



Towards a new Global Strategy for Women's, Children's and Adolescents' Health





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Towards a new Global Strategy for Women's, Children's and Adolescents' Health

We know what needs to be done, say **Marleen Temmerman and colleagues**, but we need to push hard now to create a world in which every woman, every child, and every adolescent is able to survive, thrive, and transform

The year 2015 marks a defining moment for the health of women, children, and adolescents. It is the end point of the United Nations' millennium development goals, and their transition to the sustainable development goals, and also the 20th anniversary of the International Conference on Population and Development's plan of action and the Beijing Declaration and platform of action.

This is a moment of reflection as well as celebration. Although great strides have been made in reducing maternal and child mortality, showing that change is possible, many countries are lagging behind in reaching millennium development goal 4 (to reduce the under 5 mortality rate by two thirds between 1990 and 2015) and goal 5 (to reduce the maternal mortality ratio by three quarters between 1990 and 2015 and achieve universal access to reproductive healthcare by 2015), and there are vast inequities between and within countries. In 2010, confronted with unacceptably high rates of maternal and child mortality, the UN secre-

tary general called on the world to develop a strategy to improve maternal and child health in the world's poorest and high burden countries, starting with 49 low income countries.

The 2010 Global Strategy for Women's and Children's Health was a bellwether for a global movement and led to significant progress worldwide in women's and children's survival and health. The Every Woman Every Child movement that grew out of the Global Strategy mobilised stakeholders in all sectors to work towards shared goals. It fostered national leadership, attracted new resources and financial commitments, and created a worldwide movement of champions for the health and wellbeing of every woman and every child.

Good progress has been made towards realising the vision to end all preventable maternal, newborn, and child deaths within a generation. Millions of lives have been saved, and progress towards the health related millennium development goals was accelerated. Child mortality fell by 49% and maternal mortality by 45% between 1990 and 2013. Strides forward were made in areas such as access to contraception and maternal and child health services, skilled attendance at births, reduced malnutrition, newborn interventions, management of childhood illnesses, immunisations, and combating HIV and AIDS, malaria, and tuberculosis.

The new strategy

The new Global Strategy for Women's, Children's and Adolescents' Health, released this month (see box), builds on lessons learnt and new evidence and focuses on critical population groups, such as adolescents and women and children living in fragile and conflict settings. Its key objectives are to support the resilience of health systems, to improve the quality of health services and ensure equitable coverage, and to work with health enhancing sectors (such as education, water and sanitation, and nutrition).

As we start to define the sustainable development goals and related targets, we must increase the momentum in women's, children's, and adolescents' health. Equally

important is the protection and sustenance of often fragile gains in some countries, the importance of which became clear with the Ebola virus disease epidemic and its results: weak health systems for maternal and child health in west Africa became further weakened.

Successes, lessons, gaps, and emerging priorities

The 15 papers in this collection are the bedrock on which the new strategy is developed. They summarise the current state of evidence and underscore successes as well as critical gaps in progress, emerging priorities, and the key interventions needed for a new generation of women, children, and adolescents.

Based on a life course approach of interventions and a goal of universal health coverage, the papers highlight the critical interventions needed to ensure that women, children, and adolescents are able to survive, thrive, and transform. Their analysis is based on a synthesis of evidence from epidemiological and health data on effective strategies and interventions to realise the health and human rights of women, children, and adolescents around the world.

A key success of the past two decades has been the global reduction of child mortality by 49% and maternal mortality by 45%. However, much more needs to be done. Each day 800 women and 7700 newborns die from complications during pregnancy and childbirth and from other neonatal causes, and 7300 women experience a stillbirth. While important gains have been registered since the launch of the 2010 Global Strategy, women, children, and adolescents around the world continue to experience serious violations of their health and of health related human rights.¹

One of the key factors behind the reduction of maternal and child mortality has been improved access to essential interventions and services. Family planning, antenatal care, delivery at facilities, and skilled birth attendance have all increased over the past two decades. However, huge inequities in coverage and quality continue, and furthermore stronger effort is needed to remove

Stages in updating the Global Strategy

- Initiative was led by the UN secretary general and World Health Organization, together with Health 4+ (the joint UN agency partnership to improve women's and children's health) and the Partnership on Maternal, Newborn and Child Health
- WHO led the development of papers by expert working groups in key areas
- Fifteen working papers were developed through online consultation and input from experts
- A multistakeholder writing group was constituted
- Consultations took place with member states and stakeholders in Geneva, New Delhi, and Johannesburg
- Online consultation with public on zero draft of the Global Strategy
- New Global Strategy launched at UN General Assembly in September 2015
- Operational framework for the new Global Strategy due to be presented at World Health Assembly in May 2016

barriers to access, which continue to impede success.^{2 3}

In particular, postpartum care for mothers and newborns has not received due attention and remains a missed opportunity in reproductive, maternal, newborn, and child health. Investments in women's health beyond reproductive health needs greater attention, given the rise of effects on health related to non-communicable disease, such as cancer, obesity, and diabetes.

But substantial progress has been made in preventing HIV among neonates, thanks to programmes to prevent transmission from mother to child. Another success is the increase in the prevalence of exclusive breast feeding and of oral rehydration therapy, though further effort is needed to increase coverage. Deaths of children aged under 5 years remain high in sub-Saharan Africa and southern Asia, and many more children's lives could be saved through the equitable scale-up of available, cost effective interventions. A broader and holistic global agenda on child health is needed that retains the aim to end preventable deaths among under 5s while being able to deal with emerging priorities and to achieve sustainable gains among school age children.

Evidence shows that interventions that are particularly effective in the areas of reproductive, maternal, newborn, and child health are family planning, management of labour and delivery, care of preterm births, breast feeding, and treatment of serious infectious diseases and acute malnutrition.

The new Global Strategy also needs to pay attention to adverse experiences in early childhood that can increase the risk of poor social and health outcomes such as low educational attainment, economic dependency, increased violence, crime, and substance abuse, poor mental health, and a greater risk of adult onset non-communicable diseases such as obesity, cardiovascular disease, and diabetes.

Paradigm shift

The evidence is clear: investment in childbirth and delivery can quadruple returns in terms of women's and newborn's lives saved and stillbirths and disabilities reduced.⁴ The papers in this supplement underline the imperative to accelerate momentum and protect the gains made while also calling for innovative thinking and cutting edge research and approaches to meet the needs and aspirations of millions of women, children, and adolescents around the world.

Work on creating a new paradigm for women's, children's, and adolescents' health will need to be done in a range of areas, such as sexual and reproductive health and rights,

communicable and non-communicable diseases (including cancers), and mental health—all based on a life course approach. The targets identified in the sustainable development goals,⁵ together with the transformative agenda envisioned in the new Global Strategy to ensure that women, children, and adolescents survive, thrive, and transform, are the impetus to create a paradigm shift within a generation.

This vision necessitates a comprehensive approach that takes into account the structural determinants of health, tackles inequities in access to healthcare, and encourages accountability. Despite decades of unprecedented medical advances and innovations in healthcare, the quality of care in general—and of women's, children's, and adolescents' health in particular—is often weak. Building on and extending this unfinished agenda, the papers in this collection elaborate the actions needed to improve health and wellbeing of women, children, and adolescents around the world.

A “grand convergence” is well within our reach.⁶ Given political momentum, and with the existing evidence, we now have the opportunity to end preventable deaths among all women, children, and adolescents, to vastly improve their health, and to bring about the transformative changes needed to fully realise their human rights and build resilient and prosperous societies.

We know what needs to be done. With a concerted effort we can eliminate wide disparities in preventable mortality and morbidity. In particular, by improving access to essential health interventions and building resilient health systems, we can achieve the grand convergence within a generation and create a world in which no woman, child, or adolescent faces a greater risk of preventable death just because of where they live.

The new Global Strategy is central to the realisation of this objective. It provides a platform for completing the unfinished work of the health related millennium development goals and to help countries implement the post-2015 development agenda and the health related sustainable development goals and targets.

A vision for the future

Despite some progress, societies are still failing women, children, and adolescents, most acutely in poor countries and among the poorest communities in all countries. We will fail in our endeavours if we do not comprehensively address everyone's health needs. Women, children, and adolescents who are marginalised suffer from various inequities and discrimination, such as those based on gender, income, age, place of residence, and education levels, resulting in worse health

outcomes. Low and middle income countries can have²:

- Up to three times more pregnancies among teenage girls in rural and indigenous populations than in urban populations
- A difference of up to 80% between the richest and poorest people in the proportion of births attended by skilled health personnel
- A gap of at least 18% between the poorest and richest people in the proportion who seek care for children with pneumonia symptoms, and
- A difference of least 25% in antenatal care coverage (of at least four visits) between the most and least educated and between the richest and poorest.

The papers in this supplement highlight three key areas of priorities for the new Global Strategy: the health needs of adolescents, multisectoral response, and emergency situations.

Meeting health needs of adolescents

A critical new priority at the heart of the new Global Strategy is the focus on adolescents. Adolescents aged 10-19 years have specific needs and require a responsive health system that takes into account their biological, emotional, and social development. Ensuring their healthy development means making the health system work for adolescents. But it also requires a focus on social risk factors as well as on the factors that can offer a protective effect across various health outcomes. This focus includes the legal and policy environment.

To realise the health and wellbeing of adolescents and protect their human rights, countries need to adopt holistic health policies and education programmes about prevention of injuries, violence, and self harm; good sexual and reproductive health outcomes; prevention of non-communicable disease; and other crucial aspects of physical and mental health and development. Such education will help adolescents enhance judgment and learn the skills to maximise their health and wellbeing.

A multisectoral response

Another distinguishing feature of the new Global Strategy is its explicit focus on the role of health enhancing and health enabling sectors. The evidence provided throughout this supplement highlights the importance of such interventions in the articulation of a comprehensive approach to health.

Attention needs to be paid to strengthening health systems' response. Weak capacity in health systems and the health workforce, gaps in infrastructure, and a “verticalised” focus on biomedical aspects of health

interventions hinder the attainment of health goals. Health system resilience, conversely, hinges on institutional capacity and human capital to adapt and respond to emerging shocks and needs. And policy and operational systems need to ensure continuing capacity to deliver essential health services equitably, even during an emergency, including by building greater self reliance among communities.

Innovation and financing are central to this new vision for women's, children's, and adolescents' health. There is an urgent need to scale up innovations in a sustainable manner. Crucially, we also need to transform the financing landscape, by supporting the value for money agenda; to foster an integrated approach to complete the unfinished agenda on child health; and to break down the silos separating the flows of financing between women, children, and adolescents. Better mechanisms are needed for financing the health of women, children, and adolescents who live in conflict or post-conflict settings. And we need to foster innovative financing models at global, regional, and national levels.

Humanitarian crises and emergencies

Critical new evidence points to the importance of paying urgent attention to emergencies. Specific vulnerabilities of women, children, and adolescents living in humanitarian crisis settings threaten their health and wellbeing and the realisation of the Global Strategy. Though it is clear that humanitarian crises put women, children, and adolescents at grave risk, national planning processes often leave humanitarian preparedness, response, and recovery out of their longer term development planning.⁷

Increasing investment in women's, children's, and adolescents' health has many benefits: it reduces poverty; it stimulates economic productivity and growth; it creates jobs; it is cost effective; and it helps women, children, and adolescents realise their basic

human rights to health, wellbeing, and a sustainable future.

Conclusions

Implementation of the new Global Strategy depends on effective and independent accountability. However, the reality is very different. Several countries still do not have systems of civil registration and vital statistics monitoring or functioning national health accounts and information systems. To ensure accountability, a minimum standardised reporting system is needed that enables comparison of progress across countries and regions. Such a system would also strengthen national capacity and ensure an inclusive process for stakeholders. Furthermore, indicators recommended by the 2011 Commission on Information and Accountability need to be augmented to encompass the much broader agenda of the 2015 strategy, including human rights. The critical role played by UN agencies, academia, and consortiums such as Countdown to 2015 in the accountability process for millennium development goals 4 and 5 must be recognised.⁸ In the new Global Strategy we need to further strengthen this process, with an eye on country level accountability and action, and also ensure alignment between global and national levels of accountability and monitoring.

The new Global Strategy gives us a once in a lifetime opportunity to change the discourse regarding the health of women, children, and adolescents. It is clear that business as usual will not work. For women, children, and adolescents around the world to survive, thrive, and transform, we need transformative actions that will result in enormous social, demographic, and economic benefits. This is a vision that can unite us all: united we stand, divided we fall.

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Women's health priorities and interventions

Building on the unfinished agenda, **Marleen Temmerman and colleagues** elaborate actions needed to improve the health and wellbeing of women and girls around the world

Over the past decades, governments have taken steps towards improving women's health in line with commitments made in key international summits. Progress has been made in reducing maternal mortality,¹ which accelerated with the launch of the United Nations secretary general's Global Strategy for Women's and Children's Health in 2010. Use of maternal healthcare and family planning has increased in some countries.² Progress has also been seen on two determinants of women's health—school enrolment rates for girls and political participation of women—but not for others such as gender based violence.³

However, societies are still failing women in relation to health, especially in low resource settings. Discrimination on the basis of their sex leads to health disadvantages for women.⁴ Structural determinants of women's health, along with legal and policy restrictions, often restrict women's access to health services.

This paper elaborates the health problems women face, and priority interventions to overcome them, as a background for and informing the updating of the Global Strategy for Women's, Children's and Adolescents' Health.

KEY MESSAGES

Substantial progress has been made in the past two decades in improving maternal health, with a 45% reduction in maternal mortality, but much remains to be done

It is imperative to accelerate the momentum and protect the gains made for women's health, as well as to tackle critical gaps and acknowledge the lessons learnt

Key health systems interventions are needed to address structural determinants of women's health, reduce inequities in access, improve quality of care, strengthen accountability, and promote adoption of innovations that improve performance

Priority interventions for women's health include providing health information and contraceptive services, strengthening maternal healthcare, tackling non-communicable diseases, and preventing and responding to violence against women and girls

Methods

This paper is based on a desk review and synthesis of evidence drawing on global epidemiology and health estimates to identify gender differentials in mortality and morbidity. The interventions are based on syntheses of evidence drawn from evidence reviews previously conducted for WHO initiatives.⁵⁻⁷ We used three selection criteria to identify priority interventions. (1) Interventions that tackle major causes of morbidity and mortality in women and adolescent girls. (2) Interventions that have been shown to have a high impact on health and development of women and adolescent girls. (3) Interventions critical for the overall health and wellbeing of women, children, and adolescents (such as interventions related to harmful practices and violation of human rights). We circulated a draft of the paper for comments through a web based consultation and finalised it according to comments received and expert feedback.

Unfinished agenda for women's health

Poor sexual and reproductive health outcomes represent a third of the total global burden of disease for women aged 15-44 years. Unsafe sex and violence are major risk factors for death and disability among women and girls in low and middle income countries and continue to disproportionately affect marginalised groups in high income countries.⁸

Although the global maternal mortality ratio—the number of maternal deaths per 100 000 live births—halved between 1990 and 2013, this progress is not sufficient to reach the target of millennium development goal 5 of a 75% reduction by 2015.⁹ In 2013 an estimated 289 000 women died from complications of pregnancy and childbirth; and 22 million unsafe abortions occurred in 2008 (half all induced abortions in that year), nearly all in low and middle income countries.¹⁰ The burden of maternal morbidity, such as obstetric fistulas and uterine prolapse, continues to be high.¹¹ Catastrophic and out of pocket health expenditure for healthcare services, such as treatment of complications resulting from unsafe abortion, continues to affect women and girls around the world.¹² Each year, 5.4 million women endure pregnancies that end in stillbirth (2.6 million in 2009) or neonatal death (2.8 million in 2013).¹³ Worldwide, an

estimated 225 million women have an unmet need for modern contraception.¹⁴

In 2013 almost 60% of all new HIV infections among young people aged 15-24 years occurred in girls and young women.¹⁵ Tuberculosis is often linked to HIV infection and is among the leading causes of death in women of reproductive age (and among women aged 20-59 years) in low income countries. Nearly 30% of women and adolescent girls are affected by anaemia, leading to adverse effects on their overall health and wellbeing, especially during pregnancy and childbirth.

Sexually transmitted infections, of which human papillomavirus infection is the most common, disproportionately affect women and adolescent girls. About 70% of cases of cervical cancer worldwide are caused by human papillomavirus.¹⁶ Untreated syphilis is responsible for about for 212 000 stillbirths/early fetal deaths and about 92 000 neonatal deaths every year.¹⁷

One in three women aged 15-49 years has experienced physical violence, sexual violence, or both by an intimate partner or sexual violence by a non-partner, with many short and long term consequences for their health.¹⁸ One in four girls and one in seven boys experience sexual violence before the age of 18.¹⁹

Emerging priorities for women's health

Shifts in population dynamics towards more ageing populations, along with an unprecedented growth in the world's adolescent population, have led to greater complexities in the global burden of ill health, including an increase in non-communicable diseases (NCDs).⁸ In 2012 most premature deaths from NCDs among women aged 30-70 years (82% or 4.7 million) occurred in low and middle income countries, with higher rates in women aged 15-59 years than in high income countries.²⁰

Gender norms and societal structures mean that the mobility and physical activity of women and girls in some parts of the world is often restricted. This can be further compounded by factors related to income, household hierarchies, and roles. In some regions, this has an adverse effect on the health and wellbeing of women and girls.²¹ Furthermore, gestational diabetes affects about 15% of women worldwide.²²

Globally, tobacco use accounts for about 9% of all deaths due to NCDs in women.

Maternal smoking is associated with risks in pregnancy, including ectopic pregnancy, preterm birth, placental problems, miscarriage, and stillbirth.²³ Harmful use of alcohol, illicit drugs, and other psychoactive substances by girls and women, including during pregnancy, is increasing in many parts of the world. In 2012 an estimated 4% of deaths of women were attributable solely to alcohol use.²⁴

Women's cancers, especially breast and cervical cancer, result in high rates of mortality and morbidity, especially in low and middle income countries. Widespread major inequalities in access to early detection and screening lead to large variations in clinical outcomes and survival after treatment. Breast cancer, the leading cause of deaths from cancer in women (1.7 million new cases and 0.5 million deaths in 2012), is diagnosed in low and middle income countries mostly at advanced stages, when palliative care is the only option.²⁵ Cervical cancer is the fourth most common cancer affecting women worldwide. In low and middle income countries, it is the third leading cause of death from cancer in women, and in most cases women have limited access to screening and treatment of pre-cancerous lesions, with resultant late stage identification.²⁶

Mental disorders constitute another critical emerging health problem for women and girls. Suicide is a leading cause of death in adolescent girls and in women aged 20-59 years globally.²⁷ Women experience more depression and anxiety than men.²⁸ Patterns of mental health problems differ between men and women as a result of different gender roles and responsibilities, biological differences, and variations in social contexts.²⁷ Women who have been exposed to violence by intimate partners are twice as likely to have depression and alcohol use disorders and four times more likely to commit suicide, compared with women not exposed to this violence.¹⁸ Mental health services are often limited in lower income countries, and women benefit even less from these services than do men.²⁷

Chronic obstructive pulmonary disease is also a leading cause of disease and death among older women. In low income countries, the primary risk factor for women's ill health is exposure to indoor air pollution caused by the burning of solid fuels for heating and cooking. However, health systems are not adequately equipped to provide prevention and treatment of these conditions.

Globally, women represent a higher proportion of older adults. Traditionally, women have provided most of the care in the family, looking after both children and older people,

often to the detriment of their own participation in the paid workforce. The consequences in older age include a greater risk of poverty, more limited access to good quality healthcare and social care services, and poor health. Several serious medical conditions of older age, including dementia, are more common in women, yet women find it harder to access the treatment they need.

Strengthening health systems and tackling structural determinants of women's health

Persistent obstacles in health systems to the realisation of women's health and related human rights, including sexual and reproductive health and rights, include a lack of gender responsiveness, reflected by a lack of sex disaggregated data and gender analysis. This results in health services not taking into account the specific needs and determinants of women's health or the effect on it of gender inequality. Removing these obstacles requires targeted innovations that tackle structural inequalities and improve the quality, coverage, and completeness of health services for women. Box 1 summarises health systems interventions for women's health.

Structural determinants of women's health

Sex based biological factors interact with inequalities based on gender, age, income, race, disability, ethnicity, class, and environmental factors among others in shaping women's exposure to health risks, experience of ill health, access to health services, and health outcomes. Gender inequalities in

the allocation of resources, such as income, education, healthcare, and nutrition, are strongly associated with poor health, requiring a multisectoral approach integrating the contribution of non-health sectors to the overall health and wellbeing of women and girls.

Creating an enabling legal and policy environment

Laws and policies have a direct bearing on the realisation of health and human rights by women and girls, including on sexual and reproductive health and rights. National and sub-national legal and policy frameworks should be aligned with recognised human rights norms and standards, and countries should establish or strengthen mechanisms to implement these standards.

Reducing inequalities

Another key focus in tackling the remaining gaps should be the persistent inequalities and inequities in the accessibility and quality of health systems across and within countries.²⁸ In many settings, health systems continue to have limited accessibility for certain populations, such as for poor people, older people, adolescents, rural residents, and residents of urban slums, and for uninsured or undocumented people,²⁹ as well as limited capacity as measured by indicators such as health worker density, coverage of critical services, use of health information systems, availability of essential medicines and supplies, and quality assurance.²⁹

BOX 1 HEALTH SYSTEMS INTERVENTIONS FOR WOMEN'S HEALTH

- Universal health coverage for key health interventions for women
- Inequities in access
 - Steps to enhance coverage (physical, social, geographic, linguistic, financial)
 - Removal of barriers to access, including legal and policy barriers, criminalisation, third party authorisation, and overly broad conscientious objection
- Quality of care, including supplies
 - Quality assurance of service delivery, update of evidence based norms, standards, and policies
 - Adequate supplies for key women's health problems
 - Respectful care standards and cultural sensitivity
- Health workforce
 - Development and distribution of health workforce for women's health problems, including midwives
 - Pre-service and in-service training
 - Provision of incentives to enhance quality, retention, etc.
- Monitoring and accountability
 - Investing in strengthening the overall governance of the health system to ensure better accountability for results and for realisation of rights
 - Strengthening management capacity at national and sub-national levels
- Adoption and institutionalisation of innovations that enhance quality, coverage, efficiency, and/or completeness of health interventions to women
 - Client specific innovations that improve access and reduce barriers, including the use of digital technologies
 - Health system innovations that improve performance and drive measurement and accountability, including digital innovations for vital events

Quality of care

Women's health services, particularly sexual and reproductive health services, are often not provided at a level of quality that meets human rights standards.³⁰ The persistence of poor sexual and reproductive health outcomes despite availability of supplies and facilities underscores the need to strengthen the quality of health systems.³¹ According to the recent WHO multi-country survey on maternal and newborn health, even when the coverage of effective interventions is high (above 80%) many women still die or experience severe morbidity from haemorrhage, hypertensive and other disorders of pregnancy, and prolonged obstructed labour (often resulting in death, stillbirth, or obstetric fistulas).³²

Quality of care must therefore go side by side with the increase of service coverage, as this alone does not guarantee the health results.^{32 33} Strengthening health networks, transportation, and referral systems is still an unfinished agenda in many countries. Upgrading of first and second level facilities with appropriate infrastructure and equipment, and providing adequate numbers of skilled and motivated health workers, with ongoing training and mentoring for women's health, including on sexual and reproductive health and abortion care, and on tackling violence against women, is necessary to increase coverage and facilitate access.

Quality of care is a multidimensional concept that is affected by stakeholders' priorities and context.³³ Attributes of quality of care include access to care, effectiveness of care, safety, equitability, communication, acceptability, efficiency, and privacy and confidentiality.³³

Enhancing accountability

The Commission on Information and Accountability for Women's and Children's

Health emphasised multiple dimensions of accountability, by adopting a framework built on three pillars: monitoring, review, and action (including redress).³⁴ The independent Expert Review Group, established to monitor and assess progress in implementation of recommendations made by the commission, has stated that accountability needs to be based on certain core principles: clarity about stakeholders' responsibility for action; accurate measurement; independent verification; impartial, transparent, and participatory review; and clear recommendations for future action.³⁴

Accountability is also intrinsic to ensuring that individuals' agency and choice are respected, protected, and fulfilled. Agency and choice are fundamental to enabling people to have a voice and to hold governments and all relevant stakeholders to account.

