarian settings and emergencies – caused by conflict and/or natural disasters and climate shocks – have led to an increase in the number of women, men, and their families who go hungry each day.⁶⁵

SECTION 2: SOLUTIONS AND INTERVENTIONS

A health system that is ready to deliver for women, when women are ready to deliver, is a strong health system. There is global consensus on the health and nutrition interventions that should be made available to women and newborns along a continuum of care.⁶⁶ These holistic, women-centered interventions are not only aimed at preventing the leading causes of maternal and newborn deaths, but also look to improve the overall health of women and infants by facilitating proper nutrition, and preventing and treating maternal challenges, such as gestational diabetes, childbirth injuries, and managing blood pressure.⁶⁷ Improved care for women during pregnancy plays a decisive role in reducing maternal and newborn mortality rates, as well as tackling low birthweight and stillbirths.⁶⁸

An effective continuum of care includes quality care before, during, and after pregnancy, and envisions care for normal pregnancy and childbirth, as well as emergency obstetric care delivered by skilled healthcare providers within a functioning health system.⁶⁹ For the continuum of care to have a significant impact on maternal and newborn health, it must also include access to the necessary facilities, medicines, supplies, equipment, and skilled health providers.⁷⁰ In low-income settings, improvements in water and sanitation are essential to improving the health of women and babies and saving lives.⁷¹ Finally, health services must be available, accessible, acceptable, and of quality (AAAQ),⁷² and must be provided in a dignified and respectful manner, free from discrimination and abuse.⁷³

While the global community agrees on the clinical interventions needed to improve maternal and newborn health and nutrition, there are still gaps in service. This brief highlights four strategies that have the potential to address these gaps:

- Ensure access to quality maternal and newborn care, including midwifery care
- Expand community-level strategies to reach the most vulnerable girls and women
- Address unintended pregnancy through modern contraception and increase access to safe abortion
- Provide maternal and newborn nutrition education, counseling, and support – and promote exclusive breastfeeding

Ensure Access to Quality Maternal and Newborn Care, Including Midwifery Care

Access to skilled, knowledgeable, and compassionate midwifery care is one of the strongest ways to promote affordable and quality maternal and newborn healthcare services throughout pre-pregnancy, pregnancy, birth, the postnatal period, and the first months of infancy. This is one of the most important investments a country can make to improve maternal and newborn health.⁷⁴ The provision of full care for all pregnant women and newborns – as recommended by the World Health Organization (WHO) – combined with modern contraception for women who want to avoid pregnancy, would yield a drop in maternal deaths from an estimated 308,000 to 84,000 per year, and a drop in newborn deaths from 2.7 million to 538,000 per year.⁷⁵ In humanitarian and displacement settings, ensuring the availability of skilled midwives that speak the languages of displaced populations is critical to breaking barriers of communication and access, and addressing the needs of vulnerable populations.

Many countries – including Burkina Faso, Cambodia, Indonesia, Morocco, and Sri Lanka – have significantly reduced maternal and newborn deaths by training and deploying midwives.^{76,77} Midwives, or skilled birth attendants with midwifery skills, can counsel women on sound nutrition practices – such as the importance of folic acid through food fortification – that strengthen their ability to carry pregnancies to term, prevent birth defects, and save newborn lives.⁷⁸ Midwives are crucial in the early initiation and ongoing support of breastfeeding in the first moments and weeks of life, a key newborn health and nutrition intervention.⁷⁹ Continued exclusive breastfeeding for the first six months of life has the potential to save the lives of hundreds of thousands of infants and reduce healthcare costs.^{80,81} Newborns need the nutrients found in breastmilk to protect them from conditions such as diarrhea,^{82,83} and adolescents and adults who were breastfed as babies are less likely to become overweight or obese.⁸⁴ For women with the ability to breastfeed, breastfeeding can also help reduce risks of breast and ovarian cancer, type II diabetes, and postpartum depression.^{85,86}

Many low- and middle-income countries still have a long way to go before quality midwifery coverage is available for the most underserved populations. Only 42% of the world's medical, midwifery, and nursing professionals are available in the 73 low- and middle-income countries where 92% of maternal and newborn deaths and 98%⁸⁷ of stillbirths occur.^{88,89} Not only is there a need to increase the number of midwives in these countries, but continued commitment by governments and their development partners must guarantee that midwifery services are available, accessible, acceptable, and of high quality. One way of doing this is highlighted in the case study below.

Humanitarian emergencies also present additional challenges for promoting breastfeeding practices. The disruption of social networks to promote breastfeeding, poor access to clean water, and absence of private spaces for women to breastfeed in displacement settings all deter healthy breastfeeding practices.⁹⁰ In some emergencies, increased access to breastmilk substitute donations also disincentivize critical breastfeeding practices.⁹¹ Female-friendly spaces and breastfeeding programs for displaced women can help protect and support breastfeeding practices in emergencies.



- **5.3** Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation
- **5.6** Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences

SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

- **9.1** Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

SDG 11: Make cities and human settlement inclusive, safe, resilient and sustainable.

- **11.2** By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities, and older persons



Case Study: Improving Midwifery Care in Cambodia

Maternal and newborn mortality has been falling significantly in Cambodia since 2005.⁹² Key to this decline was a notable investment in midwifery education and a marked increase in the number of midwives providing antenatal care and deliveries within an expanding primary healthcare network. Ensuring increased access to quality maternity care was led by the government, with the support of a range of partners, including NGOs and UN organizations.^{93,94} Access to improved primary healthcare, with a focus on midwifery, was also seen across the health system, including the public and private health sector. In 2010, skilled birth attendance in a facility accounted for 55% of all births, and home deliveries with a midwife for 16%. Pre-service education and in-service training for midwives have been prioritized and all health centers have at least one primary midwife.^{95,96}

Case Study: Infant and Young Child Feeding Program in Refugee Camps in Jordan

Save the Children established mother- and baby-friendly spaces in Syrian refugee camps in Jordan that provided privacy and support for breastfeeding women with children under the age of five. The spaces also offered health education sessions that emphasized the health benefits of breastfeeding and proper nutrition for young children. The program engaged more than 15,000 mothers in the Za'atari camp between December 2012 and May 2014.⁹⁷

Expand Community-Level Strategies to Reach the Most Vulnerable Girls and Women

In order to improve maternal and newborn health and nutrition, essential health services need to be provided through functioning health systems that integrate a continuum of community- and facility-based care. Grassroots-level interventions include community mobilization, health and behavior change education, community support groups, and home visits during pregnancy and after childbirth.⁹⁸ These may be provided by a healthcare provider or a community health worker at the home, village, school, or local clinic. Growing evidence suggests that community-based strategies improve maternal and newborn health outcomes, and positively affect health and nutrition practices — such as the uptake of exclusive breastfeeding.⁹⁹ Finally, strengthening community participation and engagement — involving both women and men — in the design and delivery of health services has led to improvements in their quality, availability, and utilization.¹⁰⁰ Invoking the power of community participation and engagement in emergency settings is particularly key to ensuring that the specific needs of girls and women are not overlooked.^{101,102}

Effective community-level interventions include:

- **Training and deploying community health workers (CHWs):** Community health workers can play an important role in increasing access to essential health information services and can be instrumental in providing care to underserved populations, including youth and adolescents, in rural areas, and in humanitarian settings. Community health workers receive a limited amount of training to deliver a wide range of health and nutrition services to the members of their communities and to promote sound practices, such as breastfeeding. They typically remain in their home village or neighborhood, serving as a link between their neighbors and the health facility or formal health providers. In this capacity, they can ensure that women at risk and infants are referred to the appropriate health facility, or skilled provider, for needed care and treatment.^{103,104} A number of countries have embarked on national community health worker programs with positive results. Ethiopia's Health Extension Program (HEP), Pakistan's Lady Health Worker (LHW) Program, and Uganda's Village Health Teams, among others, improve the promotion of essential health information and services.¹⁰⁵
- **Mobilizing communities through women's or community groups:** Evidence from countries in Africa and Asia points to the role of women's groups in improving maternal and newborn care practices and reducing maternal and newborn deaths. These groups bring women together before, during, and after pregnancy to share common experiences, identify problems, exchange information, discuss ways to access quality maternal and newborn healthcare, identify gaps in the system, and find potential solutions. A meta-analysis conducted in 2013 shows that women's groups can reduce maternal deaths by 49% and newborn deaths by one-third.¹⁰⁶

Case Study: Pakistan's Lady Health Worker Program

With many urban-rural disparities and a drastic imbalance in the health workforce, including insufficient numbers of health workers, nurses, and skilled birth attendants, through the Prime Minister's Programme for Family Planning and Primary Care, Pakistan created the Lady Health Worker cadre in 1994.¹⁰⁷ Lady Health Workers must be recommended by the community, have at least eight years of schooling, and undergo extensive training. The goal of this program is to equip female health workers with the skills to provide essential primary health services in rural and urban slum communities.¹⁰⁸ External evaluation has shown substantially better health indicators in the population served by Lady Health Workers. In the Punjab province, for example, Lady Health Workers have played a critical role in reducing maternal mortality rates. A 2006 study of the region revealed a drop in maternal mortality from 350 to 250 per 100,000 live births. Infant mortality also declined from 250 to 79 per 100,000 live births.¹⁰⁹