Promotion and protection of the international development agenda requires placing the human rights and health of women and adolescent girls, particularly sexual and reproductive health and rights, at its centre. Participatory monitoring and accountability mechanisms that meaningfully engage women at the sub-national, national, and global levels are a critical part of this.

Priority interventions for women's health

On the basis of the existing evidence and reviews conducted,⁵⁻⁷ we propose several priority interventions. Box 2 gives a synthesis of these interventions, which are not in an order of priority.

Providing health information and comprehensive sexuality education

Evidence based health information and comprehensive sexuality education (CSE) is a key intervention for promotion and protection of women's health. Such education and information should be available to all adolescents

and youths, in and out of school, as well as to adult women. CSE provides thorough, scientifically accurate, non-judgmental information and assists people to develop skills for decision making, critical thinking, communication, and negotiation of interpersonal relationships. Quality CSE programmes cover human rights, gender equality, respectful relationships, human sexuality, and sexual and reproductive health and rights. Effective CSE programmes seek to roll out nationwide curriculums and teacher training materials based on interactive methodologies; they select and supervise teachers and facilitators; and they work with parents, school principals, and programme managers, among others, at community level and through meaningful participation of adolescents.³⁵ Specific attention needs to be paid to adolescent girls in the context of CSE programmes.

Contraceptive information and services for all who need them

Information on contraception and integrated comprehensive sexual and reproductive health services are vital means for women and girls to maintain health, and their availability is necessary for women and girls to enjoy their human rights. Contraception has clear health benefits. For example, prevention of unintended pregnancies results in a subsequent decrease in maternal and infant mortality and morbidity. Providing access for all women in developing countries who have an unmet need for modern methods of contraception would prevent 54 million unintended pregnancies, 26 million abortions (of which 16 million would be unsafe), and 7 million miscarriages; this would also prevent 79 000 maternal deaths and 1.1 million infant deaths. This situation would particularly benefit adolescent girls, who are at increased risk for medical complications associated with pregnancy and who are often forced to make compromises in education and employment that may lead to poverty and lower educational attainment.³⁶

Effective policies at the national and local levels should ensure availability of a mix of accessible, acceptable, and high quality modern contraceptive methods, including emergency contraception, to meet women's needs across the life course; these should be evidence based and free from bias, discrimination, and unnecessary medical eligibility criteria. Financing for family planning should be strengthened through costed implementation plans, health finance facilities, and national budgets. Providers should be trained and supervised to meet human rights standards for quality care.

BOX 2 SUMMARY OF PRIORITY HEALTH INTERVENTIONS AND HEALTH SYSTEM ENABLERS FOR WOMEN'S HEALTH

- Health information and comprehensive sexuality education
- Comprehensive and integrated package of sexual and reproductive health services, including family planning
- Prevention of unsafe abortion; provision of safe abortion and post-abortion care
- Pregnancy care
- Management of pregnancy complications and maternal morbidities
- Counselling and birth preparedness
- Skilled care at birth; comprehensive emergency obstetric and newborn care
- Prevention of and response to violence against women and harmful traditional practices
- Cervical and breast cancer screening and treatment
- Testing and treatment for HIV, sexually transmitted infections, and tuberculosis according to need
- Promotion of healthy behaviours for preventing non-communicable diseases (for example, tobacco, alcohol, obesity)
- Human papillomavirus vaccine
- Adequate nutrition
- Mental health and psychosocial support

Strengthening maternal healthcare

As maternal and child mortality continues to decrease sharply in many countries, to make more progress, priority attention is needed to ensure the quality of maternal healthcare. Functioning health systems will include emergency obstetric and newborn care and strong capacity at the secondary level to treat complications of childbirth, with effective referral from the community and primary levels.^{37 38} Further strengthening of health services delivery systems is also needed, taking into account task shifting and innovative approaches such as mhealth and ehealth.

Strengthening the health workforce

Attention is needed to educate, deploy, retain, and improve the quality of the cadres of primary healthcare workers, such as midwives and nurses, through quality education, effective regulation, and an enabling work environment that includes effective referral.³⁹ Healthcare workers should be empowered and provided with the necessary knowledge, skills, medicines, and equipment. Furthermore, health workers should be provided with training and capacity building to sensitise them to approach the health needs of women and adolescent girls in a more responsive manner.

Providing safe abortion and post-abortion care

Unsafe abortion, one of the leading causes of maternal death and injuries, is entirely preventable because technologies and safe procedures are well known, cost little, and should be widely available. WHO's technical and policy guidelines for access to safe abortion should be implemented.⁴⁰ Laws restricting access to safe abortion do not reduce or end recourse to abortion, and abortion related mortality is higher in countries with restrictive laws. The UN Special Rapporteur on the Right to Health has found that criminalising reproductive behaviours, including abortion, is a violation of human rights and contributes to poor health outcomes.⁴¹ Although access to post-abortion care for treatment of the complications of unsafe abortion has increased, women in many countries still do not have access to this life saving care or are mistreated when they seek it.

Preventing and treating sexually transmitted infections and HIV in women

To effectively end the AIDS epidemic by 2030 and reduce the burden of other sexually transmitted infections (STIs), governments and the international community should fully implement effective prevention interventions; ensure access for

young and marginalised people, including young women and girls and higher risk populations, to information and services on the risks and symptoms of STIs and HIV and to the skills and means to protect themselves; provide universal access to antiretroviral drugs; ensure privacy and confidentiality; invest in development of inexpensive technologies for diagnosis, treatment, and vaccines; strengthen STI surveillance, including of microbial resistance; and challenge prevailing gender and sexuality norms.

Preventing and responding to violence against women and girls

Challenging social norms and gender inequalities is a critical element in preventing and responding to all forms of violence against women and girls. This requires multi-sector programmes and strategies that address structural determinants, including gender equality and the empowerment of women. Laws, policies, protocols, and guidelines are needed for all sectors, emphasising that violence against women and girls is a violation of human rights, imposes enormous health burdens on individuals, families, and society, and will not be tolerated. The health system has an important role in the prevention of and response to violence against women and girls by ensuring access to timely, effective, and affordable health services for women and girls who are victims of violence, particularly sexual and reproductive health services. Sexual and reproductive health, adolescent health, and maternal health services offer unique entry points to identifying violence and providing the necessary support and care to women and girls exposed to violence, including mental health, emergency contraception, safe abortion, and STI and HIV prophylaxis for post-rape care, in line with WHO's clinical and policy guidelines. This requires providers to be adequately trained and supported.

Tackling non-communicable diseases

As detailed above, women are increasingly facing a disproportionate burden of NCDs. Prevention requires interventions to promote healthy behaviours and reduce risk factors for NCDs, and governments need to take steps to overcome economic, socio-cultural health inequalities and geographic barriers. Providing women with clean cooking and heating devices reduces their risk for several NCDs while also protecting the health of infants and young children. Interventions include integration of prevention and control of NCDs into existing health systems initiatives; protection of women and girls from

aggressive marketing of tobacco products through accelerated and effective implementation of the Framework Convention on Tobacco Control; inter-sectoral collaboration to identify and promote actions outside health systems in relation to NCDs; greater involvement of women and girls in identifying problems and solutions and implementing policies in the fight against NCDs; integration of sex and gender in the design, analysis, and interpretation of studies on NCDs by research institutions; and innovative partnerships to improve access to affordable, high quality, essential medicines to treat NCDs.⁴²

Tackling women's cancers

"Changing reproductive health needs over the life cycle" includes the prevention, diagnosis, and treatment of reproductive system cancers. The human papillomavirus vaccine makes widespread primary prevention, as well as screening and treatment of precancerous lesions, potentially feasible in countries with weak health systems. Advances for breast cancer are primarily in treatment and identification, which can be used for risk screening and need to be further available for all. Important new work is being done in low income countries to inform women, and to train community and primary healthcare workers to support them, to seek diagnosis and care early enough for curable cases to be treated and to improve the management of greatly overburdened treatment facilities. This work needs to be strengthened.

Adequate nutrition

Iron deficiency anaemia increases the risk of haemorrhage and sepsis during childbirth. It causes cognitive and physical deficits in young children and reduces productivity in adults. Women and girls are most vulnerable to anaemia owing to insufficient iron in their diets, menstrual blood loss, and periods of rapid growth. In some regions, women and girls are denied access to nutrition owing to cultural factors and societal norms. This severely affects the overall health and wellbeing of women and girls, especially during pregnancy, and leads to severe birth outcomes and health conditions. This requires cross sectoral collaboration to ensure provision of adequate nutrition to women and girls. For example, the paper by Branca and colleagues recommends that interventions to reduce iron deficiency anaemia need to be rolled out at a larger scale, achieving universal coverage.⁴³ This also requires interventions to ensure gender equality and promotion of women's empowerment to ensure women's

full access to and control over resources and social protection.

Mental health

Gender is a critical determinant of mental health and mental illness. The morbidity associated with mental illness has received substantially more attention than the gender specific determinants and mechanisms that promote and protect mental health and foster resilience to stress and adversity. Gender differences occur particularly in the rates of common mental disorders such as depression, anxiety, and somatic complaints. These disorders affect approximately one in three people in the community (with a female predominance), are closely associated with intimate partner violence, and constitute a serious public health problem. Reducing gender disparities in mental health requires action at many levels. In particular, national mental health policies must be developed on the basis of an explicit analysis of gender disparities in risk and outcome. This further requires investments in gender sensitive treatment approaches and services to be developed at the national level.⁴⁴ For women to be able to access treatment at all levels from primary to specialist care and inpatient as well as outpatient facilities, services must be tailored to meet their needs.⁴⁴ Women must therefore have access to meaningful assistance to seek treatment, and the full range of women's psychosocial and mental health needs must be addressed. This, according to WHO, involves services adopting a life course approach, by acknowledging current and past gender specific exposures to stressors and risks and by responding sensitively to life circumstances and ongoing gender based roles and responsibilities.⁴⁴

Conclusion

Despite progress, persisting and emerging problems challenge women's health. Responding to these requires a comprehensive approach including implementation of effective interventions at both clinical and health systems level. Additionally, environmental, social, economic, and political determinants that result in unequal access to care should be tackled to ensure the ending of preventable deaths, morbidities, and disabilities among women and improve their health. A focus on inequalities and on marginalised groups, including in humanitarian settings, will help in achieving convergence between high and low income countries within a generation.

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Children's health priorities and interventions

Wilson Were and colleagues explain why the global community should continue to invest in children's health, to complete the unfinished child survival agenda and tackle the emerging child health priorities

Globally, deaths in children aged under 5 years declined by approximately 50% from 12.7 million in 1990 to 6.3 million in 2013, but progress has been insufficient to achieve the millennium development goal 4 target of a two thirds reduction by 2015.¹ The good news is that many countries have been able to accelerate the decline in under 5 mortality in the past two decades, more so following the launch of the United Nations secretary general's Global Strategy for Women's and Children's Health in 2010.² However, 17 000 children under 5 still die every day, largely from preventable communicable diseases and malnutrition; among those who survive, an estimated 200 million children are unable to attain their full developmental potential.^{3 4} At the same time, congenital anomalies, non-communicable diseases, and injuries are becoming increasingly important causes of morbidity and mortality in childhood.⁵ As a consequence, the decades ahead will be marked by this dual burden of childhood diseases, affecting most countries.

Here, we define children as aged 0-10 years. We present evidence based essential interventions to end preventable child deaths and promote healthy growth and development⁶; and we provide strategic directions in support of the new Global Strategy for Women's, Children's and Adolescents'

Health and the sustainable development goals agenda.

Methods

This paper is based on the forecasted changes in the distribution of causes of death in under 5s as countries move towards an absolute target of 25 or fewer deaths per 1000 live births by 2030. We estimated changes in the profile of the causes of death by examining the current distribution of causes of death in countries with different levels of under 5 mortality (table 1). Data on levels and causes of mortality by country came from WHO's Global Health Observatory.⁵ This predicted epidemiological profile served as a basis to identify emerging priorities. We drew priority interventions from the evidence syntheses previously conducted by WHO and partners.^{6 7} Priority interventions identified are those that tackle major causes of newborn and child mortality, as well as child development, and have been shown to have a high impact or are beneficial for the emerging priorities.

We drew strategic directions from the concept of universal health coverage, whereby all people should be able to equitably receive the full spectrum of essential, high quality health services—including health promotion, prevention, and treatment; rehabilitation; and palliative care—without suffering financial hardship.⁸ The paper also draws on the comments and feedback provided during the expert and public consultation on the background paper on children's health priorities prepared for the new Global Strategy for Women's, Children's and Adolescents' Health.⁹

The unfinished agenda for children's health

Of the estimated 6.3 million children aged under 5 years who died in 2013, more than 70% died in the first year of life.⁵ The leading causes of mortality were preventable newborn problems and infectious diseases—that is, preterm birth complications (15%), intrapartum related complications (11%), pneumonia (15%), diarrhoea (9%), and malaria (7%). In addition, 45% of all deaths in under 5s were associated with undernutrition, and more than 80% of newborn deaths were associated with low birth weight (fig 1).¹⁰

The reduction in neonatal mortality has been slower than that for older children; as a consequence, the proportion of deaths in

under 5s that occurs within the first month of life increased from 37% in 1990 to 44% in 2013.¹ Deaths in under 5s are increasingly concentrated in sub-Saharan Africa and southern Asia, and more than 50% occur in settings affected by conflict, displacement, and natural disasters. Sub-Saharan Africa has the highest under 5 mortality rate of 92 deaths per 1000 live births—more than 15 times the average for developed regions. Deaths are unevenly distributed between and within countries.

Epidemiological transition in under 5 mortality

As under 5 mortality declines, countries will face an epidemiological transition marked by a shift in the relative contribution of communicable and non-communicable diseases as major causes of childhood morbidity and mortality.¹¹ In the next two decades, these changes are likely to occur in the 68 countries where current under 5 mortality is at least 35/1000 live births. As a result, most countries will see a steady increase in the relative importance of deaths due to congenital anomalies, non-communicable diseases, and injuries.

Figure 2 illustrates the epidemiological transition of the causes of death as the under 5 mortality rate declines from 55 per 1000 live births to 50, 20, and less than 5 per 1000 live births.⁵ The relative contribution of congenital anomalies, non-communicable diseases, and injuries together is likely to increase from 12% to 14%, 34%, and 52%, respectively, of all deaths in under 5s. Meanwhile, the relative contribution of infectious diseases is likely to decline from 53% to 40%, 24%, and 8%, respectively. For example, in Bangladesh, the under 5 mortality declined from 144/1000 live births in

KEY MESSAGES

The millennium development goals were instrumental in increasing investment and action for child survival, thus reducing under 5 mortality by approximately 50% over the past two decades

Despite the gains made, 17 000 children under 5 years of age still die every day, mostly in sub-Saharan Africa and southern Asia and in countries affected by conflict and natural disasters

The future demands attention not only to the unfinished child survival agenda but also to a more holistic global child health agenda recognising the emerging priorities

Strategic choices have to be made to move from "business as usual" to innovative, multiple, and tailored delivery approaches to increase access, coverage, and quality of child health services

Table 1 | Distribution of countries and number of deaths in under 5s according to levels of mortality, 2013⁵

Under 5 mortality rate (per 1000 live births)	No (%) of countries (n=194)	No (%) of deaths (n=6 282 286)
<5	33 (17)	26 273 (0.4)
5-15	51 (26)	425 262 (6.8)
15-25	29 (15)	199 529 (3.2)
25-35	13 (7)	329 956 (5.3)
35-45	11 (6)	251 570 (4.0)
45-55	12 (6)	1 580 486 (25.2)
>55	45 (23)	3 469 210 (55.2)

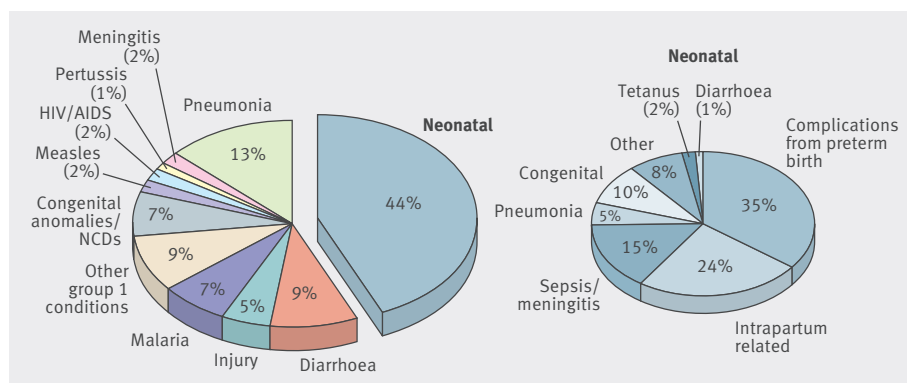


Fig 1 | Global causes newborn and under 5 mortality.^{5 10} NCD=non-communicable disease

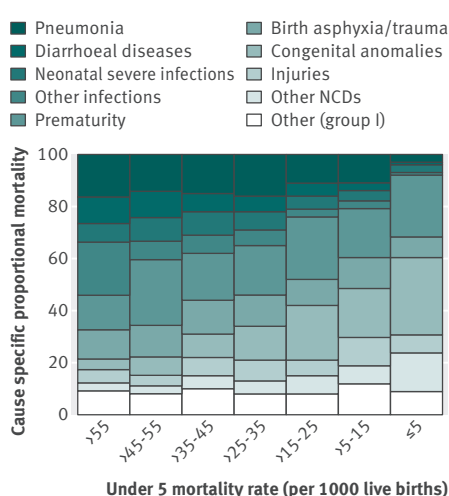


Fig 2 | Distribution of causes of death in children under 5 according to levels of under 5 mortality rate.⁵ NCD=non-communicable disease

1990 to 88/1000 live births in 2000 and to 41/1000 live births in 2013, at an annual rate of reduction of 5.4%. In the period 2000-13, the relative contribution of diarrhoea decreased from 13% to 6%, that of measles from 4% to 1%, and that of pneumonia from 18% to 14%.

Emerging priorities for children's health

Congenital anomalies, injuries, and non-communicable diseases (chronic respiratory diseases, acquired heart diseases, childhood cancers, diabetes, and obesity) are the emerging priorities in the global child health agenda. Congenital anomalies affect an estimated 1 in 33 infants, resulting in 3.2 million children with disabilities related to birth defects every year.¹⁰ The global disease burden due to non-communicable diseases affecting children in childhood and later in life is rapidly increasing, even though many of the risk factors can be prevented.¹²

Injuries (road traffic injuries, drowning, burns, and falls) rank among the top three causes of death and lifelong disability among children aged 5-15 years, yet they are

largely absent from global child survival initiatives.¹³ In 2012 violence and unintentional injuries killed an estimated 740 000 children under the age of 15, with the latter accounting for 90% of these deaths.⁵ Similarly, the worldwide number of overweight children increased from an estimated 32 million in 2000 to 42 million in 2013, including in countries with a high prevalence of childhood undernutrition.^{5 14} If these trends continue, by 2025 the prevalence of overweight in children under 5 years of age will rise to an estimated 11% from 7% worldwide.

Priority interventions

Box 1 summarises evidence based essential interventions for child survival, growth, and development that are well known but yet not reaching all children who need them.^{6 15 16} They include health and non-health sector interventions that need to be implemented at scale and with quality to close the equity gap and reach universal coverage.

Box 2 summarises beneficial interventions for tackling emerging priority conditions in childhood. They include clinical and non-clinical interventions and supportive laws and policies. Prevention of injuries, overweight, and obesity, for example, depend on appropriate national policies as well as services.^{17 18} The Commission on Ending Childhood Obesity recommended a multifaceted approach¹⁹: interventions that tackle maternal health, infant and young child feeding practices, marketing of unhealthy foods, and factors that restrict physical activity.¹⁸ Similarly preconception and periconception care interventions are increasingly important, not only to prevent congenital anomalies and optimise fetal development but also to enhance health during the child's life.²⁰

Multisectoral interventions are critical to tackle social determinants of health and child health outcomes. Alleviation of poverty, education and empowerment of women, laws and policies on marketing of food products, access to safe drinking water

and sanitation, and a safe environment are all essential to protect and support children's health and prevent common conditions such as pneumonia and diarrhoea.^{21 22}

Strategic directions

Delivery of comprehensive child health services requires functional health systems and strategies tailored to national and sub-national epidemiological situations. Major bottlenecks to universal health coverage include limited access to and poor quality of health services, suboptimal programme management, poor procurements and supply chain management systems, inadequately prepared and supported health workforce with provider shortages, and failure to convert national policies into action plans.²³ As a consequence, the coverage of many essential interventions remains low (table 2), a challenge that must be overcome as part of the sustainable development agenda.

Health sector and multisectoral efforts are needed to overcome this low coverage of interventions, the inequalities, and the social determinants of health. We propose five strategic directions to improve the current situation and move from "business as usual" to innovative, multiple, and tailored delivery approaches to increase access, coverage, and quality of child health services.

Delivery platforms

Service delivery ought to ensure availability of and seamless access to integrated packages of interventions through an optimal mixture of community (including home) and facility (health centre and hospital) based care. Optimising the mixture of community and facility based delivery of services is a widely used strategy to ensure that interventions reach populations, when and where they need them.²⁴ Evidence has shown that community health workers can increase access to preventive interventions such as health education, breast feeding and nutrition promotion and support, essential newborn care, stimulation and psychosocial support, and use of insecticide treated nets.²⁵ Similarly, appropriately trained and supported community health workers can provide treatment interventions for pneumonia, diarrhoea, malaria, and severe acute malnutrition.²⁶ However, for community health services to function optimally, they need to be part of the health system, and country specific strategies need to be in place to determine where and how to deliver these services. In India, training of community health workers to conduct postnatal home visits, training of physicians and nurses to treat or refer sick children, and strengthening of drugs and supervision resulted in substantial improvements in neonatal and infant survival.²⁷

BOX 1: SUMMARY OF ESSENTIAL NEWBORN AND CHILDHOOD HEALTH INTERVENTIONS

Adolescence and pre-pregnancy

- Family planning
- Preconception care*

Pregnancy

- Appropriate care for normal and high risk pregnancies

Childbirth

- Promotion and provision of thermal care for all newborns
- Promotion and provision of hygienic cord and skin care
- Promotion and support for early initiation and exclusive breast feeding within the first hour
- Newborn resuscitation

Postnatal period

- Antibiotics for newborns at risk and for treatment of bacterial infections
- Appropriate postnatal visits
- Extra care for small and sick babies (kangaroo mother care, treatment of infection, support for feeding, and management of respiratory complications)

Infancy and childhood

- Exclusive breast feeding for six months and continued breast feeding up to at least two years with appropriate complementary feeding from six months
- Monitoring and care for child growth and development
- Routine immunisation for common childhood diseases, including introduction of new vaccines against *Haemophilus influenzae*, *Pneumococcus*, and rotavirus
- Micronutrient supplementation, including vitamin A from 6 months
- Prevention and management of childhood malaria
- Prevention and management of childhood pneumonia
- Prevention and management of diarrhoea
- Case management of severe acute malnutrition
- Comprehensive care of children exposed to or infected with HIV

Health and multisector actions

- Ensuring food security for the family (or mother and child)
- Maternal education
- Safe drinking water and sanitation
- Hand washing with soap
- Reduced household air pollution
- Health education in schools

*Preconception care includes birth spacing and preventing teenage pregnancy, promotion of contraceptive use, optimisation of weight and micronutrient status, prevention and management of infectious diseases, and screening for and managing chronic conditions

Table 2 | Coverage of essential interventions in countries with latest survey since 2008⁴⁰

Indicator	No of countries with data	Median (range) % coverage
Demand for family planning satisfied	54	64 (13-95)
Antenatal care ≥4 visits	48	53 (15-94)
Skilled attendant at birth	60	84 (43-94)
Postnatal visit newborn	17	30 (5-83)
Exclusive breast feeding	51	41 (3-85)
Measles immunisation (first dose)	75	84 (42-99)
Antibiotic treatment for pneumonia	40	46 (7-88)
Oral rehydration therapy for diarrhoea	45	47 (12-76)
Malaria treatment (first line)	35	32 (3-97)

Integrated delivery of services

The purpose of integration is to meet children's needs in a holistic manner and provide services together for effectiveness, quality, and efficiency.²⁸ Integration spans not only the levels of care (community, primary, and referral) but also the child's life (pre-pregnancy to childhood). Integrated management of childhood illness and integrated community case management are examples of integration of preventive and

treatment interventions during visits with sick children.²⁹ The aim is for children to receive appropriate interventions, ideally at a "one stop shop." Similarly, routine immunisation outreach sessions have been used to deliver interventions such as health promotion, insecticide treated nets, vitamin A supplementation, and treatment of common childhood illnesses.³⁰ Recent evidence strongly supports linking these integrated case management platforms and strategies

with strong demand creation and community buy-in.