Address Unintended Pregnancy Through Modern Contraception and Increase Access to Safe Abortion

Roughly 43% of the 206 million pregnancies that occurred in developing regions in 2017 were unplanned.¹¹⁰ If the unmet need for modern contraception was satisfied, 36 million induced abortions could be prevented,¹¹¹ half of which are typically unsafe.¹¹² To eliminate the risks posed by unintended pregnancy and unsafe abortion, girls and women need access to contraceptive information, counseling,



Relevant International Agreements:

- Programme of Action of the International Conference on Population and Development (1994)
- Beijing Platform for Action, Fourth World Conference on Women (1995)
- Millennium Development Goals (2000 - 2015)
- Global Strategy for Women's and Children's Health (2010)
- Scaling Up Nutrition (SUN) Movement Strategy (2012 - 2015)
- Scaling Up Nutrition (SUN) Strategy and Roadmap (2016 - 2020)
- Sustainable Development Goals (2015-2030)
- WHO's Global Strategy for Women's, Children's, and Adolescents' Health (2016-2030)
- Report of the High-Level Working Group on the Health and Human Rights of Women, Children and Adolescents (2017)
- UN Decade of Action on Nutrition (2016-2025)



products, and services, as well as to be able to plan their pregnancies.¹¹³ Girls and women also need access to quality postabortion care to treat complications arising from an incomplete or unsafe abortion.¹¹⁴

In humanitarian settings, the need for reproductive health services is more acute, because girls and women affected by armed conflict and natural disasters are at increased risk of multiple forms of gender-based violence, unintended pregnancy, maternal morbidity and mortality, and unsafe abortion.^{115,116} As a result, meeting the demand for family planning in humanitarian settings is critical. For example, nearly three quarters of pregnant Syrian refugee women surveyed in Lebanon wished to prevent future pregnancy, and more than one-half did not desire their current pregnancy.¹¹⁷ Demand for the full range of contraceptive options, including long-acting methods, is present in humanitarian settings, and evidence shows that women will use them if available and of reasonable quality.¹¹⁸

Increasing access to and use of modern contraception is the best way to reduce unintended pregnancies and unsafe abortions.¹¹⁹ The use of modern contraception also allows for birth spacing, which in turn reduces birth complications, thus increasing the health of both the woman and baby.^{120,121} However, when contraceptive methods fail, or when pregnancies pose a health risk to the mother, access to safe and legal abortion is crucial to reducing maternal mortality and morbidity.¹²² Therefore, liberalizing abortion laws and increasing access to safe abortion services needs to be a priority in places where it is currently highly restricted or illegal.¹²³ In countries such as Nepal, South Africa,¹²⁴ and Tunisia, legalizing abortion has been linked to a drop in maternal mortality.¹²⁵

Where safe abortion services do exist, communities must know how to access them, and available services must be affordable. In countries where abortion remains highly restricted, and therefore often unsafe, postabortion care (PAC) services should be strengthened and efforts must be made to increase awareness of them. Fear of stigma may prevent women, and especially adolescents, from seeking care for abortion-related complications. PAC providers should not only be trained on appropriate techniques and procedures, but should also know how to provide non-judgmental, confidential, and adolescent/youth-friendly services, which should include counseling on contraception. Evidence shows that providing contraceptive services and counseling alongside PAC services increases contraceptive use, thereby reducing unintended pregnancies and repeat abortions.¹²⁶

In countries where abortion is legal, the following actions promote access to safe abortion:¹²⁷

- Registering essential medicines and making supplies available for safe abortion services;
- Training providers on WHO-endorsed safe abortion methods, including vacuum aspiration for surgical abortion and misoprostol for medical abortion; and
- Ensuring abortion is affordable, legal, and confidential for all, without age or marriage restriction.

Case Study: The Impact of Legal Reform on Availability of Abortion in South Africa

In 1996, abortion was legalized in South Africa, after which there was a significant decrease in infections and hospitalizations of women who had undergone unsafe abortion, especially younger women.¹²⁸ A review of national data indicates that abortion mortality dropped by more than 90% between 1994 and 2001.¹²⁹

Provide Maternal and Newborn Nutrition Education, Counseling, and Support — and Promote Exclusive Breastfeeding

Given the intergenerational nature of malnutrition, it is important to recognize the value of nutritional education, counseling, and support services as effective tools to improve maternal and newborn health and enhance overall health and wellbeing for all. When girls and women who are malnourished become pregnant, the impacts can be detrimental — for themselves and their babies.¹³⁰ Lack of proper nutrition can lead to the birth of underweight babies who face an increased risk of poor health throughout their lives — a risk that can have long-term impacts on health.¹³¹ It is estimated that one quarter of children under five worldwide experienced chronic malnutrition in 2017.¹³² This figure is even higher in regions such as South Asia, Eastern and Southern Africa, and West and Central Africa, where more than one-third of all girls and boys are stunted.¹³³ Proper nutrition during the first 1,000 days of a baby's life, starting from the beginning of a woman's pregnancy, is critical.¹³⁴ This 1,000-day critical window of opportunity can have a strong impact on a child's physical and cognitive growth and ability to learn,¹³⁵ as early childhood nutrition and early stimulation and learning programs extend school completion, improve learning outcomes, and increase adult wages and access to decent work opportunities.¹³⁶

An increased risk of malnutrition, death, and illness during the postnatal period has been linked to poor and inadequate feeding practices. Evidence clearly indicates the benefits of early initiation and exclusive breastfeeding for the first six months of life, which has been on the increase over the past decade.¹³⁷ Globally, 43% of infants younger than six months were exclusively breastfed in 2015, up from 35% in 2005.¹³⁸ The prevalence of exclusive breastfeeding is highest in Southern Asia (59%) and Eastern Africa (57%), but much lower in Latin America and the Caribbean (33%), Eastern Asia (28%), Western Africa (25%), and Western Asia (21%).¹³⁹ A lack of awareness of optimal feeding practices and a lack of support and encouragement from skilled counselors, family members, healthcare providers, employers, and policymakers still exists throughout Africa,¹⁴⁰ although this is changing.¹⁴¹ Babies who are not breastfed within the first hour have a higher risk of death.¹⁴² Therefore, it is vital that healthcare providers, family, and community members advising new mothers have accurate information about the merits of breastfeeding and are equipped to promote and support maternal nutrition and recommended breastfeeding practices.¹⁴³ Special attention and support around breastfeeding must also be given to low-birthweight babies and their mothers, HIV-positive mothers, and babies born in fragile and emergency settings.¹⁴⁴ Due to lacking maternity protection provisions, many women who return to work stop breastfeeding partially or completely because they do not have sufficient time or a place to breastfeed, express, and store their milk.¹⁴⁵ Enabling conditions at work, such as paid parental leave; part-time work arrangements; on-site childcare; clean, safe, and private facilities for expressing and storing breast milk; and breastfeeding breaks, can help.¹⁴⁶

A *Lancet* study estimated that the costs required for breastfeeding promotion are relatively low. For the 34 countries with 90% of the world's stunted children, achieving vast coverage in promoting early, exclusive, and continued breastfeeding through education and nutrition supplementation would cost roughly \$175 per life-year saved.¹⁴⁷

Case Study: Scaling Up Breastfeeding in Bangladesh

Breastfeeding has been widely lauded for enduring health benefits for infants and their mothers. Between 2007 and 2011, targeted education and advocacy helped increase exclusive breastfeeding in Bangladesh from 43% to 64%.¹⁴⁸ Bangladesh's success has been attributed to community mobilization and media outreach around the importance of breastfeeding, along with comprehensive health worker training. This



training helped create a support system at health facilities that provides a vital resource for positive nutritional education. Bangladesh also utilized strategic technical experience of various stakeholders – including civil society, UNICEF, and the Alive and Thrive initiative¹⁴⁹ – incorporated existing evidence and best practices, and worked across sectors to create uniform messaging and practice around breastfeeding promotion.¹⁵⁰ The Alive and Thrive initiative, for example, helped increase breastfeeding in targeted populations: In women reached by the initiative, the proportion of women who reported practicing exclusive breastfeeding increased from 49% to 88%, and the proportion of women engaging in early initiation of breastfeeding increased from 64% to 94%.¹⁵¹

SECTION 3: THE BENEFITS OF INVESTMENT

If all girls and women had access to modern contraception and the full range of maternal and newborn health services, maternal death would drop roughly 73% and newborn deaths would be reduced by about 80%.¹⁵²

Investments in maternal, newborn, and reproductive health are sound investments. They not only save lives, they increase both social and economic benefits for developing nations.¹⁵³ Every \$1 spent globally on interventions promoting contraception and high-quality maternal and newborn healthcare would reap \$120 in benefits.¹⁵⁴ Given the important role girls and women play in contributing to national and global economies, ensuring they are healthy makes them more likely to save, invest, and deliver better for themselves, their families, communities, and societies. Conversely, poor health outcomes, resulting from maternal death, disability, and inadequate nutrition, adversely affects the economy and slashes family earnings.