The Global Action Plan for the Prevention and Control of Pneumonia and Diarrhoea (GAPPD) is another form of integration.²² It provides a framework for coordinated and integrated actions to improve feeding and nutrition of infants and young children, access to safe drinking water and sanitation, hand washing with soap, reduction in indoor air pollution, immunisation, prevention of HIV, and treatment of pneumonia and diarrhoea. GAPPD is being implemented in several countries, and plans are under way to evaluate the extent to which it has been implemented. For example, Ghana, among other countries, introduced pneumococcal conjugate and rotavirus vaccines into routine immunisation and adapted the "Pocket book of hospital care for children."

Although integration of services is most efficient, vertical programmes may be desirable as a temporary measure where the health system is weak but a rapid response is needed to target vulnerable populations.³¹ This was the case in tackling the HIV epidemic, for which an urgent response was needed that is now being integrated into the health system. Vertical programmes may also provide a platform to incrementally build on other child health priority interventions.³²

Quality of services

Poor quality of care is a critical barrier to children's utilisation of health services and to health outcomes in many low and middle income countries. Provision of high quality services for children requires a competent and motivated health workforce, availability of essential medicines and physical resources, evidence based standards of care, an actionable health information system, and a functional referral system. Quality improvement processes should be embedded at all levels of service provision and be supported by appropriate managerial responses at subnational and national levels. Several strategies and approaches have been proposed to guide quality improvement in health services.³³ Programmes need to examine the effectiveness and cost of various approaches and determine which are most relevant in their context, with a view to long term feasibility and sustainability. Many of these approaches primarily identify barriers to high quality care and then implement quality improvement activities to overcome these barriers on the basis of "plan-do-study-act" cycle models.³⁴ Integrated management of childhood illness needs to be implemented at first level facilities, with improvements in triage, diagnosis, treatment guidelines, paediatric audits, monitoring, and follow-up at hospital level to improve paediatric quality of care.

BOX 2: STRATEGIES FOR TACKLING KEY EMERGING PRIORITIES IN CHILD HEALTH**Congenital anomalies**

- Optimisation of maternal nutrition to prevent low birth weight
- Periconception supplementation with folic acid
- Minimising and reducing exposure to harmful environment and substances
- Preconception and periconception maternal screening
- Newborn screening (for example, for hypothyroidism and haemoglobinopathies)

Injuries

- Policy and regulations to prevent and reduce risks of injuries and accidents
- Setting standards for safe environments and recreation areas for children
- Developing better road infrastructure
- Health education on risks of injuries, burns, and drowning

Overweight and obesity

- Appropriate policies and regulations on marketing of unhealthy foods and beverages to children and ensuring availability of healthy and nutritious choices
- Limitation of energy intake from total fats and sugars
- Increase in consumption of fruit and vegetables, as well as legumes, whole grains, and nuts
- Reducing the fat, sugar, and salt content of complementary foods and other processed foods
- Ensuring that healthy and nutritious choices are available and affordable to all consumers
- Practising child and school food and beverage policies
- Increased regular physical activity and reduced screen time

Promoting equity

The concept of universal health coverage calls for all people to be able to access essential health services without undue financial hardship. However, large inequalities between poor and better off children exist, both between and within countries.³⁵ Understanding the key drivers of these inequities is necessary to identify appropriate actions. Evidence has shown the effectiveness of multidimensional approaches that may include conditional cash transfers, voucher schemes, microcredit, outreach services, and targeted community health services.³⁶

Innovations

Improved delivery of child services will require continuous innovation, and the most promising innovations need to be supported, tested, used, and refined in countries. Innovations such as digital systems (including mobile health) have potential to strengthen health systems, reduce barriers to access, and strengthen monitoring and evaluation. Development of dispersible child friendly medicines, adaption of existing vaccines for use in resource poor settings, and point of care tests to improve early diagnosis and treatment are among the priorities for increasing access, quality, and coverage.

Global initiatives and action plans to achieve 2015-30 targets

Moving beyond 2015, the global community has set goals and targets for tackling the unfinished child survival agenda to achieve under 5 mortality of 25 or less per 1000 live births by 2030.³⁷ This momentum has been translated into several global initiatives: "ending preventable maternal mortality"

and "every newborn action plan" to promote universal coverage of high quality maternal and newborn care³⁸⁻³⁹; the "global action plan for the prevention and treatment of pneumonia and diarrhoea" to prevent and treat pneumonia and diarrhoea²²; a "comprehensive implementation plan on maternal, and infant and young child nutrition" to reduce undernutrition and obesity⁴⁰; the Global Technical Strategy for Malaria to reduce global malaria case incidence and mortality by 2030⁴¹; and the Global Vaccine Action Plan to prevent childhood diseases through vaccination.⁴² These global initiatives and action plans must be effectively articulated in national plans and the new Global Strategy for Women's, Children's and Adolescents' Health, and the emerging child health priorities must be embraced.

Conclusions

The next 15 years provide a unique opportunity for the global community to overcome health challenges affecting children aged 0-10 years. The unfinished agenda of preventable child mortality should remain a priority, with a focus on those countries and populations in greatest need. At the same time, increased attention should be given to emerging child health priorities. Governments and the global community at large must invest in the health of their children. The sustainable development goals, by virtue of their intersectoral and integrated approach, provide an excellent opportunity to mobilise the actions necessary to provide children with the services and the care they need and to leave no child behind. Governments, development partners, donors, multilateral agencies, UN agencies, and non-governmental organisations have important roles to play in aligning

their efforts and creating incentives and framework for integrated approaches to child health. The year 2015 should be a turning point towards a reinvigorated agenda in which children are enabled not only to survive but also to thrive.

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Realising the health and wellbeing of adolescents

Investing in adolescents' health and development is key to improving their survival and wellbeing and critical for the success of the post-2015 development agenda, argue **Laura Laski and colleagues**

Adolescence is a critical stage of life characterised by rapid biological, emotional, and social development. It is during this time that every person develops the capabilities required for a productive, healthy, and satisfying life. In order to make a healthy transition into adulthood, adolescents need to have access to health education, including education on sexuality;¹ quality health services, including sexual and reproductive; and a supportive environment both at home and in communities and countries.

The global community increasingly recognises these vital needs of adolescents, and there is an emerging consensus that investing intensively in adolescents' health and development is not only key to improving their survival and wellbeing but critical for the success of the post-2015 development agenda.² The suggested inclusion of adolescent health in the United Nations secretary general's Global Strategy for Women's and Children's Health is an expression of this growing awareness and represents an unprecedented opportunity to place adolescents on the political map beyond 2015. Ensuring that every adolescent has the knowledge, skills, and opportunities for a healthy, productive life and enjoyment of all human rights³ is essential for achieving improved health, social justice, gender equality, and other development goals.

We argue that the priority in the revised Every Women Every Child Global Strategy needs to be giving adolescents a voice, expanding their choices and control over their bodies, and enabling them to develop

the capabilities required for a productive, healthy, and satisfying life. We call for a global, participatory movement to improve the health of the world's adolescents as part of a broader agenda to improve their wellbeing and uphold their rights.

Methods

This paper is based on the review of evidence based inputs received from public consultations conducted by the Partnership for Maternal, Newborn and Child Health and expert meetings organised by the UN Population Fund (UNFPA) in 2015 as part of the UN secretary general's Global Strategy for Women's, Children's and Adolescents' Health. The consultations brought together leaders in adolescent health from governments, civil society organisations, UN agencies (including H4+, a partnership between UNAIDS, UNFPA, Unicef, the World Health Organization, UN Women, and the World Bank that helps countries improve their health services for women, children, and newborns), donors, academics and other researchers, private sector organisations, and young people and built consensus on priority actions needed to protect and promote the health of adolescents and youth.

Health challenges faced by adolescents

Adolescents have benefited less than younger children from the "epidemiological transition" that has reduced all causes of mortality among children.³ In 2012, an estimated 1.3 million adolescents died mostly from preventable or treatable causes.⁴ We set out the major health problems below.⁵

Injuries and violence

Unintentional injuries are a leading cause of mortality and morbidity during the second decade of life. Road traffic injuries are the top cause of death among adolescents, with some 330 adolescents dying every day.

An estimated 180 adolescents die every day from interpersonal violence.⁵ At least one in four boys aged 15-19 said they had experienced physical violence since age 15.⁶ Worldwide, up to 50% of sexual assaults are committed against girls under 16, and some 30% of girls aged 15-19 experience violence by a partner.⁴ Moreover, many girls' first sexual experience is forced and coerced.

Mental health and self harm

Although half of all mental health disorders in adulthood start by age 14, most remain undetected and untreated. Depression is the top cause of illness and disability among adolescents, and suicide is the leading cause of death among adolescent girls aged 15-19 and the third cause of death among all adolescents 10-19 globally.⁴

Communicable and non-communicable diseases

Childhood immunisation has brought down adolescent deaths and disability significantly,⁴ but common infectious diseases that have been a focus for action in young children are still killing adolescents. For example, diarrhoea and lower respiratory tract infections are estimated to rank second and fourth, respectively, among causes of death in 10-14 year olds globally.⁴ Adolescents who are sexually active have the highest rates of prevalent and incident human papillomavirus (HPV) infections, with 50-80% having infections within three years of initiating sexual intercourse.⁷

The health related behaviours that underlie major non-communicable diseases usually start during adolescence: tobacco and alcohol use and diet and exercise patterns potentially leading to overweight and obesity. These habits could affect the morbidity and mortality of adolescents later in their lives as well as of future generations. Anaemia, resulting from rapid growth during adolescence combined with a lack of iron, affects girls and boys and is the third cause of years lost to death and disability.⁴

Maternal mortality and morbidity

In low and middle income countries high adolescent birth rates reflect both a lack of opportunities available to girls and vulnerabilities they experience during adolescence and beyond. Every day in developing countries, 20 000 girls under age 18 give birth. Girls under 15 account for two million of the annual total of 7.3 million new adolescent mothers; if current trends continue, the number of births to girls under 15 could rise to three million a year in 2030.⁸

Pregnancy, whether intended or not, puts adolescents at risk of death and injury, including conditions such as obstetric fistula. Maternal mortality is the second leading

KEY MESSAGES

Adolescents aged 10-19 years have specific needs and health systems need to take into account their biological, emotional, and social development
Interventions to support adolescents to attain a productive, healthy, and satisfying life are critical to the success of the sustainable development agenda
Priorities for action include health education, access to health services, immunisation, nutrition, and psychological support
Action is also needed in other sectors, particularly education

cause of death among adolescent girls aged 15-19 years.⁴ Around 11% of births worldwide, or an estimated 16 million, are to girls aged 15-19,^{9 10} and very young mothers are the most likely to experience complications and die of pregnancy related causes.¹¹ Adolescent girls have high rates of complications from pregnancy, delivery, and unsafe abortion.^{4 10 12} The consequences have implications for future generations, as newborns and infants of adolescent mothers are at higher risk of low birth weight and mortality.¹³ Gaps in the fulfilment of sexual and reproductive health undermine the achievement of gender equality, drain household incomes and public budgets, lead to poor health and educational outcomes, lower productivity and labour force participation, and result in missed opportunities for economic growth.¹⁴

HIV-AIDS

Although there has been a 43% decline in new HIV infections among adolescents since 2000, globally, there are twice as many new infections as deaths from AIDS.¹⁴ In 2013, an estimated 2.1 million adolescents between the ages of 10 and 19 years were infected with HIV. In 2014, HIV/AIDS was estimated to be the second leading cause of death globally.⁴ Adolescents, especially adolescent girls, are the only population group for which AIDS related deaths are not falling.¹⁵ Young women and adolescent girls are disproportionately vulnerable and at high risk.¹⁶

Interventions to protect and promote health

In the past 20 years, governments and the international community have made clear commitments to adolescents and their health.^{14 5 8-10 17 18} Evidence shows that positive health outcomes for adolescents require intervention from not only health but other sectors, including education and workforce.

To ensure adolescents have a voice, choice, and control over their bodies and are enabled to develop the capabilities required for a productive, healthy, and satisfying life, global efforts should focus on reducing adolescent deaths and morbidity and creating a supportive legal and social climate for positive adolescent development. Key interventions need to span the health sector to social determinants of health, to other actors such as parents and community members. Based on an analysis of problems and opportunities, we suggest the following priority actions:

- **Health education, including comprehensive sexuality education**—Adolescence is an appropriate time to learn about healthy diets, the consequences of alcohol and substance misuse, resisting peer pressure and bullying, healthy sexuality, sexual

violence, respect for human rights, and promotion of gender equality. Promotion of and opportunities for physical activity should be also included in schools and communities

- **Access to and use of integrated health services**—As adolescents become sexually active, they require an integrated package of services, especially sexual and reproductive health services. This includes access to an expanded mix of contraceptives, including emergency contraception and long acting reversible contraceptives; safe abortion where legal, and management of the consequences of unsafe abortion; maternity care; testing and treatment of sexually transmitted infections, including HIV testing, diagnosis, counselling, care, and post-exposure prophylaxis; and care after gender based or sexual violence
- **Immunisation**—HPV vaccination for 10-14 year olds protects them from developing cervical cancer as adults. HPV vaccination is also an opportunity to reach adolescents with other interventions such as menstrual hygiene, deworming, and malaria prevention. Other critical vaccines include tetanus booster, rubella, and hepatitis B (if not previously vaccinated), measles, and meningococcal disease (depending on epidemiology)
- **Nutrition**—Developing healthy eating and exercise habits at this age are foundations for good health in adulthood and protect against overweight and obesity. Nutritional supplementation, particularly iron and folic acid, is important to prevent anaemia and protect the health of their future offspring (should they choose to have children)
- **Psychosocial support**—Mental health problems in adolescence should be detected and managed by competent health workers.⁵ Schools and other community settings can also help in promoting good mental health

Creating health systems suited to adolescents

Availability of good quality care and health-care workers trained to deal with adolescents is critical for delivering effective health interventions. Efforts to improve adolescent health require health systems that are responsive to adolescents.⁴ Stigma, discrimination, judgmental treatment, lack of confidentiality, and inability to physically access services have been shown to be important barriers to care.¹⁹ Evidence from both high and low income countries shows that services for adolescents are highly fragmented, poorly coordinated, and uneven in quality.⁴ Outreach and non-facility based services are important to reach adolescents who otherwise

will not come to the services. Variability in quality can be minimised by setting standards and supporting their achievement.⁴

Individual, interpersonal, community, organisational, and structural factors affect how adolescents access care, how they understand information, what information they receive, which channels of information influence their behaviours, and how they think about the future and make decisions in the present. To improve acceptability and quality of health services, health workers, particularly primary care workers, need to be trained and supported in protecting adolescents' privacy and confidentiality and in treating them with respect and without judgment.⁴

Financial and legal barriers also need to be tackled. Adolescents may not be covered by an effective prepaid pooling arrangement, such as insurance schemes, or be able to meet out of pocket expenses.²⁰ Financial protection to cover the services needed by adolescents should be part of universal health coverage.⁴ In some countries, governments restrict access of adolescents to health services, especially sexual and reproductive services, by requiring the consent of parents, or spouses if they are married.

Non-health sector interventions

Numerous factors outside the health sector protect or undermine the health of adolescents.²¹ Short and long term risks arise from economic (poverty, inequality), sociocultural (gender, early marriage), biological (prevalence of malaria, water borne helminths, HIV, etc) physical, environmental (such as road conditions, housing, and pollution), legal, and policy factors, but education is the principal socioeconomic determinant of adolescent health.

A good education gives young people the skills and knowledge to enable them to mitigate health risks and to seek health and social services when faced with these problems. The longer a girl stays in school, the greater the chances that she uses modern contraception if she has sex, and the lower her chances of giving birth as an adolescent.¹⁷ Early (and often forced) marriage is a serious contributing problem to school retention and health. Fifty one countries have rates of early marriage (before age 18) that are above 25%, and nine out of 10 adolescent births take place in the context of early marriages.¹⁸ Schools must become a safe place for girls and should enable pregnant girls to pursue their education in a supportive environment.

Adolescents need quality education and schooling at least to secondary level. Younger adolescent girls in particular may need extra support to stay in school, and all adolescents

need a range of economic and social assets such as financial literacy, life skills, safe spaces, social networks, and economic capital. Vocational training is also important to prepare adolescents for decent paid employment and self employment after they reach working age.

Communities and schools must be equipped with safe water and sanitation, which promotes good hygiene, and particular challenges for menstruating girls must be addressed. Appropriate spaces and facilities for physical activity need to be in place to promote and enable safe and healthy exercise practices.

Parents and tutors have a critical role in raising healthy children. In the challenging adolescent years, parents need support, information, skills, and resources to function effectively. Investment in support activities for parents is an important component of programmes for adolescents, to prevent interpersonal violence and promote good mental and sexual health.²² Support (both practical and legal) also needs to be provided for those affected by harmful traditional practices and violence, including trafficking. Over the next five years, interventions must be prioritised for places where child marriage is prevalent, including keeping girls in school and equipping them with the knowledge and ability to exercise their rights as adolescents. Finally, adolescents must be given the opportunity to participate in decision making and be encouraged to participate in the political process once they have reached the legal age.

Policies and laws protecting the health of adolescents

Adolescents are neither children nor adults; their needs can be easily overlooked in policies. Health interventions for adolescents cannot be effectively implemented without the appropriate policy and legal environment and its effective application. In this regard countries need to take the following actions:

- **Enable access to health services**—Examine and potentially revise current policies to remove mandatory third party authorisation for sexual and reproductive health services and adopt flexible policies to allow adolescents to be considered “mature minors”
- **Control exposure to unhealthy products**—Enact and enforce laws on use of tobacco, alcohol, and illegal substances and food policies to reduce exposure to dangerous and unhealthy substances (such as raising taxes on tobacco and alcohol, prohibition of sale to people below an appropriate minimum age, prohibiting smoking in

public spaces, setting lower maximum blood alcohol concentration levels for young drivers, and regulating marketing of foods high in saturated fats, trans-fatty acids, sugar, or salt)

- **Revise and implement laws on child marriage**—The minimum age at marriage should be universally set at 18 for both boys and girls. Exceptions to marry with consent from parents should not be included in marriage laws. As part of civil registration and vital statistics efforts, birth and marriage registration should be made mandatory
- **Make adolescents visible in policy formulation and monitoring**—Use existing data on adolescents from censuses, demographic and health surveys, and multiple indicator cluster surveys to formulate policy and deliver programmes. Dedicated surveys such as the global school-based student health surveys are needed to overcome the lack of data, especially on younger adolescents and other subpopulations of adolescents, such as head of households, those living without their parents, domestic workers or migrants, refugees, those living with disabilities, and trafficked adolescents.

Building a new monitoring framework

We need a unified platform that allows countries to come together and pursue a contextually relevant yet common agenda on adolescent health. The global strategy presents just such a platform, convening and leading countries in a global call to action on indicators related to adolescent health in the sustainable development goals accountability framework. Four of the sustainable development goals include clearly stated targets for adolescent health (see appendix on thebmj.com for details).

Given the extent of change across adolescence, these health targets must be measured separately in adolescents aged 10-14 and 15-19 years so that we can monitor countries' progress.

Conclusions

The inclusion of adolescent health in the UN secretary general's Global Strategy on Women's and Children's Health and targets directly linked to adolescent health in the post-2015 sustainable development goals agenda represent an unprecedented opportunity to step up efforts to adopt policies for adolescents. By developing programmes to provide them with the skills they need for their health and development countries can ensure adolescents will contribute fully to their societies and develop the judgment, values, behaviours, and resilience they need to be safe, to end discrimination and

violence, and to help create and sustain national and global peace. In turn, this healthy generation will nurture the next so that it can participate effectively in a rapidly changing globalised world.

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Ending preventable maternal and newborn mortality and stillbirths

Doris Chou and colleagues discuss the strategic priorities needed to prevent maternal and newborn deaths and stillbirths and promote maternal and newborn health and wellbeing

Despite remarkable achievements to improve maternal and child survival, 800 women and 7700 newborns still die each day from complications during pregnancy, childbirth, and in the postnatal period; an additional 7300 women experience a stillbirth.¹⁻³ Some countries have been able to improve health outcomes for women and children, even with relatively low health expenditures.⁴ The key to their success can be found in context specific, evidence informed strategies to improve and integrate care, supported by strong guiding principles and good governance.⁵

This paper builds upon two strategic plans—Every Newborn: An Action Plan to End Preventable Deaths (ENAP) and the Strategies toward Ending Preventable Maternal Mortality (EPMM)^{6,7}—that aim to catalyse global action to eliminate wide disparities in the risk of death and end preventable maternal and newborn mortality and stillbirths within a generation (box 1). We discuss the strategic priorities and essential interventions needed to prevent maternal and newborn deaths and stillbirths and promote maternal and newborn health and wellbeing.

Methods

A complete review and mapping of the elements of ENAP and EPMM was undertaken.

KEY MESSAGES

Unacceptable levels of maternal and newborn mortality and stillbirths impede the realisation of healthy and sustainable societies

Achieving country and global targets for ENAP and EPMM will contribute to the goals of the Global Strategy for Women's, Children's and Adolescents' Health

We present five strategic objectives that should be prioritised to end preventable maternal and newborn deaths and stillbirths, synthesised from the strategic objectives described by ENAP and EPMM

The objectives focus on strengthening care around the time of birth; strengthening health systems; reaching every woman and newborn; harnessing the power of parents, families, and communities; and improving data for decision making and accountability

Key themes and strategic objectives that were found to be largely similar are discussed in this paper. Where the emphasis or recommended strategic approach varied based on the target population, and the distinctions were deemed important, specific recommendations were retained.

Both strategic plans are based on scientific and empirical evidence, and underwent wide expert consultation with inputs from national, regional, and global meetings, and an official online consultation.^{7,8,9} The mortality targets were endorsed by countries, including at the 67th World Health Assembly in 2014.¹⁰

Limited progress

As the era of the millennium development goals comes to a close, more needs to be done for women's and children's health. Although maternal deaths declined to 289 000 in 2013,¹ the 45% reduction in maternal mortality since 1990 falls far short of the target of 75% in millennium development goal 5. The majority of maternal deaths are still due to direct obstetric causes—that is, haemorrhage (27%), hypertensive disorders (14%), sepsis (11%), and complications of abortion (8%).¹¹ However, a rising number of deaths are related to chronic health conditions in pregnancy, such as diabetes, HIV, malaria, cardiovascular conditions, and obesity (fig 1).