Evidence suggests that in Africa and Asia, an 11% loss in gross national product is directly linked to malnutrition, and that scaling up nutrition interventions targeting pregnant women and young children yields a return of at least \$16 for every \$1 spent.^{155,156} Children who are malnourished during their first 1,000 days of life are more susceptible to infectious diseases and have lower cognitive abilities.¹⁵⁷ As a result, early undernutrition or overnutrition can considerably hinder a country's economic growth.¹⁵⁸

During the first two years of a child's life, optimal breastfeeding reduces a child's risk of death and lowers the long-term negative impact of poor nutrition.¹⁵⁹ Breastfeeding and proper nutrition may also lower the risk of high blood pressure and cholesterol, obesity, diabetes, cancers, and some childhood asthmas.^{160,161} Providing women with micronutrients can help ensure healthy pregnancies, prevent anemia, enhance fetal growth, and support healthy birthweights.¹⁶² Micronutrients are important for the health of the baby, but also for the overall health and wellbeing of girls and women.

Research has demonstrated that the impact of maternal death on families, and especially on children who are left behind, can be devastating.¹⁶³ Maternal mortality has implications for the surviving household's financial stability and puts the future education of children at risk.¹⁶⁴ Research has shown that newborns whose mothers die in childbirth are far less likely to reach their first birthday than those whose mothers survive.¹⁶⁵ Among surviving daughters, school dropout and early marriage rates rise, repeating the cycle of poverty for the next generation.¹⁶⁶

SECTION 4: CALLS TO ACTION

The vast majority of maternal and newborn deaths and disabilities can be prevented by known interventions provided through a continuum of care. Access to quality maternal and newborn care and nutrition not only benefits the woman and child, it has far-reaching benefits for families, communities, and societies as a whole. In order to power progress for all, many different constituencies must work together – governments, civil society, academia, media, affected populations, the United Nations, and the private sector – to take the following actions for girls and women:

- Guarantee access to quality, affordable care before, during, and after pregnancy – inclusive of midwifery and obstetric care, modern contraception, safe abortion, and post-abortion care. (Most relevant for: civil society, governments, the United Nations, and the private sector)
- Ensure quality care is inclusive of midwifery and obstetric care, family planning, safe abortion and postabortion care, and repairs of fistula. (Most relevant for: civil society, governments, the United Nations, and the private sector)
- Meet the unmet need for modern contraception for girls and women. (Most relevant for: civil society, governments, the United Nations, and the private sector)
- Support the prevention, screening, and treatment of common challenges during pregnancy such as obesity, gestational diabetes, and high blood pressure. (Most relevant for: civil society, governments, the United Nations, and the private sector)
- Increase national budgets for maternal and newborn health and nutrition to meet global health and nutrition targets by 2030. (Most relevant for: governments)
- Set measurable targets for improving maternal and newborn health and nutrition, monitor progress, and strengthen accountability mechanisms, while ensuring the equal involvement of all stakeholders, including civil society. (Most relevant for: civil society and governments)
- Address barriers to healthcare, including user fees, poor infrastructure – including inadequate access to clean water, sanitation, and hygiene – and a lack of essential supplies, medicines, and micronutrients. (Most relevant for: governments, civil society and the private sector)
- Include girls, young people, and women in the design and implementation of maternal and newborn health and nutrition programs as context experts. (Most relevant for: civil society, governments, and the United Nations)
- Hold governments accountable to commitments made in support of girls' and women's health, rights, and wellbeing. (Most relevant for: affected populations, civil society, and the United Nations)
- Promote and provide young people and women access to nutritious food, counseling on proper nutritional practices such as early initiation, exclusive and continued breastfeeding, and critical micronutrients. (Most relevant for: affected populations, civil society, governments, the United Nations, and the private sector)
- Ensure that adequate parental protection measures are put in place so that women who return to work are aware of their rights



and can continue breastfeeding until their baby is at least 6 months old. (Most relevant for: governments, the United Nations, the private sector and civil society)

- Ensure that the full spectrum of maternal and newborn health, food security, and nutrition interventions are included in humanitarian response guidelines and protocols, financed, and implemented, including the Minimum Initial Service Package (MISP) and the minimum standards in food security and nutrition guidelines. (Most relevant for the United Nations, governments, and civil society)

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