Newborn deaths have declined by 40% since 1990; about 2.8 million newborns died in 2013. The fall in newborn mortality has been slower than that in child mortality, and newborn deaths now account for 44% of all deaths in children under 5 globally.² The three main causes of newborn deaths are preterm birth complications (35%), intrapartum conditions (24%), and infections (20%).¹² Almost 80% of newborn deaths occur among babies who weigh less than

2500 g at birth, especially those born preterm (fig 1).¹³

Stillbirths have declined by only 15% since 1995. An estimated 2.6 million stillbirths occurred globally in 2009, of which 40% were intrapartum and probably due to inadequate care.^{3, 14} In addition to prolonged and obstructed labour, untreated infections such as syphilis are an important cause of stillbirths in low resource settings.¹⁴

Optimal quality of care around childbirth and in the neonatal period could avert 113 000 maternal deaths, 531 000 stillbirths, and 1.3 million newborn deaths by 2020.¹⁵ Furthermore, satisfying the unmet need for family planning could prevent 29% of maternal deaths a year.¹⁶ Effective care that prevents mortality will also prevent maternal and neonatal morbidities and improve child neurodevelopmental outcomes and long term adult wellbeing.^{13, 17, 18} The health and survival of babies and their mothers are inextricably linked, calling for coordinated care before and during pregnancy, in childbirth, and in the postnatal period.

Strategic priorities

Evidence based strategy must inform planning for maternal and newborn health and survival, with due consideration of health system dynamics and social and environmental risk factors in different countries.¹⁹ Financial security and health equity are essential. The sustainable development goals provide a framework for universal health coverage described by three, interlinked objectives—enhancing the quality and availability of essential health services; achieving equitable and optimal uptake of services in relation to need; and improving cost efficiencies and financial protection.²⁰ The Global Financing Facility can help to drive financial innovations to achieve the sustainable development goals across the

BOX 1 GLOBAL TARGETS FOR ENDING PREVENTABLE MATERNAL AND NEWBORN MORTALITY

- Every country should reduce its maternal mortality ratio by at least two thirds from the 2010 baseline, and no country should have a rate higher than 140 deaths per 100 000 live births (twice the global target)
- Every country should have a national neonatal mortality rate of ≤ 12 per 1000 live births and a stillbirth rate of ≤ 12 per 1000 total births
- The global maternal mortality ratio should be < 70 maternal deaths per 100 000 live births
- The global neonatal mortality rate milestone will be 9 per 1000 live births and stillbirth rate 9 per 1000 total births

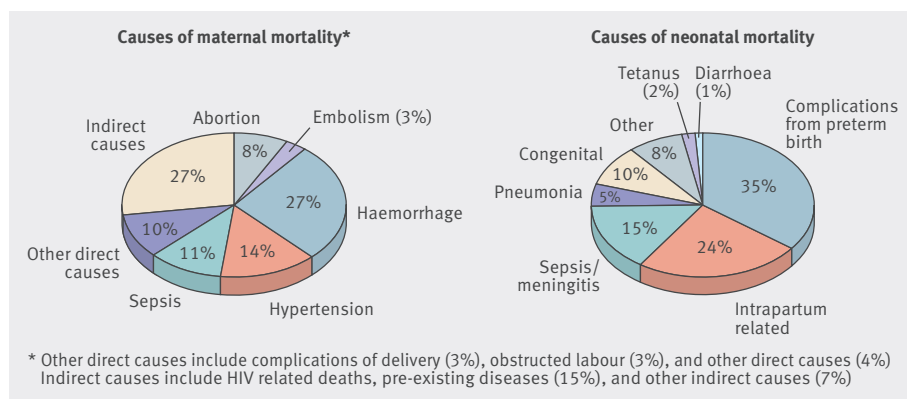


Figure 1 | Causes of maternal and neonatal mortality^{11,12}

continuum of reproductive, maternal, newborn, child, and adolescent health by 2030.²¹

We present five priorities, synthesised from the strategic objectives described by ENAP and EPMM (box 2).

Objective 1—Strengthen care around time of birth

Mothers and their babies are at highest risk of death during labour, childbirth, and the first week after birth. Investing in improved access to and quality of care around this time, and achieving high levels of coverage of effective interventions, has the potential to avert three million deaths of women, newborns, and stillborn babies a year, almost two million of which can be prevented around the time of birth (fig 2).¹⁵

Despite a global increase in coverage of skilled birth attendance, associated declines in maternal mortality have been modest, and for stillbirths virtually non-existent.^{3,4,22,23} This lack of improvement highlights the need to focus on quality of care, including provider competencies and environments that enable provision of essential clinical interventions with dignity. High quality healthcare is safe, effective, timely, efficient, equitable, people centred, and respectful.²⁴⁻²⁶ Given the inextricable link between mother and baby, care should also be administered without separation of mother and baby.²³⁻²⁵

Effective healthcare for all major causes of death will contribute to ending preventable maternal and newborn mortality and reaching the highest attainable level of health.^{11,15,27}

BOX 2 PRIORITY STRATEGIC OBJECTIVES

- Strengthen and invest in care around the time of birth, with a focus on improving quality and experience of care, while ensuring full integration of services for mothers and babies across the continuum of care
- Strengthen health systems to optimise the organisation and delivery of care, the workforce, commodities, and innovation
- Reach every woman and newborn by minimising inequities in access to and coverage of care
- Harness the power of parents, families, and communities, and engage with society
- Improve data for decision making and accountability

For example, family planning will prevent closely spaced or ill timed pregnancies, which are directly correlated with increased mortality, and implementation of WHO's technical and policy guidelines for access to safe abortion will also avert deaths.²⁸ For newborn health, improved care around the time of childbirth and special care for small and sick newborns is essential to reduce mortality.⁸

Objective 2—Strengthen health systems

Health system strengthening must tackle both the hardware (essential health infrastructure, amenities, and commodities) and software (leadership and governance, transparent health information, innovation and private-public partnerships, mechanisms for participation and community engagement, and respectful care norms and values) of health systems.²⁹ In addition, effective referral systems are needed to ensure seamless coordination across time, disciplines, and facilities.

Lack of an adequate health workforce and access to lifesaving commodities are major constraints in many countries. Thirty eight high burden countries face critical imbalances and shortages in the availability of healthcare providers.³⁰ Nearly 90% of essential care services for maternal and neonatal health can be provided by health workers with midwifery skills, provided they are educated to achieve international standards of competency and regulated to ensure their skills are maintained.³⁰ Yet midwives make up only 36% of the global maternity care

workforce. The lack of complete registration of births and deaths and accurate information on causes of death to inform healthcare decision making and programme evaluation limit the equitable delivery of essential, quality interventions to populations in need. Research and development is needed to tackle intransigent problems in the delivery of healthcare services and to develop technologies that make birth safer, such as simplified resuscitation or better drug delivery. The global community must also explicitly describe what constitutes quality of care and skilled attendance at birth to enable appropriate monitoring and evaluation, and WHO is developing standards that respond to the quality framework published in its vision statement (WHO, unpublished data).³¹

Objective 3—Reach every woman and newborn

Equity is a fundamental human right and a prerequisite to achieving the sustainable development goals. Programme planners need to better understand barriers to access and the personal factors that make care acceptable to all. Equity includes not just access to services but provision of high quality care without discrimination and meeting sustained demand at scale.

Gender equality and the empowerment of women and girls are central to a rights based approach. Gender based violence is widespread and its adverse effects include unwanted pregnancies, pregnancy complications including low birth weight and miscarriage, maternal injury and death, and sexually transmitted infections such as HIV/AIDS.³² Strategies for empowering women in their reproductive and maternal healthcare must ensure not only the power of decision making—including whether, when, and how often to get pregnant—but the availability of options they need to exercise their choices.

The cost of health services can be a major barrier to care. Up to 11% of the population in some countries incur high out-of-pocket costs

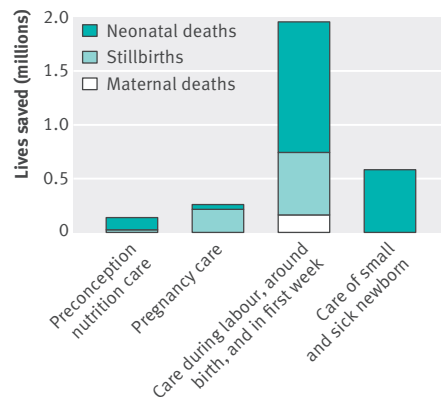


Figure 2 | Potential impact of intervention packages¹⁵

for healthcare, with as many as 5% forced into poverty by health related expenditures, including costs associated with essential maternal and newborn care.³³ Universal health coverage means reaching all people in the population with essential services and protecting them from financial hardship owing to the cost of these services. Performance based financial incentives and conditional cash transfers have been effective in increasing care seeking and improving quality of care.³⁴ Political and financial decision makers in countries and global donors must prioritise adequate and sustainable resources for maternal and newborn health.

Objective 4—Harness the power of parents, families, and communities

Ideally, families protect and care for women and newborns. Men have an important role in safeguarding family health, and they should receive support to do so.³⁵ Evidence shows that women's groups led by a skilled facilitator can improve maternal and neonatal health through participatory learning, particularly in rural settings with low access to health services.³⁶ Trained community health workers can assist families to strengthen preventive and caregiving practices and facilitate appropriate care seeking. Participatory mechanisms at every level of the health system can help foster community engagement and ensure that services are transparent, inclusive, and responsive to those they serve. Civil society organisations, including parent groups, can contribute substantially to social mobilisation and can hold governments and health services to account for maternal and neonatal health commitments.

Objective 5—Improve data for decision making and accountability

Changing population demographics and disease burden affect the epidemiology of risk in countries and influence the choice of strategies to prevent maternal and newborn deaths and stillbirths.^{23,37} Better data are needed for such planning. Establishing national registration and vital statistics systems in every country is essential for counting births and deaths and tracking progress.³⁸ In 2012 only a third of countries had high quality civil registration systems for maternal or neonatal deaths or stillbirths; about 137 million births globally, and nearly all neonatal deaths and stillbirths, were unregistered.¹³ The countries where little or no empirical data are available tend to be those where the estimated burden is highest. Accurate documentation of cause of death using standard definitions is also critical to designing effective health programmes to tackle preventable causes of mortality. Countries must invest in strengthening

maternal and perinatal death review and response mechanisms.^{39,40}

Additional global indicators are needed. Innovations in information technology (including m-health) can strengthen health systems through effective, real time data collection.⁴¹ Closing the loop of monitoring and evaluation through actual use of data to understand the effects of interventions is critical in ensuring accountability.⁴²

Priority interventions

To achieve the targets of ENAP and EPMM an essential package of effective interventions must be implemented to reach every woman, pregnancy, and newborn. But the choice of interventions and measures of success must be tailored to each country based on local context. The interventions related to maternal and newborn care that are included in the UN Global Strategy for Women's, Children's and Adolescents' Health (see data supplement on bmj.com)⁴³ are not exhaustive but are prioritised based on their substantial effects on the main causes of maternal and newborn mortality and morbidity and stillbirth.^{15,19}

Conclusion

As the agenda of the sustainable development goals emerges, healthy societies where women, adolescent girls, newborns, and children thrive, and pregnancy and childbirth are safe everywhere, should be at the heart of its ambition. Ending preventable maternal and newborn deaths and stillbirths is possible within a generation and requires focused attention on high impact interventions and strategies to improve access and quality of care. Effective care around the time of childbirth is most critical for survival and health, but comprehensive strategies and high impact interventions should span the continuum of care including before pregnancy. The detailed strategic guidance, specific targets, interventions, and milestones from the ENAP and EPMM global action plans provide guidance for countries to use in their formulation of national health plans and funding priorities.

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Effective interventions and strategies for improving early child development

Investing in early child development is a smart and essential strategy for building human capital, reducing inequities, and promoting sustainable development, argue

Bernadette Daelmans and colleagues

The millennium development goal on child health has led to great improvements in child survival worldwide. Child mortality has fallen by almost 50%, resulting in an estimated 17 000 fewer children dying every day in 2013 than in 1990.¹ Nevertheless, many children who survive do not thrive, with over 200 million children under 5 years of age at risk of not attaining their developmental potential.² Physical and mental health, educational and occupational attainment, family wellbeing, and the capacity for mutually rewarding social relationships all have their roots in early childhood. We now have a good understanding of the serious implications of young children going off course, including the longer term economic and societal ramifications. Here, we synthesise evidence about effective interventions and strategies to improve early child development, and call for it to be included in a new global strategy on women's, children's, and adolescents' health.

Methods

Our analysis draws on the following evidence: WHO records on early child development, beginning with the Commission on Maternal Care and Mental Health led by John

Bowlby in 1951³; four special scientific journal issues on early child development and on efficacy and effectiveness of interventions and programmes²⁻⁶; the conclusions of the Commission on Social Determinants of Health⁷; the WHO expert meeting held in January 2013 to review evidence on the role of the health sector in improving early child development⁸; and empirical neuroscience research linking early experiences with health and diseases across the lifespan.

Why early development is important

Child development refers to the expansion of physical, cognitive, psychological, and socioemotional skills that lead to increased competence, autonomy, and independence. What children experience during the early years (prenatal to the age of 5 years) creates a trajectory across the lifespan. Adverse exposures and experiences in early childhood increase the risk of poor social, cognitive, and health outcomes, including economic dependency, violence, crime, substance misuse, and adult onset of non-communicable diseases. Early deficits are compounded and become increasingly difficult to reverse beyond early childhood.⁹

Genes and experiences interact to shape brain architecture and functioning, which develops rapidly in the first few years of life when neuroplasticity is greatest. Neural connections formed early in life lay the foundations for physical and mental health, affecting adaptability, learning capacity, longevity, and resilience.¹⁰ Supporting children's development is therefore imperative, especially for the millions of children who live in disadvantaged and vulnerable families and communities and who face multiple adversities.

The figure summarises the risk factors for suboptimal development. They include biological and contextual factors.¹¹ Gender disparities, for example, are a critical component of the sustainable development framework and start prenatally, with boys being more sensitive to neurological threats¹² while girls are more at risk from selective abortion.¹³ To prevent and mitigate risks, integrated responses are required that improve children's physical, familial, and societal environments.

Priorities for intervention

Interventions to protect and support early child development start before conception and continue through pregnancy and childbirth into early childhood (box).¹⁴ Protecting children from illness and ensuring adequate nutrition are essential but not sufficient. Children need to grow in a caring, safe, and stimulating environment that provides opportunities for ongoing learning and mastery. We highlight three areas of intervention that can be integrated into ongoing programmes for maternal and child healthcare and nutrition: promotion of responsive and nurturing caregiving, supporting maternal mental health, and social protection through poverty reduction strategies that strengthen family capacity to provide for children.

The benefits of these interventions include better mental and physical health and academic performance during childhood and adolescence, and increased economic productivity and social integration during adulthood.^{15 16} The rate of return on investment in programmes that promote early childhood for disadvantaged children is estimated to be 7-10%.¹⁷

Promoting responsive and nurturing care

Children thrive in stable and engaged family environments in which parents show interest and encourage children's development and learning. WHO and Unicef developed Care for Child Development (CCD), an evidence based intervention to support care giving.¹⁸ By promoting age appropriate play and communication, CCD enables carers to strengthen their sensitivity and responsiveness to their child's needs. Responsive care giving in turn has an effect on care practices, including responsive feeding, seeking care for illness, child stimulation, and opportunities for learning, and it also benefits parental mental health.¹⁹ CCD has been shown to improve children's cognitive, social, and language scores.²⁰ Landmark programmes, such as the Jamaican home stimulation programme, have shown the immediate and long term effects of the intervention when delivered as part of health and nutrition services.²¹

KEY MESSAGES

Adverse exposures and experiences in early childhood increase risks for poor social, cognitive, and health outcomes

Despite great strides in improving child survival over 200 million children under 5 are at risk of not reaching their full potential

Interventions implemented through health, nutrition, education, and social protection sectors are effective at improving early child development

Such interventions have long term health, economic, and social benefits

Interventions to promote nurturing care, protect maternal mental health, and reduce poverty should be prioritised to complement and enhance services for maternal and child health and nutrition

ESSENTIAL INTERVENTIONS TO SUPPORT EARLY CHILD DEVELOPMENT

Preconception care

- Promotion of adequate maternal nutrition
- Maternal immunisation
- Birth spacing
- Cessation of smoking and substance misuse
- Detection of genetic conditions
- Prevention from environmental toxins
- Prevention of intimate partner violence
- Support for mental health

Maternal health

- Antenatal, childbirth, and postnatal care by a skilled provider
- Detection and care for maternal mental health problems

Child health

- Immunisation
- Prevention and integrated management of newborn conditions
- Prevention and integrated management of childhood illnesses
- Counselling on Care for Child Development

Nutrition

- Counselling on infant and young child feeding, management of feeding difficulties, and inadequate growth
- Counselling on Care for Child Development

Adolescent health

- Promoting health literacy and support for healthy lifestyles
- Addressing adolescent health needs and agency for decision making to promote health and development

Violence prevention

- Prevention of child maltreatment
- Prevention of violence in the home and community

Environmental health

- Access to safe water, sanitation, and hygiene
- Access to electricity
- Safe places for play
- Prevention of exposure to toxins such as lead, mercury, and pesticides
- Prevention of indoor and outdoor air pollution

Social protection

- Social help and cash transfer schemes
- Birth registration
- Parental leave and child care
- Child protection services

CCD can be integrated into services for well and sick children, preschool programmes, and services to prevent and manage maltreatment.²²⁻²³ Work is in progress to develop complementary tools that enable providers to recognise when children show a developmental delay or disability and to act appropriately, with intensified intervention or referral.²⁴ This addition is expected to improve the capacity of countries to care for children with disabilities and implement rehabilitative strategies.²⁵

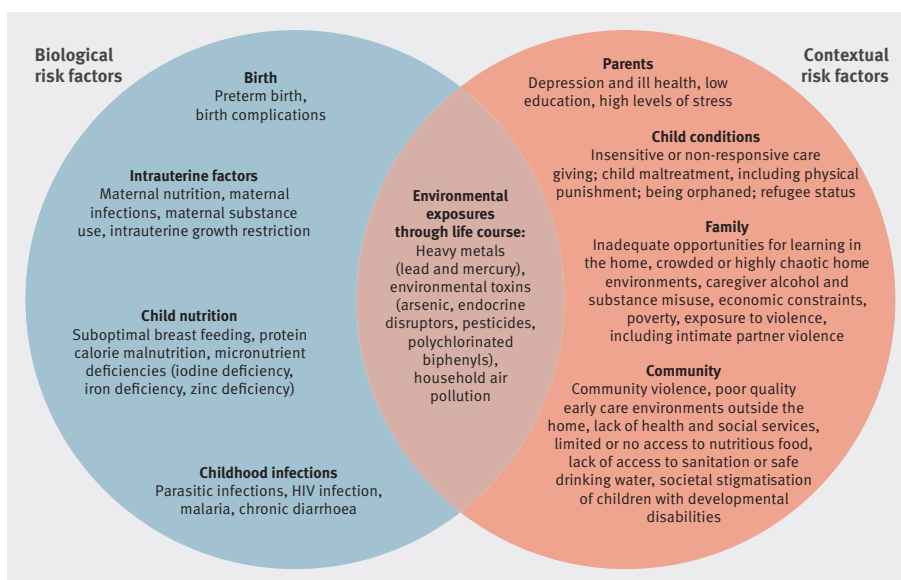
Supporting maternal mental health

Starting with Bowlby's seminal work on attachment and loss,³ evidence has accumulated about the adverse effects of maternal depressive symptoms on early child development and quality of parenting. Between a third and a fifth of pregnant women and mothers of newborns experience serious mental health problems that can be recognised through use of simple reliable tools.²⁶ Poor maternal mental health nonetheless remains a seriously under-recognised public health problem. Young children can be protected against ill effects if mothers are helped to improve their caregiving skills and treated for their underlying conditions, as needed.²⁷ These interventions can be integrated into health services and implemented by paraprofessionals through home visiting, mothers' groups, or by community health workers with specialised training.

Family support through social protection to reduce poverty

Poverty remains a pervasive determinant of suboptimal health and development. Children growing up in poverty have an increased likelihood of being exposed to environmental risks, household stresses, and violence; they also receive less optimal healthcare, nutrition, and education. Evidence from countries that have implemented large scale early child development programmes shows the importance of coordinated actions providing social protection (such as financial support); building parents' capacities (vocational training, parenting skills, etc), and using multiple platforms to reach families and children with effective interventions for health, nutrition, child care, and learning.²⁸

Conditional cash transfer (CCT) programmes, implemented particularly in Latin America, and unconditional cash transfer programmes in sub-Saharan Africa have been shown to benefit nutrition and child development, helping to break the intergenerational effects of poverty.²⁹⁻³⁰ By increasing household resources and access to early child care and preprimary education, such



Factors compromising early child development

programmes can substantially boost children's learning and development.

Moving forward

Implementation of interventions to optimise child development need guidance and political will to promote coordinated governance, increased funding and capacity, and improved data collection to inform programme improvements and show that they work.

Coordinated governance—Leadership across sectors is needed at national, subnational, and local levels to implement coordinated interventions for young children and families. Coordinated governance must bring together health, nutrition, environment, education, and child and social protection, as well as the public and private sectors and civil society.³¹

Financing—Early childhood programmes and systems of support have been seriously underfunded. The establishment of coordinated early childhood plans should be a call to action to bilateral and multilateral agencies, national governments, and the private sector to dedicate increased funding through traditional and innovative financial instruments.³² Investment is also needed across multiple sectors to strengthen the capacity of the workforce, assure quality of services, and provide administrative oversight and accountability. Using multiple delivery platforms, such as community health workers, primary healthcare services, preschool education, and parent groups, is necessary to ensure success.

Improved measurement, research, and innovation—UN agencies are working together to develop and align new measures to track child development and monitor the quality of services and to use the results of evaluation to consolidate, extend, and improve programmes. New investments, methodological advancements, and political will are needed to validate these emerging measures, integrate them into existing data collection efforts, and help build management information systems that will generate data to guide policy. Although measurement has been a challenging issue in advancing early child development, there is now a selection of tools for assessing preschool children, including the Inter-American Development Bank's Regional Project on Child Development Indicators (PRIDI), the Early Development Instrument (EDI), and Save the Children's International Development and Early Learning Assessment (IDELA); scales are also emerging for children under 2 years old.³³

Scientific, technological, social, and business innovation can ensure that the largest numbers of children are reached and that

every child has support to reach their developmental potential. Innovations that promote healthy development in the first five years are showing the long term effect of early life interventions on physical, cognitive, and socioemotional development. They include mobile and internet based technologies to transfer information, financial assistance, and provision of home-based counselling and support by community workers.³⁴

Conclusions

The new sustainable development goals adopted by the United Nations launch an exciting period in the global effort to end poverty, transform the world to better meet human needs, and protect the environment to ensure peace and realise human rights. As the recent secretary general report emphasises, "Millions of people, particularly women and children, have been left behind in the unfinished work of the MDGs [millennium development goals]."³⁵ The new agenda can transform the way health and human services are delivered and create the conditions globally so children can have equitable opportunities to meet their developmental potential and grow into healthy and socially integrated citizens. This historic moment calls for a bold commitment to support healthy child development as the foundation for sustainable societies.

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Nutrition and health in women, children, and adolescent girls

Urgent action is needed to tackle malnutrition in all forms and to help nutrition unlock the potential of investment in the health of women, children, and adolescents, say **Francesco Branca and colleagues**

Every year the lives of around 50 million children are put at risk because they are dangerously thin from acute undernutrition, while the long term health of more than 40 million children is threatened because they are overweight. Two billion people suffer from vitamin and mineral deficiencies, but overweight and obesity are key contributors to the non-communicable diseases that account for almost two thirds (63%) of adult deaths globally. These different forms of malnutrition—undernutrition, overweight and obesity, and micronutrient deficiencies—now affect people across the same communities and harm people of all ages. (Unless otherwise cited, the figures given are WHO estimates.)

Improving nutrition therefore presents a key opportunity to improve health. As the UN secretary general launches his second Global Strategy for Women's, Children's and Adolescents' Health in September 2015 a strengthened focus on nutrition is warranted, with special attention to the first 1000 days of life (from pregnancy to the child's second birthday), pregnant and lactating women, women of reproductive age, and adolescent girls.

KEY MESSAGES

Investment in nutrition is crucial to future efforts to improve the health of women, children, and adolescents; the potential human, societal, and economic gains from such investment are substantial.

Clear global commitments to action are in place, backed by targets to measure progress. All contributors, across government and society, must come together to turn these commitments into action.

Specific actions are needed to improve the quality of the diet; to protect, promote, and support breast feeding; to ensure that everyone has access to essential nutrition actions; to provide adequate water and sanitation; and to provide information and education.

Methods

This paper highlights nutrition related priority actions to improve the health of women, children, and adolescent girls. It is based on existing policy guidance issued by the World Health Assembly in the form of resolutions or targets; guidelines from the World Health Organization; or the outcome documents of the Second International Conference on Nutrition (ICN2).

The vast majority of the recommended actions proposed in this paper were agreed by the 162 member states attending the ICN2 in Rome in November 2014.¹ These recommendations were developed by the secretariats of the Food and Agriculture Organization of the United Nations and WHO on the basis of current evidence and were subject to extensive consultation. An information note on the ICN2 provides more background information on the recommended actions.²

Some additional recommendations, specific to women's, children's, or adolescents' nutrition, are based on WHO guidance. Where such a recommendation does not exist, emerging evidence reviewed by the authors is cited.

Problems associated with poor nutrition

Good nutrition is fundamental for optimal health and growth. Through its effect on health and cognitive development it is also vital for academic performance and productivity, and therefore for healthy economies and socioeconomic development.

Health effects of malnutrition

The consequences of malnutrition could hardly be more serious: around 45% of child deaths in 2011 were due to malnutrition (including fetal growth restriction, subopti-

mal breast feeding, stunting, wasting, and deficiencies of vitamin A and zinc). In 2013 the growth of around 161 million children aged under 5 was stunted by chronic undernutrition, leading to hampered cognitive and physical development, poor health, and an increased risk of degenerative diseases.³ In the same year 51 million children were wasted (having low weight for height) because of acute undernutrition; severe wasting increases the risk of morbidity, particularly from infectious diseases such as diarrhoea, pneumonia, and measles, and is responsible for as many as two million deaths a year.⁴

Meanwhile, deficiencies of vitamin A and zinc cause many deaths (157 000 and 116 000 child deaths, respectively, in 2011),⁵ and iodine and iron deficiencies, along with stunting, contribute to children not achieving their full potential. Iron and calcium deficiencies increase the risks associated with pregnancy, particularly maternal mortality.⁵

At the same time overweight and obesity in children and adults have been increasing rapidly in all regions of the world, and half a billion adults were affected by obesity in 2010. Dietary risk factors, together with inadequate physical activity, were responsible for 10% of the global burden of disease and disability in 2010.⁶

Socioeconomic impact of malnutrition

Malnutrition contributes to an estimated 200 million children failing to attain their full development potential. Stunting is estimated to reduce a country's gross domestic product by as much as 3%,⁷ and eliminating anaemia could increase adult productivity by 5-17%.⁸

BOX : NUTRITION IN RECENT GLOBAL INITIATIVES AND COMMITMENTS

- *Global Strategy for Women's and Children's Health*: the UN secretary general's strategy, put into action by the global Every Woman Every Child movement, clearly set out the need to tackle nutrition in young children.¹¹
- Global nutrition targets for 2025: countries are working towards six global targets agreed at the 65th World Health Assembly in 2012 (table 1).
- *Global Action Plan for the Prevention and Control of Non-communicable Diseases 2013-20*: includes targets to reduce salt intake by a third and to halt the increase in obesity among adolescents and adults.
- Second International Conference on Nutrition: in November 2014 the world's leaders committed to eradicating hunger and preventing all forms of malnutrition worldwide.¹²

BOX: WHAT DO WE MEAN BY MALNUTRITION?

- Malnutrition: nutritional disorders in all of their forms (including imbalances in energy intake, macronutrient and micronutrient deficiencies, and unhealthy dietary patterns). Conventionally, the emphasis has been on inadequacy, but malnutrition also applies to excess and imbalanced intakes.
- Overweight: a situation caused by an excessive, unbalanced intake of energy or nutritional substances (and often combined with a sedentary lifestyle).
- Stunting: low height for age (more than two standard deviations below the WHO child growth standard median for children under 5). Stunting is defined by WHO as a public health problem when 20% or more of the population are affected.
- Undernutrition: a situation in which the body's energy and nutrient requirements are not met because of under-consumption or the impaired absorption and use of nutrients. Undernutrition commonly refers to a deficit in energy intake, but it can also refer to deficiencies of macronutrients and micronutrients, and it can be either acute or chronic.
- Wasting: low weight for height (more than two standard deviations below the WHO child growth standard median for children under 5). Wasting becomes a public health problem when 5% or more of the population are affected.

Every \$1 (£0.64; €0.91) invested in tackling undernutrition is estimated to yield around \$18 in return—the median benefit:cost ratio from a study modelling the effect of preventing one third of stunting in children up to age 3 in 17 high burden countries.⁹ More specifically, a recent study of the benefit:cost ratio of a package of nutrition interventions aimed at averting stunting in 15 countries found that benefits outweighed costs by as much as 42:1, depending on the existing economic and nutritional situation.¹⁰

What progress has been made in tackling malnutrition?

Better understanding of the challenges and solutions

The root causes of malnutrition and the factors leading to it are complex and multidimensional. Poverty, underdevelopment, and low socioeconomic status are major contributors, along with other social determinants. Current food systems struggle to provide adequate, safe, and diversified foods. The reasons include constraints on access to land, water, and other resources—often aggravated by environmental damage—

along with unsustainable production and consumption patterns, food losses and waste, and unequal distribution and access. Malnutrition is often aggravated by poor feeding and care practices for infants and young children, as well as poor sanitation and hygiene. A lack of access to education, quality health systems, and safe drinking water can also have a negative effect, along with infectious disease and the ingestion of harmful contaminants.

In recent years progress has been made in developing knowledge and understanding of the magnitude and scope of nutritional challenges, the increasing contribution of non-communicable diseases, and the complex web of factors that can influence nutrition.

A greater understanding has developed regarding the importance of nutrition at different stages of the life course and the effect of poor nutrition across generations (fig 1). An intergenerational cycle of malnutrition exists whereby a woman who has anaemia, for example, is likely to have a baby with a reduced birth weight. Low birthweight babies are more likely to be wasted or

stunted and to have a higher risk of morbidity and mortality and of developing non-communicable diseases later in life. Conversely, if the mother is obese when she starts her pregnancy she is also at increased risk of complications during pregnancy or delivery, which could result in premature delivery—and, therefore, a low birth weight for her baby. Alternatively, if she carries the baby to full term, her baby is more likely to have a higher birth weight and a higher risk of child and adolescent obesity.

The past two decades have also seen a major shift in understanding of the policy responses required to improve nutrition and promote healthy diets. It is now clear that an enabling environment plays a key role and that policies that change aspects of the food environment are required (such as what foods are available, what levels of fat, sugar, or salt they contain, or how much they cost), as well as nutrition education and information.

Similarly, there is now much greater awareness that effective responses need to come from beyond the health sector and that this must involve other sectors, such as those related to water and sanitation, education, trade, and social protection. Crucially, a radical transformation is needed so that food systems can ensure that everyone has access to a sustainable, balanced, and healthy diet.

Progress towards global nutrition targets

Significant progress has been made in reducing hunger and undernutrition in the past two decades: the percentage of people in developing regions experiencing hunger fell from 24% in 1990-92 to 14% in 2011-13.¹⁴ The 2014 *Global Nutrition Report* showed, however, that the world is not on track to meet any of the six World Health Assembly nutrition targets (table 1).

What are the priorities for improving nutrition?

Improving women's, children's, and adolescents' nutrition requires a range of policies, programmes, and interventions at different stages of life. And, since we know that malnourished women give birth to malnourished children, it is possible to take action to improve nutrition across generations (fig 2).

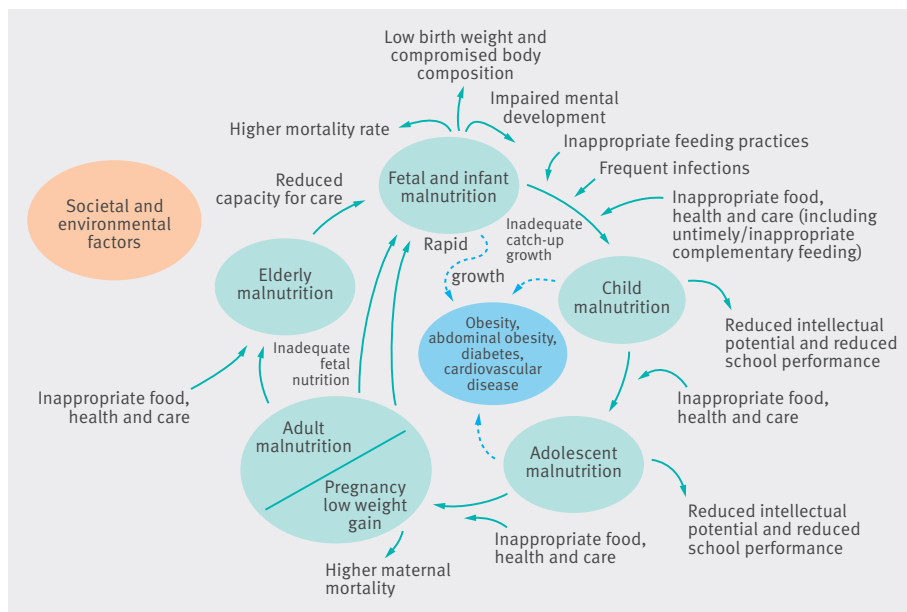


Fig 1 | Nutrition through the life course—proposed causal links¹³
 Reproduced from WHO childhood overweight policy brief, based on figure from Darnton-Hill I, Nishida C, James WPT. A life course approach to diet, nutrition and the prevention of chronic diseases. *Public Health Nutr* 2004;7:101-21.

Table 1 | Findings of the 2014 Global Nutrition Report¹⁷

Category	WHA target	Baseline years	Baseline status	Target for 2025	Globally on course?	Comments
Stunting	40% reduction in number of children under 5 who are stunted*	2012	162 million	~100 million (~15% prevalence)	No	Current pace projects 130 million by 2025 (20% reduction)
Anaemia	50% reduction of anaemia in women of reproductive age	2011	29%	15%	No	Very little movement (was 32% in 2000)
Low birth weight	30% reduction in low birth weight	2008-12	15%	10%	No	Little progress to date
Under 5 overweight	No increase in childhood overweight	2012	7%	7%	No	Upward trajectory is unchecked
Under 5 overweight	Increase the rate of exclusive breast feeding in first six months to at least 50%	2008-12	38%	50%	No	Rate was 37% in 2000, 41% in 2012
Wasting	Reduce and maintain childhood wasting to under 5%	2012	8%	<5%	No	No progress (was 8% globally in 2013)

Table 2 | Recommended actions to improve adolescents' nutrition

Recommendations and actions	Who needs to take action?
Improve maternal nutrition and health	
Establish policies and strengthen interventions to ensure that pregnant and lactating adolescent mothers are adequately nourished	National policy makers, health service providers
Introduce measures to prevent adolescent pregnancy and to encourage pregnancy spacing	National policy makers, health service providers, education sector
Prevent and control anaemia	
Promote healthy and diversified diets containing adequate amounts of bioavailable iron	National policy makers, food and agriculture sectors, health and education sectors
Promote consumption of nutrient dense foods, especially foods rich in iron	National policy makers, health and education, food and agriculture sectors
Where necessary, implement supplementation strategies and consider fortification of wheat and maize flours with iron, folic acid, and other micronutrients in settings where these foods are major staples	National policy makers, food and agriculture sectors
Prevent and treat malaria in pregnant women as part of strategies to prevent and control anaemia	
Ensure universal access to and use of insecticide treated nets	National policy makers, health service providers, development partners
Provide preventive malaria treatment for pregnant women in areas with moderate to high malaria transmission	National policy makers, health service providers
Offer a healthy diet to all populations	
Create coherence in national policies and investment plans, including trade, food, and agricultural policies, to promote a healthy diet and protect public health ^{18*}	Regional and national policy makers, food and beverage industries, creative and media industries
Encourage consumer demand for healthy foods and meals [†]	
Promote physical activity in adolescents	
Create a conducive environment that promotes physical activity to tackle sedentary lifestyle ^{19‡}	Regional, national, and local policy makers, urban planners, early years education, health services
Promote optimal nutrition in adolescents with HIV/AIDS	
Provide nutrition counselling to improve health outcomes in adolescents with HIV ^{20‡}	Health service providers, development partners

All recommended actions are based on those proposed in the Framework for Action issued by the Second International Conference on Nutrition in November 2014 except (*), which is based on a WHO healthy diet fact sheet; (†), which is based on WHO guidelines on physical activity; and (‡), for which evidence is available but no formal WHO recommendation.

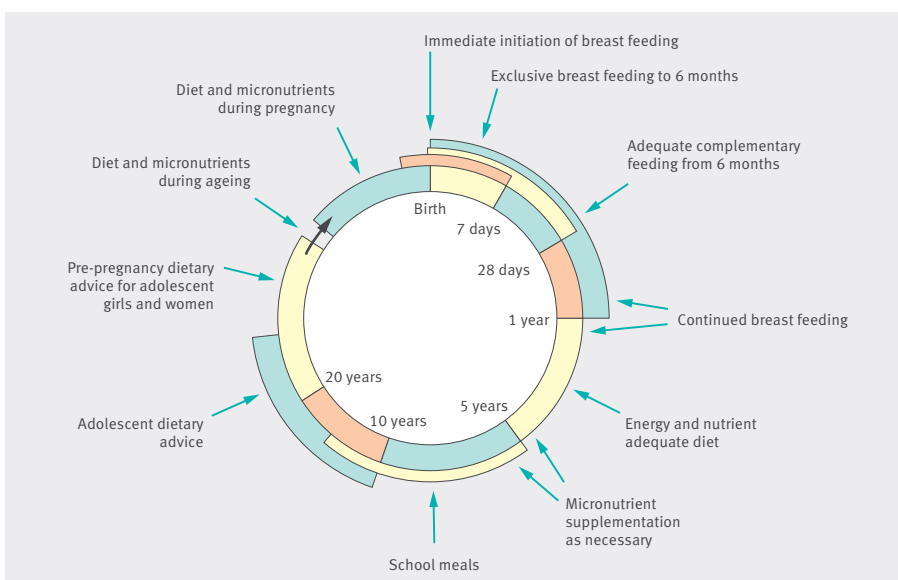


Fig 2 | Improving nutrition throughout the life course¹⁵

Specific recommendations and actions to help put them into practice are shown in tables 2 to 4.

Actions to improve adolescent girls' nutrition

Adolescent girls should be at the heart of a life course approach—a young adolescent girl is still a child, but often she will soon become a mother. Adolescent pregnancy is associated with higher risk of maternal mortality and morbidity, stillbirths, neonatal deaths, preterm births, and low birth weight. In addition to actions to prevent adolescent pregnancy and encourage pregnancy spacing, efforts are required to ensure that pregnant and lactating teenage mothers are adequately nourished.

Actions to improve child nutrition

The first 1000 days of life (from pregnancy to the child's second birthday) present an

Table 3 | Recommended actions to improve child nutrition

Recommendations and recommended concrete actions	Who needs to take action?
Promote optimal infant and young child feeding*	
Adapt and implement the International Code of Marketing of Breast Milk Substitutes and subsequent relevant World Health Assembly resolutions	National policy makers
Ensure that health services and employment policies promote, protect, and support breast feeding, including WHO's Baby-Friendly Hospital Initiative	National policy makers, employers, health facilities
Encourage and promote active participation of men in sharing care for infants and young children	National policy makers, educational institutions, employers, health facilities
Empower women and enhance their health and nutritional status throughout the life course	National policy makers, educational institutions, employers, health facilities
Ensure that policies and practices in emergency situations and humanitarian crises promote, protect, and support breast feeding	International organisations, national policy makers, humanitarian actors
Tackle maternal exposure to the availability and marketing of complementary foods	International organisations, national policy makers, humanitarian actors
Improve supplementary feeding programmes for infants and young children	International organisations, national policy makers, humanitarian actors
Improve coverage of treatment for wasting	
Adopt policies and actions and mobilise funding to improve coverage using the community based management of acute malnutrition approach	National policy makers, development partners, humanitarian actors, health services
Improve the integrated management of childhood illnesses	National policy makers, health services
Reduce the risk of anaemia in children	
Provide iron supplementation for pre-school children	National policy makers, health services
Reduce prevalence and severity of infectious disease in children	
Provide zinc supplementation to reduce the duration and severity of diarrhoea and to prevent subsequent episodes in children	National policy makers, health services
Implement policies and programmes to ensure universal access to and use of insecticide treated nets	National policy makers, health services
Provide periodic deworming for all school age children in endemic areas	National policy makers, health services, schools
Improve the management of moderate acute malnutrition in children	
Provide supplementary foods for the management of moderate acute malnutrition in children	National policy makers, health services, development partners, humanitarian actors
Reduce children's intakes of free sugars and sodium	
Regulate the marketing of food and non-alcoholic beverages to children in accordance with WHO recommendations	National policy makers, food industry, advertising and media sector
Provide adequate food in school settings	
Promote physical activity in children	
Create a conducive environment that promotes physical activity and tackles sedentary lifestyle	National and local policy makers, urban planners, early years education services, health services
*Exclusive breast feeding up to age 6 months, followed by adequate complementary feeding (from 6 to 24 months) and continued breast feeding up to 2 years of age or beyond. All recommended actions are based on those proposed in the Framework for Action issued by the Second International Conference on Nutrition in November 2014 except (†), which is based on a WHO Technical Note (www.who.int/nutrition/publications/moderate_malnutrition/9789241504423/en/).	

important window of opportunity to improve child nutrition. The key pillar of any strategy to improve this—in addition to good maternal nutrition and health—is optimal feeding and care for infants and young children. Exclusive breast feeding (defined as the practice of giving an infant only breast milk for the first six months of life, with no other food or water), in particular, has the single largest potential effect on child mortality of any preventive intervention. Timely and adequate complementary feeding, with particular attention to vitamin and mineral content and the nutrient density of foods, is urgently needed.

Actions to improve women's nutrition

The health and nutrition statuses of women and children are intimately linked. Improving the health of women and children, therefore, begins with ensuring the health and nutritional status of women throughout all stages of life, and it continues with women being providers for their children and families. Thus, a key priority is female empowerment and women's full and equal access to,

and control over, social protection and resources such as income, land, water, and technology. Direct multisectoral actions to tackle critical women's nutritional challenges, such as iron deficiency anaemia, need to be rolled out on a larger scale to achieve universal coverage.

Improving nutrition across the life course

These targeted recommendations must be supported by a raft of nutrition interventions throughout the life course (see the ICN2 Framework for Action for the full range of recommended actions). Policies are needed, for example, to transform food systems and strengthen health systems. Universal access to functioning and resilient health systems and the scaled-up delivery of interventions can improve nutrition. Governments and international organisations also have a role in developing clear guidelines on healthy diets.

What needs to happen now?

If we want to improve the health of women, children, and adolescents, action to invest in

nutrition is needed now. We know what needs to be done—as explained by the recommended actions in tables 2 to 4—and the clear global commitments to action.

We now need to implement these commitments and ensure the resources to do so (the Addis Ababa Action Agenda refers to the need to scale up efforts to end hunger and malnutrition at paragraph 13 and the need to strengthen national health systems at paragraph 77).¹⁶ In a nutshell, actions are needed to improve the quality of diets; protect, promote, and support breast feeding; ensure that everyone has access to essential nutrition actions; provide adequate water and sanitation; and provide information and education.

To achieve these aims governments and society must join forces and make nutrition a priority. Governments, health services, the food and agriculture industries, schools and universities, and community leaders—along with many others—must work together in a coordinated and coherent way.

The potential human, societal, and economic gains from turning these commitments into action are substantial, and the costs of

Table 4 | Recommended actions to improve women's nutrition

Recommended actions and evidence	Who needs to take action?
Prevent and control anaemia	
Promote consumption of nutrient dense foods, especially foods rich in iron	National policy makers, food and agriculture sectors
Implement actions to ensure that pregnant and lactating adolescent mothers are adequately nourished	National policy makers, development partners, food and agriculture sectors
Introduce measures to prevent adolescent pregnancy and to encourage pregnancy spacing	National policy makers, health service providers
Reduce the risk of low birth weight, maternal anaemia, and iron deficiency	
Provide daily iron and folic acid and other micronutrient supplementation to pregnant women as part of antenatal care	National policy makers, health service providers
Provide intermittent iron and folic acid supplementation to menstruating women where prevalence of anaemia is 20% or higher	National policy makers, health service providers
Provide periodic treatment with anthelmintic (deworming) medicines for all women of childbearing age living in endemic areas	National policy makers, health service providers, development partners
Promote healthy weight gain and adequate nutrition during pregnancy	
Provide dietary counselling to women during pregnancy	National policy makers, health service providers
Prevent and treat malaria as part of anaemia prevention and control	
Ensure universal access to and use of insecticide treated nets	National policy makers, health service providers, development partners
Provide preventive malaria treatment for pregnant women in areas with moderate to high malaria transmission	National policy makers, health service providers, development partners
Ensure access to reproductive healthcare	
Ensure that women have comprehensive information about safe pregnancy and delivery	National policy makers, health service providers, development partners
Ensure that women have access to integral healthcare services that ensure adequate support for safe pregnancy and delivery	National policy makers, health service providers, development partners
Promote protection of working mothers to support or sustain breast feeding	
Implement policies and practices to promote protection of working mothers (eg, longer maternity leave, breaks to feed or express breast milk)	National or regional policy makers, employers
Improve pregnancy outcomes for undernourished pregnant women	
To prevent pre-eclampsia, provide calcium supplementation for pregnant women in areas where dietary calcium intake is low and for higher risk women ^{21*}	National policy makers, health service providers, development partners

All recommended actions are based on those proposed in the Framework for Action issued by the Second International Conference on Nutrition in November 2014 except (*), which is based on a WHO recommendation.

inaction are high. The time is right to tackle malnutrition in all forms at all ages and to break its intergenerational cycle.

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Improving the resilience and workforce of health systems for women's, children's, and adolescents' health

To achieve the sustainable development goals related to maternal, child, and adolescent health, countries need to integrate targeted interventions within their national health strategies and leverage them into financing, workforce, and monitoring capacity across the system, say

James Campbell and colleagues.

The United Nations' first Every Woman Every Child strategy, Global Strategy for Women's and Children's Health, provided an impetus "to improve the health of hundreds of millions of women and children around the world and, in so doing, to improve the lives of all people."¹ The updated Global Strategy for Women's, Children's and Adolescents' Health calls for an even more ambitious agenda of expanding equitable coverage to a broader range of reproductive, maternal, newborn, child, and adolescent health services, as integral to the 2030 targets of the sustainable development goals.²

These goals cannot be realised by efforts that tackle only specific parts of the global strategy. Instead, an integrated approach is required, to include the complementary functions of stewardship, financing, work-

force, supply chain, information systems, and service delivery.³ In this paper we highlight two core aspects that require urgent attention—building the resilience of health systems and ensuring sufficient human resources.

Methods

Our analysis is informed by lessons from countries that have made the most rapid progress on millennium development goals 4 (to reduce child mortality rates), 5 (to improve maternal health), and 6 (to combat HIV/AIDS, malaria, and other diseases) since 2000. In addition, we draw on the experiences of several countries in the recent outbreak of Ebola virus disease, new evidence on the workforce requirements for achieving universal health coverage,^{4,5} and the forthcoming WHO Global Strategy on Human Resources for Health: Workforce 2030⁶ and WHO Global Strategy on People Centred and Integrated Health Care Services,⁷ which describe innovative ways to deliver services and organise workforces. These two strategies are the product of iterative and broad consultation processes, multiple literature reviews, and advice from expert groups. We cross checked key findings from these analyses with the contents of the revised Every Woman Every Child strategy.

Fragmentation of care and weak service delivery systems

Progress in achieving the millennium development goals has been substantive but uneven, with its equity, effectiveness, and

sustainability being often undermined by lack of integration into national health systems. Even where efforts have been made to embed services at the community level, such as in the roll-out of integrated community case management of childhood illness programmes, a lack of full integration and stewardship by national health systems has hindered service use and sustainability.⁸ Disease specific approaches often fail to tackle the delivery of services for other diseases or to sustainably strengthen common delivery platforms.⁹ Despite both methodological and data limitations in the evidence,¹⁰ there are clear indications that working towards integrated service delivery can improve healthcare use and outcomes.¹¹ The desire for focus on specific conditions is understandable, but efforts need to be aligned with and steered by national health systems and must be accompanied by deliberate attempts to create synergies with other priorities of the health system.

A further challenge is the insufficient resilience of many health systems to withstand shocks and adapt to changing needs.¹² The recent outbreak of Ebola highlighted how progress in women's, children's, and adolescents' health can be fragile in weak health systems (box 1).

In Liberia skilled birth attendance fell from 52% to 38% and vaccination rates for measles and combined diphtheria, tetanus, and pertussis fell to 45% and 53%, respectively, during the outbreak. At the height of the outbreak, 64% of all Liberian health facilities were not operational (WHO, unpublished data). Sierra

KEY MESSAGES

Achieving the ambitious agenda of the global Every Woman Every Child strategy requires improved efforts at strengthening health systems, building their resilience, and tackling critical health workforce challenges

Targeted programmes relating to reproductive, maternal, newborn, child, and adolescent health should be led by countries and be integrated into national health systems

Governments should integrate international support for targeted interventions within their national health strategies and leverage these programmes into financing, workforce, and monitoring capacity across the system

The global strategy should consider the health system and workforce implications of its targets. It should promote commitments, investment, and accountability from both national and international sources that encourage sustainable investment in health systems and the health workforce

BOX 1: WEAK HEALTH SYSTEMS LACK RESILIENCE

The resilience of a health system is its capacity to respond, adapt, and strengthen when exposed to a shock, such as a disease outbreak, natural disaster, or conflict. In weak health systems (such as those lacking core capacity in governance, financing, health workforce, or information systems), the ability of both the clinical and public health workforce to respond to planned and unplanned needs is limited, and gains can easily be reversed. In the most severe phases of the continuing Ebola outbreak in west Africa the needs of women for antenatal services, safe delivery, and postnatal care were not met. The capacity of the health system to continue delivery of essential health services and respond to the health crisis was limited, highlighting the need for substantial investment in, and improvement of, health systems.¹³

BOX 2: FUTURE TRENDS IN THE GLOBAL HEALTH LABOUR MARKET

A projected shortfall of skilled health professionals (doctors, nurses, and midwives) of 10.1 million by 2030 has been identified, a challenge compounded by uneven geographic distribution.⁶ Sub-Saharan Africa is the most affected region in both absolute and relative terms, with a projected deficit of 3.7 million healthcare workers. Sustainable development goal 3.c appropriately calls for a substantial increase in health financing and in the recruitment, development, training, and retention of the health workforce in developing countries.¹⁶ At the same time, global demand for health workers will rise to 45 million additional professionals by 2030. A disparity exists, however, between population needs and market based demands, as those countries where basic health needs are the greatest have the fewest economic resources to create employment positions in the public health sector. The proposed sustainable development goals, which are implicit in the Every Woman Every Child strategy, will not be achieved without unprecedented international governance and solidarity, together with innovative national approaches to maximise the efficiency of available resources.

Leone reported that 21% fewer children received basic immunisation. In Guinea diphtheria, tetanus, and pertussis coverage dropped by 30% between 2013 and August 2014 (Ministere de la Santé, unpublished).

The health workforce, from the community level to specialist care, is critical in building resilient health systems. Progress in strengthening human resources for health currently falls short of population needs (box 2).^{14,15}

Disrupting the status quo

The Every Woman Every Child strategy should create a new agenda characterised by several key elements:

- Approaches based on public health and social determinants, which reduce demand on costly clinical services, are critical components of a resilient health system,¹⁷ and improvements in the coverage of health services are linked to progress in sectors such as nutrition, water and sanitation, education, and transportation.
- People centred, integrated health services are required throughout the life cycle, from early infant and child development, through adolescent, adult, and ageing populations.
- Community engagement is needed to establish trust between patients and the health system and to empower patients to become active participants in, rather than passive recipients of, care.¹⁸ Health systems need to be deliberately designed to narrow equity gaps.
- The health and social care workforce are people working in dynamic labour markets with responsibilities and rights—their opportunities for decent work and occupational health and safety are consistent with sustainable development goal 8, for decent work for all.
- Finally, health systems are diverse, and the agenda needs to be adapted to different socioeconomic contexts—for example, enhanced capacity building and supportive investments from external sources will be needed in fragile states characterised by weak governance and leadership.

Leadership and integration at national level

All health programmes—whether funded by governments, development partners, civil society, or the private sector—must contribute to national priorities set by governments. To achieve this requires improved governance of health systems, better coordination between national and sub-national systems, and mobilisation of sufficient financing with better cash flow.¹⁹ Some of the countries that have made the greatest gains in maternal, child, and adolescent health are those where national governments have skilfully brokered international support for targeted interventions and integrated these initiatives into existing financing, workforce, and monitoring capacities within their national health systems.²⁰⁻²² Other countries have improved their health outcomes by comprehensively strengthening their health workforce and using integrated platforms for delivery of care in the community.²³ Promoting the exchange of knowledge and resources from these success stories, and using them as benchmarks, can accelerate progress in other countries.

Building resilience

The development of mechanisms to ensure continued delivery of essential health services during a health shock must include the capacity to cater to the special needs of women and children. The importance of putting people at the centre of delivery of health services was apparent in the ongoing Ebola outbreak—during the initial response, the early recovery phase, and long term planning for resilience. This entails renewed focus on sub-national delivery systems (particularly at community and district levels), on quality improvements, and on strengthening national disease surveillance and response (figure).

Strengthening the workforce is a core element of this agenda, and it must encompass both short term measures—such as health and safety programmes, continuing training and supportive supervision, and community engagement—and recovery measures, such as increasing the fiscal space, adopting education strategies, developing locally appropriate

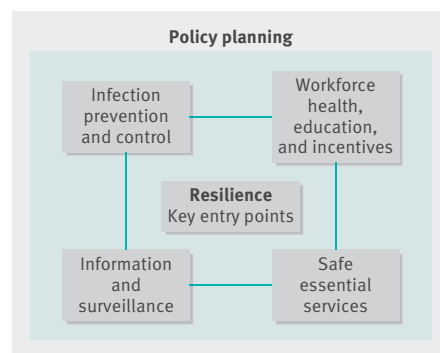
incentive systems, and models of healthcare delivery that harness a more diverse and sustainable skills mix.

Prevention and control of infection are also important. Disease surveillance and information systems that use new technologies, such as mobile phones and rapid data collection forms, are the key to collecting geographically targeted data, which can be used for decision making and improvement of care.

Broader efforts at strengthening health system governance, including planning, monitoring, and accountability of policy makers, are also needed for effective health service delivery. Strengthening and building up these capacities are pre-conditions for effective health service delivery, especially in fragile states and contexts with weak governance, where they may also contribute to broader state building efforts.²⁴

Improving the workforce

Optimising the competence and capacity of the health workforce can bring key services, such as contraception, closer to communities and improve coverage of key interventions to reduce maternal, neonatal, and fetal morbidity and mortality from obstetric complications. The “obstetric transition” of sustainable development goal 3.1 requires a health workforce that can provide obstetric and newborn services and access to family planning.²⁵ Essential health and supporting services will need to be scaled up, particularly in the prevention of maternal and newborn deaths and stillbirths.²⁶ Similarly, better distribution of skilled health professionals, with a particular focus on the midwifery workforce, will be needed.²⁷ Despite international recommendations, midwives in many countries are not empowered to provide the basic functions of emergency obstetric care, including the use of vacuum extraction for difficult childbirth. New competencies will be needed to meet the additional service needs for youth and adolescent health, reproductive cancers, and to tackle the risk factors of childhood obesity.



Entry points to health system resilience

Evidence has shown the potential for community based and mid-level practitioners to provide expanded coverage of other essential interventions for maternal, child, and adolescent health.^{28–29} Such practitioners must be adequately supported by health systems that enable their optimisation and sustainability (as in Bangladesh, Brazil, Ethiopia, Mozambique, Pakistan, Thailand, and others).^{30–31}

Optimising the health workforce will also contribute to sustainable development goals 2 (end hunger, achieve food security and improved nutrition, and promote sustainable agriculture), 3 (ensure healthy lives and promote wellbeing for all at all ages), 4 (ensure inclusive and equitable quality education and promote lifelong opportunities for all), 5 (achieve gender equality and empower all women and girls), 6 (ensure availability and sustainable management of water and sanitation for all), and 8 (promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all), as well as the updated Every Woman Every Child targets.^{32–33}

Evidence from high income countries shows that despite a rise in unemployment in the manufacturing and construction sectors health sector employment has remained stable or grown during the recession.³⁴ Emerging economies are undergoing an economic transition that will increase the health resource budget and a demographic transition that will see hundreds of millions of potential new entrants in the active workforce. These prospects create an unprecedented opportunity to design and implement health workforce strategies to tackle the gaps in equity and coverage faced by health systems, while also contributing to economic growth potential.³⁵ The volume and growth of global health expenditures, which exceeded \$6 trillion (£3.8 trillion; €5.5 trillion) a year by 2010, confirm that health is a sector with potential for substantial economic growth.³⁶

To design and implement an enhanced workforce agenda, national institutions need to develop the capacities for collecting, collating, and analysing (public and private) workforce data and labour economics; leading short and long term health workforce planning and development; advocating for better employment and working conditions for health workers; designing, developing, and delivering enhanced pre-service and in-service education and training for health workers; supporting health professional associations; facilitating collaboration with, and regulation of, private sector educational institutions and health providers; overseeing the design of fair and effective performance management; and monitoring and

evaluating human resources for health interventions.⁶

Much can be achieved if a global and comprehensive approach is implemented to tackle market failures and create the conditions for future health employment (particularly for women and young people) and economic growth. A measurement and accountability framework for the sustainable development goals can provide the foundations for new investments in national and sub-national health workforce information systems,⁶ and enable the implementation of a mechanism to standardise health workforce information across countries. Such a mechanism would be based on agreed health workforce indicators and could produce the information needed to facilitate health workforce planning and management.

Conclusions

The updated Every Woman Every Child strategy must place health systems at its heart, as their performance will decide success or failure for reproductive, maternal, newborn, child, and adolescent health in the next 15 years. Achieving the health goals of the new 2030 agenda will require augmented efforts to build integrated healthcare delivery systems, aligning market forces and population expectations for essential and universal care. This will require a radical transformation of implementation efforts at the country level. All programmes must be integrated into national health systems so they can be reconfigured to meet changing national needs. National and global governance must be overhauled to deliver a substantive scale-up of domestic public sector and international financing to meet systems and workforce needs. Health and social care should be recognised not just as rights but as opportunities for employment creation (particularly for young people and women) and economic growth. In addition, expanding the workforce is a good investment for implementation of the sustainable development goals. The existing systems and workforce need to be optimised, which can be made possible by stronger national institutions that are able to devise and implement more effective strategies. Capacity must be built at the local level to monitor health service delivery and inform policy change.

Securing the necessary political will, ensuring effective governance in countries, aligning the required efforts of different sectors and constituencies in society, and accountability are critical to achieving this ambitious vision. The updated Every Woman Every Child strategy could contribute to this agenda in several ways. Firstly, it could promote the development of international commitments, national plans, and investment

decisions that recognise the centrality of building health system resilience and strengthening the health workforce. Secondly, it should include explicit targets and related accountability mechanisms that refer to the health systems and workforce needs. Finally, it should facilitate the adoption of funding approaches by related initiatives, such as the Global Financing Facility, that encourage long term investment in capital and recurrent costs for health systems.

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Ensuring multisectoral action on the determinants of reproductive, maternal, newborn, child, and adolescent health in the post-2015 era

Kumanan Rasanathan and colleagues explain how integrating action on determinants of women's, children's, and adolescents' health beyond the health sector into core health strategies is crucial to achieving sustainable development goal targets to end preventable deaths and ensure healthy lives

Despite impressive improvements since the launch of the millennium development goals (MDGs), many countries will not reach the targets on maternal and child mortality, partly because of the lack of attention to determinants of health (box 1) beyond the health sector. For example, the 2010-15 Global Strategy for Women's and Children's Health, launched by the United Nations secretary general to accelerate progress on MDGs 4-6,¹ failed to consider determinants of health or interventions beyond the health sector. The maturation of the goals this year provides an opportunity to reflect on how coordinated multisectoral action could achieve more ambitious targets for women and children's health, such as ending preventable maternal, newborn, and child deaths in all countries.

The finalisation of the 2016-30 sustainable development goals (SDGs; which urge a more integrated and transformative view of development) and the upcoming launch of the 2016-30 Global Strategy for Women's, Children's and Adolescents' Health (Every

Woman Every Child 2.0; EWEC 2.0) also make it timely to consider how multisectoral action can be facilitated in countries, including in updating and developing new national strategies for reproductive, maternal, newborn, child and adolescent health (RMNCAH). Here we review evidence on the contribution of action on determinants, discuss major obstacles, and propose key steps for global and national strategies to provide guidance.

Methods

The conclusions and recommendations in this article are drawn from a review of the literature, estimates of the effects of interventions, country lessons, and the authors' experiences. The range of products from the Commission on Social Determinants of Health² and the Success Factors³ project provided key inputs, along with multiple rounds of consultation undertaken as part of the process of updating the global strategy, which included online and face to face consultations.

The determinants of health paradox: increasing recognition but limited action

Progress on RMNCAH can be accelerated by interventions beyond the health sector. The contribution of non-health sectors, including the contributions of different sectors and interventions, is best understood for mortality in children under 5.⁶ About half the decrease in child mortality in low and middle income countries since 1990 is due to non-health sector investments.⁵

Estimates for the contribution of educational improvement vary—as high as 51.2% for 1970-2009.⁷ Malnutrition remains the underlying cause of 45% of child deaths.⁸ Environmental factors are important contributors to diarrhoea, malaria, and respiratory infections (among the greatest causes of death in children under 5), as well as injury and malnutrition. About a third of all disease in children can be attributed to modifiable environmental factors such as water quality and access, air pollution, unsafe sanitation, exposure to chemicals, and climate change.⁹

Better female education, reduced fertility rates, urbanisation, women's access to

resources, and infrastructure improvements (roads, electricity, housing, information and communications technology) can also reduce maternal mortality.¹⁰ Interactions between different determinants, such as the impact of women's and girls' education on fertility rates and their joint impact on health outcomes, are also important.¹¹

Structural societal factors, such as poverty, gender inequality, and other forms of discrimination (such as racism) and inequality directly and indirectly affect RMNCAH and generate health inequities. Interventions to mitigate these adverse factors (such as reducing poverty, ending child marriage, or tackling violence against women and children) help improve women's, children's, and adolescents' health, but there is a lack of comprehensive evidence of the effects of specific interventions on mortality. The correlation between economic growth and improvements in maternal and child mortality is complex, with wide variations in performance between countries of similar wealth levels,¹² mediated by differences in health systems and determinants. This underscores the importance of policy choices and attention to inequities in health and wealth, and of prioritising new resources for marginalised communities, which often lack political influence. Globally there has been a call for attention to transnational and commercial determinants of health given their increasing impact on health and widening disparities.¹³⁻¹⁵

Multisectoral efforts to improve determinants of health are therefore extremely important for RMNCAH—to reduce inequities, create healthier environments, and increase coverage of health interventions. The related millennium and sustainable development goals will not be achieved without them. For example, no country has reduced newborn and child mortality to the SDG target levels through healthcare alone, without transformations in social and economic development. Evidence on which policies and interventions are necessary is also accumulating.¹⁶

Despite the eight MDGs being presented as a joint agenda, including key determinants, in practice the different goals were not

KEY MESSAGES

Social, economic, political, environmental, and cultural determinants of health have crucial effects on reproductive, maternal, newborn, child, and adolescent health

The goal of ending preventable maternal, newborn, and child deaths requires multisectoral action to improve determinants of health, including within the health sector itself

Key steps to improving determinants of health include appropriately framing determinants and multisectoral action in health strategies; identifying key targets and indicators; prioritising key policies and interventions; and mobilising resources, improving governance, and generating evidence of multisectoral efforts

We propose the convening of a new United Nations commission on implementation and accountability of multisectoral action for women's, children's, and adolescents' health to assist these efforts

BOX 1: DETERMINANTS OF HEALTH

The determinants of health are the conditions in which people are born, grow, live, work, and age, and the distribution of power, money, and resources that affect these conditions.² They encompass social, economic, political, environmental, and cultural dimensions. Here, we use “determinants” to cover all of these factors (“social determinants of health”² or “underlying determinants”³ are sometimes used in a similar way).

Determinants crucially influence the health of women, children, and adolescents, who often experience discrimination and unequal access to resources and realisation of their rights, resulting in exposure to adverse socioeconomic, political, and environmental conditions. These factors directly cause inequities of health in this population within and between countries. Determinants affect access and coverage of essential health interventions and directly affect health, including through the shaping of social norms and behaviours.

Gender (in)equality is a key determinant of health that transcends sectors and illustrates this concept well.⁴ Manifestations of gender inequality (such as differential access to education and health services, forced and early child marriage, unequal labour market participation and remuneration, and violence against women and children) are major contributors to maternal and child mortality. Measures to mitigate these factors can improve health outcomes and reduce disparities.

Determinants are not static but interact with each other and change with the evolving context. Action within various sectors (such as health, education, water and sanitation, environment related sectors, and nutrition) and joint action across and between sectors (cross sectoral and intersectoral action) is needed to improve determinants.

managed together.¹⁷ Improvements in health service coverage have been crucial to progress in MDGs 4-6, but the contribution of multisectoral interventions to the health specific goals has been insufficiently tracked and documented. This failure to recognise the importance of key policies across a range of sectors undermines efforts to reach RMNCAH outcome targets, as well as efforts to increase coverage of healthcare interventions. Identifying why some groups have lower health service coverage, even in countries with overall strong performance, requires a focus on, and measurement of, determinants such as discrimination, poverty, and gender inequality. All providers of healthcare (including faith based organisations) must be considered and interventions in other sectors such as roads, utilities, and finance prioritised. The effects of deficiencies in other sectors on health systems have been neglected—a recent review of healthcare facilities found that 38% lacked water, 19% had no sanitation, and 35% lacked water and soap for handwashing.¹⁸

Investment in institutions to advocate for, pioneer new approaches, or regulate multisectoral work has also been inadequate. Working across sectors for health has proved challenging, especially in settings with a high RMNCAH burden. The challenge is not just how to identify the key interventions in non-health sectors but how to catalyse work with other sectors and contribute to policies and interventions that are of core concern to other sectors but that can be shaped to maximise positive health outcomes. This requires building the capacity of the health sector to work with other sectors and identify areas of mutual concern. Issues of governance, financing (and co-financing across sectors), implementa-

tion, and monitoring will need to be addressed to change the status quo.

One obstacle to engaging other sectors has been the lack of clear mechanisms for public and social accountability for RMNCAH. Despite progress in accountability within the health sector at global and national levels (including through the Commission on Information and Accountability for Women's and Children's Health), little attention has been paid to increasing the accountability of other sectors. This gap reflects how responsibility for maternal, child, and adolescent health is still perceived as the interest of the health sector only.

What is now needed for action on determinants of RMNCAH

Ensuring multisectoral action on determinants of RMNCAH will require prioritisation and resources to overcome the obstacles discussed above. Global and national strategies, including EWEC 2.0, can contribute by integrating a focus on determinants as “core business.” We propose four key steps for inclusion in such strategies.

1. Framing determinants and multisectoral action

The health sector often lacks conceptual and practical understanding of determinants of RMNCAH and multisectoral action. New global and national strategies need to clarify the different types of action required:

- Addressing structural forces and social and gender norms that affect all of society, including those that drive disparities, which require wide ranging cross sectoral policies driven by heads of government and championed by key societal agents of change

- Supporting actions within single sectors that form their core business (such as ensuring children attend school and learn well for the education sector, access to safe water for the water and sanitation sector, or access to clean power for the energy sector)
- Ensuring the health sector recognises its own role in generating health disparities (such as discrimination and abuse, provision of differential quality of care to different groups, and inadequate water and energy supplies to health facilities) and maximises its key role in primary prevention
- Identifying, promoting, and co-financing actions that require collaboration between two or more sectors (intersectoral work) to produce joint or “co-benefits” and to maximise health benefits (such as the use of cleaner stoves to reduce indoor air pollution, or sexuality education in schools).

Although work on determinants often focuses on intersectoral efforts, the greatest benefits often lie in the first two activities above—addressing structural forces and social and gender norms (for example, reducing poverty or increasing gender equality) and single sectors doing their own core business well. For example, for the education sector, keeping adolescent girls in school and providing a good education that enables their economic empowerment has greater health impact than collaborative activities to increase health literacy or undertake school based health clinics.^{7,11,19} When considering multisectoral action, the health sector has too often focused on marginal collaborations at the expense of recognising the impact of the core work of other sectors.

Determinants also influence global and national leadership, accountability, and the actions of the health and other sectors. Structural inequities in power at global, national, district, and community levels obstruct the policy and implementation choices needed for equitable delivery of essential services and for harnessing the resources needed for multisectoral implementation. The MDGs were not explicitly aimed at reducing these imbalances in power, and although the SDGs focus on inequality more explicitly, it is unclear how effectively global targets can deal with such structural challenges. Global and national strategies can draw from existing conceptual frameworks for determinants, such as that of the Commission on Social Determinants of Health,²⁰ and recent adaptations, such as for child wellbeing,²¹ to consider how implementation can account for these obstacles.

2. Identifying key SDG targets for joint tracking and action

MDGs 4-6 strongly underpinned global and national efforts on maternal and child health and the SDGs aim to provide a similar platform. RMNCAH is well represented by SDG 3 (the "health goal"), with updated MDG 4-6 targets, new targets on non-communicable diseases and injuries, and on universal health coverage, all of which require multi-sectoral efforts.

However, the SDGs will be more comprehensive, with 17 goals and 169 targets proposed, encompassing a greater number of sectors related to RMNCAH. This comprehensive scope implies a need to learn from the fragmentation of sectors during the implementation of the MDGs, with goals identified with single sectors.¹⁷ Unintended risks of this comprehensiveness are dilution of efforts and a lack of focus on specific interventions. This can be mitigated by prioritising targets across different sectors to help focus global and national efforts to improve RMNCAH.

Almost all of the proposed goals have some relevance to the determinants of RMNCAH. Difficult choices need to be made about which targets are crucial. We drew up an initial priority list of targets for global and national strategies, drawn from a longer list of potential targets and informed by other

efforts at prioritisation (figure).²² It excludes the priority SDG 3 health targets in which the health sector will take the lead. Exceptions are targets 3.6 on road traffic injury and 3.9 on pollution where non-health sectors need to lead.

There is a need to mobilise efforts across these targets and facilitate their joint monitoring, along with the health outcome targets, for accountability at country and global level (for example, extending and expanding the current Countdown to 2015 platform²³). This is a clear avenue for EWEC 2.0 to make a contribution.

3. Prioritising key multisectoral interventions, policies, and indicators for action

Most global and national strategies on RMNCAH have highlighted key healthcare interventions needed but not interventions and policies led by other sectors. As global and national strategies are updated to incorporate the SDGs (including EWEC 2.0), they should include a guide to multisectoral action on determinants, prioritising key policies and interventions, with indicators for joint monitoring against the SDG targets.

Table 1 lists initial proposals for key determinants, interventions, policies, indicators, and SDG targets to be prioritised as part of EWEC 2.0.

4. Implementing multisectoral efforts

Efforts to drive multisectoral action on determinants of health have often stalled at the implementation phase, even when policy makers accept the rationale and conceptual framework. Governance, financing, and joint monitoring of multisectoral action to achieve targets on RMNCAH have proved difficult in practice. While the details of these problems are often beyond the scope of global and national strategies, they are fundamental to implementation. Different countries' successes in driving multisectoral efforts to improve RMNCAH (table 2) provide useful guidance that merits greater dissemination, including through South-South collaboration (direct collaboration and technical assistance between low and middle income countries).

Specific guidance is needed on the work and governance of different types of multi-sectoral action (single sector, intersectoral, and cross sectoral), including on how key policies for RMNCAH can be implemented and linked across sectors, even in low income, high burden settings. Lessons are available from the HIV movement's response, tobacco control, and the environmental sector. Building governance for a multisectoral approach can benefit from obligations under the human right to health, which calls for healthcare and interventions

1.1	By 2030 eradicate extreme poverty for all people everywhere, currently measured as living on less than \$1.25 a day
1.3	Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of poor and vulnerable people
2.2	By 2030 end all forms of malnutrition, including achieving the internationally agreed targets on stunting and wasting in children under 5 years of age by 2025. Address the nutritional needs of adolescent girls, pregnant and lactating women, and older women
3.6	By 2020 halve the number of global deaths and injuries from road traffic accidents
3.9	By 2030 substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
4.1	By 2030 ensure that all girls and boys complete free, equitable, and quality primary and secondary education that leads to relevant and effective learning outcomes
4.2	By 2030 ensure that all girls and boys have access to good quality early childhood development, care, and pre-primary education so that they are ready for primary education
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 public and private spheres, including trafficking and sexual and other types of exploitation
5.3	Eliminate all harmful practices, such as child, early and forced marriage, and female genital mutilation
5.5	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic, and public life
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
6.1	By 2030 achieve universal and equitable access to safe and affordable drinking water for all
6.2	By 2030 achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
7.1	By 2030 ensure universal access to affordable, reliable, and modern energy services
13.2	Integrate climate change measures into national policies, strategies, and planning
16.2	End abuse, exploitation, trafficking, and all forms of violence against and torture of children
16.9	By 2030 provide legal identity for all including birth registration
17.18	By 2020 enhance capacity building support to developing countries, including for least developed countries and small island developing states, to increase significantly the availability of high quality, timely, and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographical location, and other characteristics relevant in national contexts

Priority sustainable development goal targets for reproductive, maternal, newborn, child, and adolescent health

Table 1 | Key reproductive, maternal, newborn, child, and adolescent health determinants; interventions; indicators; and corresponding sustainable development goal (SDG) targets

Determinant	Policies and interventions	Indicator	SDG targets*
Income and social protection	Reduce poverty through the use of child and gender sensitive cash transfer programmes designed with health sector input, especially on use of conditionality	Proportion of population below \$1.25†/day disaggregated by sex and age group	1.1, 5.4
Food security	Prioritise measures to enhance food security in communities with high mortality burden	Prevalence of undernourishment	2.1
Nutrition in infants and young children	Implement Infant and Young Child Feeding (IYCF) guidelines	Prevalence of stunting in children under 5 years of age; rate of exclusive breast feeding among infants under 6 months of age	2.2
Education of adolescent girls	Prioritise support for adolescent girls to receive a good quality education, including through mechanisms such as cash transfers	Completion rate (%) of upper secondary education by girls	4.1
Early child development	Implement a multisectoral approach to early child development for all children, using a progressive universalism approach to maximise gains for the worst off	Early Childhood Development Index	4.2
Ending child marriage	Enact legislation and provide social support services to end child marriage	Proportion of women aged 20-24 who were married or in a union before age 18 years	5.3
Ending violence against women and children	Enact legal frameworks criminalising all forms of violence and abuse against women and children	Proportion of ever partnered women and girls (aged 15-49) subjected to physical or sexual violence (or both) by a current or former intimate partner in the past 12 months	5.2
		Proportion of young adults aged 18-24 years who have experienced violence by age 18, by type (physical, psychological, or sexual)	16.2
Political participation of women	Implement minimum quotas for participation of women in political institutions, such as parliaments	Proportion of seats held by women in local governments	5.5
Safe drinking water	Provide universal access to safely managed, affordable, and sustainable drinking water through investments in education on the importance of safely managed water use and infrastructure in households, communities, schools, and health facilities	Proportion of population using safely managed drinking water services	6.1
Access to improved sanitation and hygiene	End open defecation and provide universal access to improved sanitation facilities and hygiene measures, and encourage implementation of sanitation safety plans	Proportion of population using safely managed sanitation services	6.2
Access to electricity	Prioritise new infrastructural development for energy access in communities with high mortality burden, including in health facilities	Proportion of population with electricity access	7.1
Exposure to household air pollution	Increase use of clean home energy fuels and technologies (for cooking, heating, lighting)	Proportion of people using primarily clean fuels or technologies (for cooking, heating, lighting), where "clean" is defined by WHO guidelines	7.1
		Child mortality and morbidity attributable to household air pollution	3.9
Hazardous child labour	Systematic detection and elimination of hazardous child labour	Proportion and number of children aged 5-17 years engaged in child labour, by sex and age group (disaggregated by the worst forms of child labour)	8.7
Lead in the environment	Eliminate non-essential uses of lead (such as in paint) and ensure the safe recycling of waste that contains lead	Number of countries that have regulated lead in paint	12.4
Climate change	Enhance climate resilience of environmental determinants of health (such as climate resilient water, sanitation, and hygiene infrastructure and management practice)	Population coverage with climate resilient infrastructure and management practices (such as climate resilient water safety plans)	13.2
Birth registration	Build civil registration and vital statistics systems to achieve universal birth and death registration	Proportion of children under 5 whose births have been registered with civil authority	16.9

*See figure.

†Purchasing power parity.

on the “underlying” determinants, providing a legal and normative framework for tackling determinants.³

Tools and methods are available for analysing health risks and benefits associated with policies implemented across and within different sectors (such as “health in all policies” and health impact assessment) and to review specific determinants (such as gender assessments and audits and gender responsive planning and budgeting).^{24 25} The engagement of women, children, and adolescents in decisions about their own health should be prioritised when designing new governance structures, measurement tools, standards, and policies.

EWEC 2.0 should aim to mobilise financial resources for action on determinants of

RMNCAH. All countries already invest resources on determinants as part of core work in other sectors. The question is whether EWEC 2.0, and its follow-up, can accelerate investment in a set of key policies and interventions on determinants. Discussions on single national investment plans have already identified key areas where non-health sector interventions are crucial for RMNCAH outcomes.²⁶

Global and national RMNCAH strategies (particularly EWEC 2.0 at the global level) should monitor key determinants and interventions beyond the health sector as part of their accountability follow-up, harnessing existing monitoring initiatives in other sectors. Global reports on RMNCAH need to be linked with efforts in other sectors—such as

nutrition, water, and sanitation—to deliver joint information and accountability and allow cross sectoral analysis and prioritisation for investment and implementation at country level. Disaggregating data for indicators for interventions in health and non-health sectors would facilitate a greater focus on equity and reinforce attention on determinants, given that drivers of disparity lie mostly beyond the health sector.

Evidence gaps on determinants remain to be filled, mostly by implementation research. For example, evidence on the health impacts of specific interventions within sectors and on interventions and policies to address societal or structural forces is sparse, whereas evidence on interventions for social protection and environmental

Table 2 | Examples of successful multisectoral interventions on determinants of reproductive, maternal, newborn, child, and adolescent health

Country	Determinant	Action	Impact
Peru	Malnutrition in children under 3 and in pregnant and lactating women	“Buen Inicio”—a package of community based interventions including health promotion by rural trained health promoters, hygiene, and antenatal care	Reduction in child stunting and anaemia in pilot communities; foundation for national strategy to combat child malnutrition
Rwanda	Governance and sex equality	Biannual joint health sector reviews and establishment of health sector working groups; creation of the Rwanda Women Parliamentarian Forum and the Women's Council	Passage of bill to reduce gender based violence; highest global rates of female parliament participation; planned programme of health sector decentralisation
Zimbabwe	Sex equality and girls' education	Efforts to increase girls' participation in school	75% of women aged 15-24 completed lower secondary school in 2010; HIV prevalence decreased from 29% in 1997 to 14% by 2007
Malawi	Girls' education	Randomised controlled trial provided conditional cash transfers (\$1-\$15*/month) to 1200 women aged 13-22 and their parents while also paying school fees	Reduction in teenage pregnancies (29%) and early marriage (32%); prevalence of HIV infection fell by 64%
Uganda	Sex based violence	Collaborative SASA! study aimed at reducing sex based violence by implementing a violence prevention intervention in eight communities in Kampala; qualitative data on social change also collected	52% lower rates of sex based violence and fewer concurrent sexual partners among men in SASA! communities versus controls; sex based violence believed to be less acceptable and the idea that women can refuse sex more acceptable in SASA! communities
Niger	Early marriage and fertility	Creating safe spaces for adolescent women to interact with trained female mentors; community dialogue; home visits by mentors; health check-ups, literacy and numeracy training for girls; sexual and reproductive health promotion	Increased sexual and reproductive health knowledge among adolescent women; increased ability to read the alphabet, nearly 100% of females set up a savings plan; girls believe they have the right to choose their spouse and programme is overall acceptable
Mozambique	Information and communication technologies	Community based, multisectoral project in which community health volunteers improve community use of maternal, newborn, and child health services through community engagement and mobile phones to follow pregnant women through pregnancy; reminders and advice provided through text or audio messages; made antenatal and postpartum visits	Increased credibility among community health volunteers, stronger linkages to health system, and expedited management of minor and major health complications
New Zealand	Poor housing	Insulation and thermal envelope improvements in 1350 low income households	Reduced self reported respiratory illness, doctor visits, hospital admissions, and days off work or school; marginal increase in indoor temperatures but 13% reduction in energy use; health gains cost effective compared with carbon dioxide mitigation

*\$1=£0.64; €0.91.

determinants is more robust. Evidence of multisectoral impact is scattered and often drawn from modelling exercises, which assess correlation but do not provide specific evidence on the mechanisms that directly improve health. Tools used in RMNCAH planning and budgeting (such as the lives saved tool^{27 28}) should encompass interventions beyond the health sector, but this will require improving the evidence base. The generation of costing and effectiveness data for key interventions and policies for RMNCAH outside of the health sector would

increase understanding of their health gains and of the value of “co-benefits” shared between health and other sectors.

Limitations

The above four areas are first steps in a full determinants approach to RMNCAH. This approach may seem “selective,” missing the complexity and comprehensiveness required. The ambitious visions of initiatives such as the UN Commission on Sustainable Development and the WHO Commission on Social Determinants of Health are not limited

to increased uptake of specific interventions within sectors but mark a paradigm shift in the organisation of societies. A multidisciplinary and multi-institutional approach with new participatory processes is needed to realise the full vision of the SDGs.

We did not cover the two way association and contribution of health to other sectors because of the abundance of literature in this area. For example, it has been estimated that increases in health expenditure in high burden countries would have enormous economic and social benefits,²⁹ and that about 24% of recent full income growth in low and middle income countries came from health gains.³⁰ The association between determinants and individual agency, capability, and opportunities is also complex,^{31 32} and further work on the drivers of behaviour is warranted, including social and cultural norms—for example, their role in perpetuating gender inequality, racism, and other forms of discrimination.

We acknowledge these limitations and do not imply that these broader questions can be ignored. Instead, the areas highlighted represent practical starting points in moving efforts on RMNCAH beyond the health sector to tackle determinants, with the hope that follow-up work can engage with these greater complexities, which are particularly important for reducing disparities.

BOX 2: KEY GLOBAL ACTIVITIES TO SUPPORT MULTISECTORAL ACTION ON DETERMINANTS OF REPRODUCTIVE, MATERNAL, NEWBORN, CHILD AND ADOLESCENT HEALTH (RMNCAH)

1. Joint global and national monitoring of interventions and targets (table 1) driven by the United Nations secretary general's office, building on existing sectoral monitoring efforts and incorporating a gender sensitive lens
2. Efforts to synthesise and generate data on the cost and effectiveness of key RMNCAH outcomes of multisectoral interventions and policies
3. Efforts to synthesise and build knowledge on incentives for intersectoral action, including how joint efforts can drive mutual benefits for RMNCAH and the core business of other sectors
4. Mobilise the Every Woman Every Child movement, in particular governments and civil society (including faith based organisations), to invest in champions (such as parliamentarians) and institutions to steer multisectoral action on determinants
5. Mobilise financing and incentivise multisectoral collaboration and action through existing partnerships and new financing mechanisms
6. Consider how the Every Woman Every Child innovation pipeline can contribute further to multisectoral action³³
7. Request the United Nations to coordinate, as appropriate, the work needed between sectors, including setting an example by better coordination within itself

Conclusion

The launch of the SDGs and the 2016-2030 Global Strategy for Women's, Children's and Adolescents' Health provides an opportunity to "mainstream" multisectoral efforts on improving determinants of RMNCAH at global, national, and district levels. Important first steps are to clarify how multisectoral efforts on determinants fit into post-2015 efforts on improving RMNCAH; prioritise key determinants, interventions, policies, indicators, and SDG targets; and build the governance, financing, monitoring, and research needed for implementation. Box 2 summarises key activities at the global level, but the extent to which national strategies and implementation policies reorient their efforts to integrate a multisectoral focus on determinants of RMNCAH, informed by EWEC 2.0, will be more important. To support these efforts, we propose a UN commission on implementation and accountability of multisectoral action for women's, children's, and adolescents' health. Similar to the Commission on Information and Accountability for Women's and Children's Health, this should collect available knowledge and put in place a multisectoral focus on improving determinants of RMNCAH at global and national levels.

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Human rights in the new Global Strategy

By recognising the centrality of human rights, the revised Global Strategy encourages some bold shifts in improving the health and wellbeing of women, children, and adolescents, say **Jyoti Sanghera and colleagues**

The Global Strategy for Women's and Children's Health (2010), with its emphasis on participatory decision making processes, non-discrimination, and accountability, affirmed the importance of human rights. Despite important gains following its launch women, children, and adolescents continue to experience serious violations of their health and health related human rights, including discrimination in access to quality healthcare. A human rights based approach must thus be fully integrated throughout the Global Strategy.

The right to health is recognised by several legal tools and treaties relating to human rights, including the International Covenant on Economic, Social and Cultural Rights; the Convention on the Rights of the Child; and the Convention on the Elimination of All Forms of Discrimination against Women. A human rights framework for realising the right to health of women, children, and adolescents calls for national governments to ensure that health facilities, goods, and services are of good quality, are available in sufficient quantity, and are physically accessible and affordable on the basis

of non-discrimination.¹ Health facilities, goods, and services must also be acceptable—that is, gender and child sensitive and respectful of confidentiality and the requirement for informed consent, among other things.

A human rights based approach is based on accountability and on empowering women, children, and adolescents to claim their rights and participate in decision making, and it covers the interrelated determinants of health and wellbeing (box). Because a human rights based approach promotes holistic responses, rather than fragmented strategies, and requires attention to the health needs of marginalised and vulnerable populations, it is a valuable tool for improving health outcomes.

Methods

The methods we used in this article comprise reference to existing human rights norms documented in relevant legal texts, as interpreted by authoritative guidance and expert opinion. We drew our recommendations on the basis of the need for health laws and practices to conform to human rights standards, a need identified by common and well known trends in government policy and practice.

Human rights problems

Many of the barriers faced by women, children, and adolescents in accessing healthcare and other entitlements and services that affect their ability to live healthy lives are a consequence of the denial of human rights.

Women and girls

Laws, policies, and practices often discriminate against women and girls, resulting in the denial of autonomy and agency and in differential access to healthcare. Gender stereotypes and discrimination against women and girls often result in the perpetuation of harmful practices such as early, childhood, or forced marriage; gender based violence; female genital mutilation; neglect; and infanticide. Although laws and policies have been put in place to prevent these practices, prevailing social norms continue to play an important part in confining women to the role of mothers and caregivers and limiting access to education, paid employment, and equal opportunities.

Lack of autonomy, agency, and economic independence affects the ability of women to access health services or to interact with health systems in ways that respect their rights to privacy and confidentiality, which in turn may inhibit them from seeking these services. This is, arguably, most evident in the area of reproductive and sexual health, where maternal mortality and morbidity rates remain high.² The health situation of the most marginalised groups of women and girls, including those belonging to sexual minorities, ethnic minorities, and rural communities and women and girls with disabilities, is especially acute in all of the above respects.

Children

States have an obligation, under human rights law, to take measures to protect the right of the child to life and to ensure his or her survival and development.³ One major challenge to reducing ill health in children is the failure to systematically identify and overcome the root causes. These include the denial of the right to adequate water, sanitation, and hygiene; malnutrition; the failure to provide safe and secure living environments; harmful practices; and discrimination. All of these have an effect on the ability to enjoy good health and to access good quality healthcare.⁴ In addition, young children are often victims of neglect, maltreatment, and abuse; their inability to protect themselves or to seek the protection of others renders them particularly at risk.

Respect for the status of children as rights holders and for their agency is a pre-condition for the full exercise of their health and health related rights. This is often ignored or rejected owing to conceptions about age and immaturity, as well as to cultural norms governing the child's role in the family and broader society.⁵ The failure to ensure that the best interests of the child are assessed and taken as a primary consideration in all actions affecting children is also implicated in poor responses to child health,⁶ as is the violation of the right of children to express their views and to have these views seriously taken into account, according to age and maturity.⁷ This is true to an even greater extent for marginalised or vulnerable groups of children, such as children with disabilities, children affected by HIV/AIDS, migrant children, children in detention, and child

KEY MESSAGES

Unless human rights are integrated throughout the Global Strategy for Women's, Children's and Adolescents' Health, the health and health related rights of these groups will not be fully realised. Despite important gains women, children, and adolescents continue to experience serious violations of their health and health related human rights.

Insufficient attention to discrimination and social exclusion in policy development and service provision consistently undermine efforts to ensure and improve access to and quality of care.

Health is a justiciable human right that is interdependent with and indivisible from other human rights, including the rights to life, bodily integrity, autonomy, information, and privacy.

Key interventions in the area of policy and legislation, equality and non-discrimination, service delivery, stakeholder participation, the underlying determinants of health, and accountability are proposed.

HUMAN RIGHTS ADD VALUE

To meet their obligation to respect, fulfil, and protect the right to health and other health rights guaranteed under international human rights law, governments can adopt a human rights based approach by:

- Providing access to affordable, acceptable, and good quality healthcare and services for all women, children, and adolescents on an equal footing
- Empowering women, children, and adolescents to claim their rights and participate in decision making
- Putting in place the necessary policy and legal frameworks to ensure the accountability of all actors involved in health service delivery
- Adopting comprehensive strategies, working together with other sectors that affect health, to respond to the full range of health challenges faced by women, children, and adolescents
- Engaging multiple stakeholders, including children and adolescents, in policy formulation, implementation, and review and supporting their consistent participation
- Improving health outcomes for marginalised, excluded, and vulnerable women, children, and adolescents

refugees and internally displaced people. In much the same way that early childhood development profoundly affects health throughout life, the poor realisation of rights in childhood frequently determines the enjoyment of rights in later life.^{8,9}

Adolescents

Whereas maternal and child mortality and morbidity have received increasing attention, adolescent health has not benefited to the same extent despite the fact, for instance, that the highest rate of maternal deaths is among adolescent girls.¹⁰ Adolescence is an important developmental stage presenting particular challenges for health and wellbeing. From puberty, the risks associated with sexual violence, childhood and early marriage, unwanted pregnancy, maternal mortality and morbidity, and the incidence of HIV and other sexually transmitted infections increase exponentially. Proactive measures are needed to ensure that risks are averted and that these early years lay down strong foundations for a healthy life.

Adolescents face considerable barriers in accessing high quality healthcare and services, particularly sexual and reproductive health services and information, that respond to their needs and their evolving capacities. Access to sexual and reproductive health services and information is often hindered as a result of laws and regulations imposing restrictions relating to minimum age, third party authorisation, or marital status. Policies that allow health service providers to deny women sexual and reproductive health services on the basis of their religious beliefs while simultaneously failing to ensure alternative access to these services, negative and discriminatory attitudes grounded in personal beliefs regarding adolescent sexuality, and cultural norms can all be major factors preventing or inhibiting access to sexual and reproductive health services and information.

Response and priority interventions

Below we set out the priority human rights interventions to advance the health and health related rights of women, children, and adolescents. Although not exhaustive, these interventions would, if implemented, help to overcome major obstacles to the realisation of these rights and, through that, provide solutions to many of the health challenges. The web appendix expands on the interventions under each heading.

Enabling policy and legal environment

Laws and policies have a direct bearing on the realisation of health and human rights by women, children, and adolescents, so an enabling legal and policy environment is indispensable. Legislative and policy interventions should be geared towards the enactment, amendment, or repeal of laws and policies, as necessary, to align legal and policy frameworks with human rights norms.^{11,12} Priority interventions should be to:

- *Collect comprehensive data* disaggregated by sex, age, disability, race, ethnicity, mobility, or economic or other status, as nationally relevant, to identify women, children, and adolescents facing discrimination in access to healthcare and other entitlements and services that affect their health and related human rights.
- *Conduct an assessment* of the extent to which existing legal and policy frameworks comply with the human rights norms applicable to health and wellbeing, as part of a comprehensive analysis, through a participatory, inclusive, and transparent process, with stakeholder consultation throughout.
- *Repeal, rescind, or amend laws and policies* that create barriers or restrict access to health services and that discriminate, explicitly or in effect, against women, children, and adolescents as such or on grounds prohibited under human rights law. This includes the repeal of laws that

criminalise specific sexual and reproductive conduct and decisions, such as abortion, same sex intimacy, and sex work.

- *Enact laws and implement policies* promoting positive measures to ensure that essential health services, including primary healthcare, sexual and reproductive health services, maternal health services, and neonatal, child, and adolescent health services are available, accessible, acceptable, and of good quality.
- *Prohibit harmful practices* such as early, forced, or childhood marriage; female genital mutilation; and violence against women, children, and adolescents, including gender based violence.
- *Promote social mobilisation, education, information, and awareness raising programmes and campaigns* to challenge discrimination and harmful social norms and to create legal awareness and literacy among health service personnel and beneficiaries, with a focus on women, children, and adolescents, including vulnerable and marginalised groups within these populations.

Participation

The meaningful participation of all women, children, and adolescents, including those from marginalised or vulnerable groups, in the formulation, implementation, and monitoring of policies that affect their health is an essential building block of a human rights based approach. Priority interventions should be to:

- *Build the capacity of rights holders* to participate and to claim their rights, through education and awareness raising, and ensure that transparent and accessible mechanisms for engaging stakeholders' participation and facilitating regular communication between rights holders and health service providers are established and/or strengthened at community, sub-national, and national levels.
- *Ensure stakeholders' participation* in priority setting; in policy and programme design, implementation, monitoring, and evaluation; and in accountability mechanisms. This can be achieved by establishing and/or strengthening transparent participation and social dialogue or multi-stakeholder mechanisms at community, sub-national, and national levels and ensuring that participation outcomes inform sub-national, national, and global policies and programmes related to women's, children's, and adolescents' health.¹³

Equality and non-discrimination

Discrimination on grounds prohibited under international human rights law, including

on account of gender, age, race, ethnicity, income, and location, severely undermines the enjoyment of human rights. Priority interventions should be to:

- *Develop, fund, and implement a national strategy* to eliminate discrimination against women, children, and adolescents in access to health services and in health-care, taking into account, particularly, gender and age based discrimination.
- *Tackle the specific barriers* faced by women, children, and adolescents from marginalised and vulnerable population groups—for example, through the provision of culturally appropriate health services for indigenous peoples, the provision of health information in formats that are accessible to people with disabilities, and health coverage for both documented and undocumented migrant populations.

Planning and budgeting

States have an obligation to take steps to achieve the progressive realisation of the right to health of women, children, and adolescents to the maximum of their available resources.^{14 15} Priority should be given to securing adequate funding for the health and health related sectors and to implementing comprehensive strategies and plans of action.¹⁶ Priority interventions should be to:

- *Formulate comprehensive, rights based, coordinated, multi-sectoral strategies* and adequately resourced plans of action mandating action to ensure the accessibility, availability, acceptability, and quality of facilities, goods, and services, without discrimination, and to reduce barriers to access.^{17 18} Plans of action should include targets and indicators prioritised through a participatory and inclusive process and should focus attention on the health needs of women, children, and adolescents.
- *Establish participatory budget processes* with a view to ensuring transparency and promoting the involvement of women, children, and adolescents in monitoring the allocation and utilisation of resources for their health.¹⁹

Rights based services

Interventions in this area are those aimed at ensuring that health facilities, goods, and services are of good quality, are available in sufficient quantity, and are physically accessible and affordable on the basis of non-discrimination. Priority interventions should be to:

- *Implement comprehensive strategies*, formulated through consultative processes and user participation, for ensuring access

to high quality and affordable healthcare for diseases affecting women, children, and adolescents, in an environment that guarantees free and informed decision making and respect for privacy, autonomy, and agency. Health information, counselling, and education should be evidence based, in line with human rights, and readily available and accessible to women and adolescents as well as children, in accordance with their level of maturity.

- *Provide for universal access to health coverage* for all women, children, and adolescents, including those from marginalised or vulnerable populations and those employed in the informal sector. Coverage should identify the priority interventions guaranteed, and services should be free at the point of access to ensure the protection of privacy and confidentiality.
- *Provide comprehensive training* on the health rights of women, children, and adolescents; the effect of discrimination; and the importance of communication and respect for patients' dignity in health-care settings. This should be an integral part of all training for health personnel.

Structural and other determinants of health

The right to health encompasses access both to healthcare and to other factors affecting health such as adequate nutrition, housing, water, sanitation, and hygiene.^{20 21} A human rights based approach to women's, children's, and adolescents' health requires a multifaceted, multisectoral approach to improve the determinants of health and ensure the full realisation of the right to health and related rights. A review of the determinants of health, together with proposed interventions, is available in the article entitled "Socioeconomic, political, and environmental determinants," also published as part of this series.²²

Accountability

A human rights based approach requires strong accountability mechanisms that include redress, remedial action, and guarantees of non-repetition. Effective accountability at country level involves a diverse range of actors within and beyond the health sector and requires multiple forms of review and oversight, including administrative, political, legal, and international accountability.²³ Priority interventions should be to:

- *Establish and/or strengthen transparent, inclusive, and participatory processes and mechanisms*, with jurisdiction to recommend remedial action, for independent accountability at the national, regional, and global level within both the health

and the justice systems.²⁴ These include courts or quasi-judicial and non-judicial bodies, complaints mechanisms within the health system, national human rights institutions, and professional standards associations.

- *Develop a national strategy to promote access to justice mechanisms* for women, children, and adolescents. Measures include identifying and removing barriers to access, such as cost, through the provision of free legal assistance, the establishment of mobile courts or other redress mechanisms to facilitate physical access, and ensuring that services are available in languages that are understood by the client communities.²⁵

Conclusion

Most barriers to access to healthcare facing women, children, and adolescents can, arguably, be attributed to the failure to integrate human rights into health law and policy and to tackle violations of the right to health. The Global Strategy presents a valuable opportunity to reduce deficits in implementing a human rights based approach to the health of women, children, and adolescents by mobilising national efforts to this end. The human rights interventions proposed in this paper aim to respond to the common areas in which national implementation tends to be weak and to focus attention on where the most significant gains potentially stand to be made.

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National leadership: driving forward the updated Global Strategy for Women's, Children's and Adolescents' Health

Implementing the updated global strategy means effective leadership, nationally and sub-nationally—requiring country led health plans, partnerships, accountability, advocacy, and collective action at all levels, say **C K Mishra and colleagues**

Targets, as one would expect, are easier to set than to achieve. At the end of this year the millennium development goals for reducing maternal and child mortality will remain unmet.¹ While most maternal and child deaths can be prevented using proved cost effective interventions,² a range of factors—from poor governance to the lack of a skilled health workforce—affect its delivery at scale. This is especially true for the poorest people in low to middle income countries (LMICs), where the burden is highest.

Not surprisingly, numerous calls have been made for effective leadership to prioritise women's, children's, and adolescents' health needs and to accelerate progress. While this requires the presence of a committed leader, this alone is not enough. Institutions within and outside government are equally important: they help to sustain leadership, enable resilience to shocks, and further the achievement of development goals.^{3,4} This is the focus of our paper. Drawing on lessons learnt from LMICs, we highlight how national leadership can put the updated global strategy into practice.

Methods

The analysis presented here is underpinned by a conceptual framework (fig 1), which builds on the World Health Organization's health systems building blocks⁵ and the

global investment framework for women's and children's health.²

We used two approaches to identify the guiding principles and enablers for national leadership in driving health outcomes. Firstly, we reviewed the literature to assess factors that impede the effective delivery of health interventions in LMICs and their solutions. Secondly, we held consultations with a range of stakeholders including senior political and administrative leaders on 25 and 26 February 2015 in New Delhi, India, to gain their perspective on why leadership matters, what makes it effective, and how it can be sustained.

A key outcome of the New Delhi consultations was an agreement on the conceptual framework.⁶ Every Woman Every Child also published a more detailed version of this paper for additional comments.

Lessons learnt

Recent analysis of success factors in 10 fast track countries showed that some LMICs have been able to accelerate progress despite low health budgets and considerable social and political challenges. These were Bangladesh, Cambodia, China, Egypt, Ethiopia, Laos, Nepal, Peru, Rwanda, and Vietnam—which, when the success factor studies started in 2012, were on track to achieve millennium development goals 4 and 5a. Although no standard formula exists these countries are moving ahead in three main areas to improve women's and children's health⁷:

- *Guiding principles*: political vision and emphasis on human rights, alignment of development aid with country plans, and sustainability have helped these countries to mobilise resources and shape their health systems. For instance, Nepal's policies on safe motherhood and neonatal health and gender are anchored in the principles of human rights.
- *Systematic adoption of evidence based or catalytic strategies*: mobilisation of partnerships, effective planning, and the use of robust and timely evidence to inform

decision making and enable accountability have contributed to the optimal use of resources in these countries.

- *Multisector progress*: about half of the reduction in maternal and child mortality in LMICs since 1990 can be attributed to investments in sectors that influence health, such as education, gender parity, water, sanitation and hygiene, and alleviating poverty. While improving its health outcomes Egypt met its millennium development goal target to increase sustainable access to safe drinking water and basic sanitation, and Cambodia reduced poverty across its population by 60% from 2004 to 2011.

Good governance (including corruption control), a focus on value for money, and women's political and socioeconomic participation were further identified as key enablers in improving women's and children's health.⁷ In Ethiopia, where mortality in under 5s declined by two thirds from 1990 to 2012, government reforms to reduce corruption and improve the efficiency of civil services have made a difference.⁸

Framework for applying the global strategy

The causes of poor health outcomes for women, children, and adolescents relate partly to wider constraints that affect health systems and, ultimately, access to services. These include bureaucracies' failure to incentivise performance³ and a weak political and legislative framework that contributes to corruption⁹ and hinders accountability.

National leadership—political and administrative—can potentially tackle these wider constraints and pave the way for reform. It can set priorities, revisit the relative roles of stakeholders, and mobilise and harmonise efforts at the local government, health facility, and community levels. Stakeholders include the government, multilateral and bilateral funding partners, private sector, civil society and non-profit organisations, academic institutions, and the media.

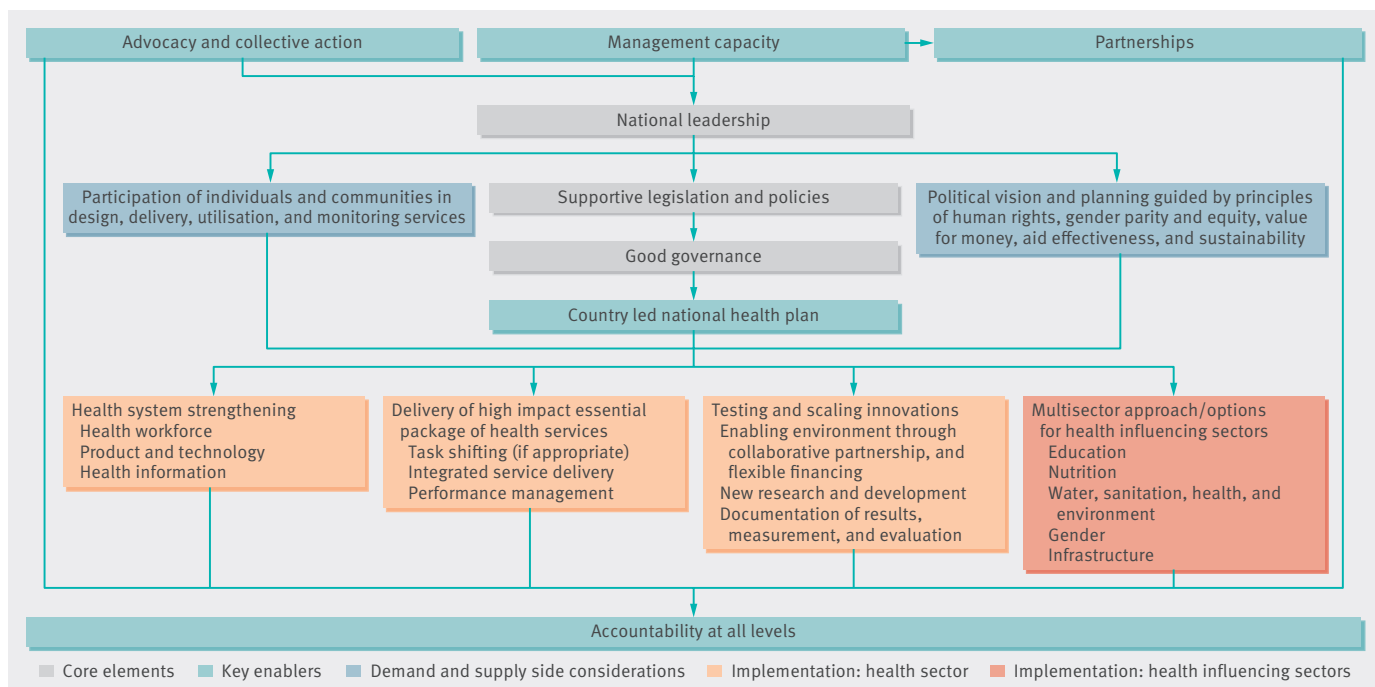
To this end, we include a framework illustrating how the updated global strategy can be translated into practice (fig 1). It highlights

KEY MESSAGES

Wider institutional deficiencies can affect the delivery of services for women, children, and adolescents

National leadership can set priorities and pave the way for reform—but, to achieve the updated global strategy, it must be sustained and effective

To scale up essential health interventions and create resilient health systems, political commitment must be supported by investment in country led health planning, management capacity, partnerships, accountability, advocacy, and collective action at all levels



Conceptual framework to operationalise the Global Strategy for Women's, Children's and Adolescents' Health

how national leadership can implement illustrative policies for future investment—including legislation, programmes, and allocation of funds required for implementing the updated global strategy²—in the context of each country. Of critical importance is the need to create an environment where the planning, delivery, and monitoring of services is aligned with the principles of human rights, gender parity, equity, and aid effectiveness and is informed by individual and community participation.

Both of these potentially require policy changes and measures to improve governance. However, given that today's leaders have to navigate an increasingly complex landscape—where adversarial political systems, trust deficits, and competing interests all make the path to reform more challenging—the framework also identifies five key enablers for sustaining effective political and administrative leadership. Together, these make it more likely for essential health interventions to be scaled up in a way that is operationally, financially, and socially sustainable and also for health systems to respond to new challenges and opportunities. These enablers, along with options for their implementation, are set out below.

Management capacity

A close working relationship between political and administrative leaders, characterised by a set of shared values and bureaucrats with the autonomy to shape policy, has helped the progressive development of some countries—for example, in Botswana, whose top politicians are often former civil servants.¹⁰ Nevertheless, this approach is likely

to be successful only with the political will and effective bureaucracy, where the relative roles of political and administrative leaders are well defined and adhered to. To this end, the following options may be considered:

- **Increasing women's political participation:** this can affect priorities and resource allocation. For instance, a study examining the implications of political reservations in village councils across two Indian states found that leaders invested more in infrastructure that dealt with their own gender's needs.¹¹ Similarly, in Rwanda, where 64% of parliamentarians are women, a gender policy informs planning processes.¹²
- **Selecting and promoting skilled administrative leaders:** a key first step to improving governance is ensuring meritocratic recruitment through civil service examinations.¹³ Stability in government also requires systems for transparent performance management and succession planning.
- **Building capacity:** a number of tools are available to increase leaders' effectiveness. These include skill development and peer to peer learning initiatives, as well as devolution and decentralisation of power. However, the evidence on their impact has been mixed;^{7 14} as such, identifying strategies must involve an analysis of the types of challenges facing leadership.

Country led national health plan

A country led, costed national health plan, including financing and aligned with local priorities and conditions, can help to improve the targeting of resources and communicate a shared understanding of “how

to.” It can also provide a basis for holding leadership accountable. There are, however, a number of underlying challenges.¹⁵

Firstly, not all countries are convinced of the utility of a national plan (rather than a budget) and may view it primarily as a way of raising funds—and, where a costed national health plan is in place,¹⁵ there is some way to go before the fundamental principles of aid effectiveness can be met.

Secondly, there is inadequate capacity to develop appropriate and flexible plans, as well as limited engagement of civil society in health policy formulation. Thirdly, disaggregated data including a breakdown of costs are lacking, and there is insufficient emphasis on procedures for mutual accountability. Fourthly, requirements of funding agencies, such as financial and procurement systems, are often not factored in and can lead to inefficiencies and misallocation of funds.

Development of the national plan would require appropriate guidelines based on global good practices, training, and analytical tools to determine resource allocation; advocacy and consultation with stakeholders to ensure buy-in and alignment; a shift towards pooled financing; a framework for measurement and accountability; and a country coordinating mechanism led by the national government.

Partnerships

Partnerships offer leaders a vehicle for aligning interests and using additional resources, plugging gaps and improving service delivery, developing and distributing low cost public goods, and fostering greater accountability. Their success, however, depends on whether leaders are “credible brokers” who can help to

change perspectives while empowering weaker sections of society.¹⁶ Other factors include clear goals, standards, and processes governing transactions between stakeholders,¹⁷ as well as investment in technical knowledge and performance management.¹⁸

Accountability mechanisms

Perhaps one of the most important ways to ensure effective leadership is through appropriate monitoring and course correction at each level. While most countries will have a framework for enabling accountability, this can be strengthened¹⁹ by clearly defining financial and administrative authority; making disaggregated data and information on initiatives publicly available; strengthening judiciary and autonomous regulatory mechanisms to provide oversight; ensuring whistleblower policy and protection; and engaging better with stakeholders to independently monitor implementation.

Advocacy and collective action

Stakeholders outside the government can make sure that they fulfil their obligations.^{4 20} For instance, once the Turkish government had ratified the United Nations Convention on the Elimination of all Forms of Discrimination Against Women, the women's rights movement successfully campaigned for a new civil and penal code.²¹ Key principles for effective advocacy^{22,23} include prioritisation and alignment of action; identification of evidence based strategies and "government champions"; engagement at every level, including individuals, communities, and religious leaders; and monitoring outcomes and impact.

Conclusion

Achieving the updated global strategy requires strong political commitment and collaborative governance. Although no universal blueprint exists, in countries with high maternal and child mortality rates efforts must be directed towards increasing the capacity, skill, and accountability of leaders. Ultimately, the health and wellbeing of women, children, and adolescents relies on how countries sustain effective political and administrative leadership.

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Innovating for women's, children's, and adolescents' health

Innovation is central to reaching the sustainable development goals on women's, children's, and adolescents' health. The task now is to scale up these innovations in a sustainable way, say **Haitham El-Noush and colleagues**

The progress report on the UN secretary general's Global Strategy for Women's and Children's Health, *Saving Lives, Protecting Futures*, notes that "innovation is essential to achieving the ultimate goal of ending preventable deaths among women and children and ensuring they thrive."¹ The report advocates for integrated innovation, which combines science and technology and social, business, and financial innovation to enable sustainability and the scaling up of interventions.²

Innovation is required in all aspects of the Every Woman Every Child initiative (www.everywomaneverychild.org), including health systems, social determinants of health, human rights, leadership, finance, and accountability, to help to achieve the United Nations' sustainable development goals.

Strategically, innovation forges non-traditional partnerships among the public and private sectors, attracts new sources of funding through investment opportunities for the private sector and governments, and stimulates creative ways for countries to use innovation to accelerate attainment of their health goals. Innovation complements programmes that achieve results in the near term but that may not be sustainable without ongoing support from donors.

Alongside Every Woman Every Child in 2010 the UN secretary general, Ban Ki-moon,

launched an associated Innovation Working Group to advocate for, identify, and support innovations to accelerate progress on the health targets in the millennium development goals. Meanwhile, global partners of the secretary general's strategy were developing a pipeline of innovations in women's, children's, and adolescents' health. Research conducted for *Saving Lives, Protecting Futures* showed that more than 1000 innovations totalling over \$255m (£165m; €235m) had been supported in the research and development pipeline.

We are in a watershed year. The transition from the millennium development goals to the sustainable development goals provides a pragmatic opportunity to advance the innovation agenda to ensure that the best innovations are scaled up and have maximum impact on saving and improving the lives of women and children by 2030.

In this paper we propose challenges and solutions for the post-2015 period, aimed at meeting the goals of the Global Strategy for Women's, Children's and Adolescents' Health and the sustainable development goals.

Methods

Evidence for this article was gathered from the published literature, UN reports, and the authors' experiences in development innovation. While we cannot claim consensus, this paper was reviewed by members of the Every Woman Every Child Innovation Working Group and other global health experts, whose feedback was used to modify it.

What is the problem?

Despite important progress, unfortunately each year 6.3 million children still die before the age of 5 and 289 000 women die in pregnancy and childbirth. A third of children, meanwhile, fail to reach their full potential. Innovation is needed to rectify this situation and help us reach the new sustainable development goals. In the past five years over 1000 innovations in women's, children's, and adolescents' health have been supported. Most of these, however, are at proof of concept stage, with only a few being fully scaled up.

A major gap is the lack of a smooth pathway along which innovations can be scaled up sustainably. Every Woman Every Child is uniquely positioned to bridge any gaps by providing a platform to deliver strong political and leadership commitments, mobilise resources, and connect the stakeholders needed to successfully scale up an innovation. These stakeholders include innovators, universities, small and medium enterprises, incubators and accelerators, foundations, development agencies, civil society organisations, multinational corporations, investment banks, high net worth individuals, and governments.

EWEC innovation marketplace

The Innovation Working Group aims to smooth the innovation pathway in a sustainable manner by establishing the Every Woman Every Child innovation marketplace to facilitate the four interlinked elements of innovation: the pipeline, curation, brokering, and investment. The group seeks to create links to already existing resources and initiatives, thus establishing a more coherent system for scaling up innovations in a sustainable manner. But it does not propose to replicate what is already being done well by others in the innovation ecosystem. Every Woman Every Child provides investors with a trustworthy source of investment opportunities that is free from conflicts of interest, developed by a trusted partner that used transparent criteria and governance processes. It catalyses the convergence of initiatives and stakeholders in a way that might not otherwise be possible.

Priority interventions

The goal of the EWEC innovation marketplace is to scale up 20 investments in women's, children's, and adolescents' health by 2020 and to enable at least 10 of these innovations to be widely available and having a significant effect by 2030.

One inspiring example of innovation is the African meningitis vaccine project, which took 15 years to start saving lives but has now been used to immunise more than 215 million people. By 2020 the vaccine is expected to protect more than 400 million

KEY MESSAGES

Innovation in healthcare is essential to the achievement of the post-2015 sustainable development goals

Over the past five years over 1000 innovations in women's, children's, and adolescents' health have been supported but few have been fully scaled up in a sustainable manner

To tackle the scaling challenge in innovation, the Every Woman Every Child Innovation Working Group builds networks of investors and links innovations to private sector commitments and national resources, through the brokering function of its innovation marketplace

BOX 1: EXAMPLES OF INNOVATIONS*

Preventing bleeding after childbirth

Effort has been made to accelerate the development of an innovative, heat stable, and low cost inhaled form of oxytocin to manage postpartum haemorrhage after childbirth in developing countries. An innovation was developed by Monash University and initially supported by the Saving Lives at Birth partners. It is now being accelerated through a collaboration with GlaxoSmithKline, McCall MacBain, the Planet Wheeler Foundation, and Grand Challenges Canada. It has the potential to save the lives of almost 20 000 pregnant women each year.

Assisting difficult births

The BD Odón Device is a delivery assistance device supported by the Saving Lives at Birth partners, which is designed to be safer and easier to use in resource limited settings than forceps, vacuum extractors, or caesarean sections. It has the potential to prevent 200 000 deaths a year in sub-Saharan Africa. Development of this new device continues, in partnership with the World Health Organization (WHO). The medical technology company BD (Becton Dickinson) intends to manufacture and distribute it at full scale, assuming that ongoing clinical testing validates its safety and efficacy.

Preventing infection among newborns

With investment from the Saving Lives at Birth partners, John Snow International has pioneered the use of the antiseptic compound chlorhexidine in Nepal as a safer, more effective alternative than existing methods for disinfecting a newborn's umbilical cord stump. Research indicates that routine use of chlorhexidine could reduce the incidence of newborn death by 24%. Already 1.2 million babies have had chlorhexidine applied to their umbilical cord stump, leading to an estimated more than 7500 lives saved in Nepal alone. Scaling up is already occurring in Nigeria and Madagascar, and in other countries.

*Descriptions adapted from www.everywomaneverychild.org/global-strategy-2/g52-progress-report.

people and prevent one million cases of meningitis A, 150 000 deaths, and 250 000 cases of severe disability.³

The time frame for innovation means that their full impact may not be felt for five, 10, or even 15 years.⁴ Examples of innovations that are in the process of being scaled up are in box 1.

Four interlinked aspects of innovation Pipeline

The pipeline comprises early stage innovations supported by investments of \$100 000 to \$250 000 to reach the proof of concept stage. There are more than 1000 innovations in the pipeline for women's, children's, and adolescents' health. Examples of key sources of innovations in the pipeline are shown in box 2.

Although the innovation pipeline is robust, it is difficult to access and analyse. For example, 1689 innovative projects (including but not limited to women's, children's, and adolescents' health) in 80 countries are listed on grandchallenges.org. This level of information is an advance, but it is difficult to search for all the projects on a specific topic, access project level information (potentially including results), analyse individual projects, or allow other qualified funders to deposit projects. The Bill and Melinda Gates Foundation, USAID, Grand Challenges Canada, and the Results for Development Institute are working together to improve the interoperability of these data.

The Innovation Working Group's role is to stimulate funders to refresh the pipeline, to monitor it, and to encourage the consolidation of pipeline information to make it easier to access and analyse. A specific example is

the use of common data elements, allowing project information and updates to be easily transferred from one repository to another.

Curation

Curation is the comparative analysis of innovations in the pipeline. It answers the question of which of the innovations are best. It is a critical step in distilling dozens of innovations that might be in the pipeline for a women's, children's, and adolescents' health sub-topic such as pneumonia down to a few of the best to present to an investor who may be interested in supporting an innovation for pneumonia. Naturally, what is "best" depends on the intended audience, and the curation process needs to take this into account. The figure shows a taxonomy of sub-topics developed through consultation by the Innovation Working Group.

Currently there is not enough comparison of innovations. The provenance of initial

funding at proof of concept stage often determines which investments are scaled up. Curation activity must focus on conditions with the greatest disease burden and on innovations with the greatest potential to save and improve lives.

A process and criteria are needed to enable comparison among innovations, especially those vying for further investment in certain sub-topics. A good example of an attempt to do this is the PATH Innovation Countdown 2030 report, funded by the Norwegian Agency for Development Cooperation (Norad), US Agency for International Development (USAID), and the Bill and Melinda Gates Foundation (see <http://ic2030.org>). Many groups, from foundations to companies to venture capital firms, do their own curation when deciding on investments, but there is no system to share and build on these efforts.

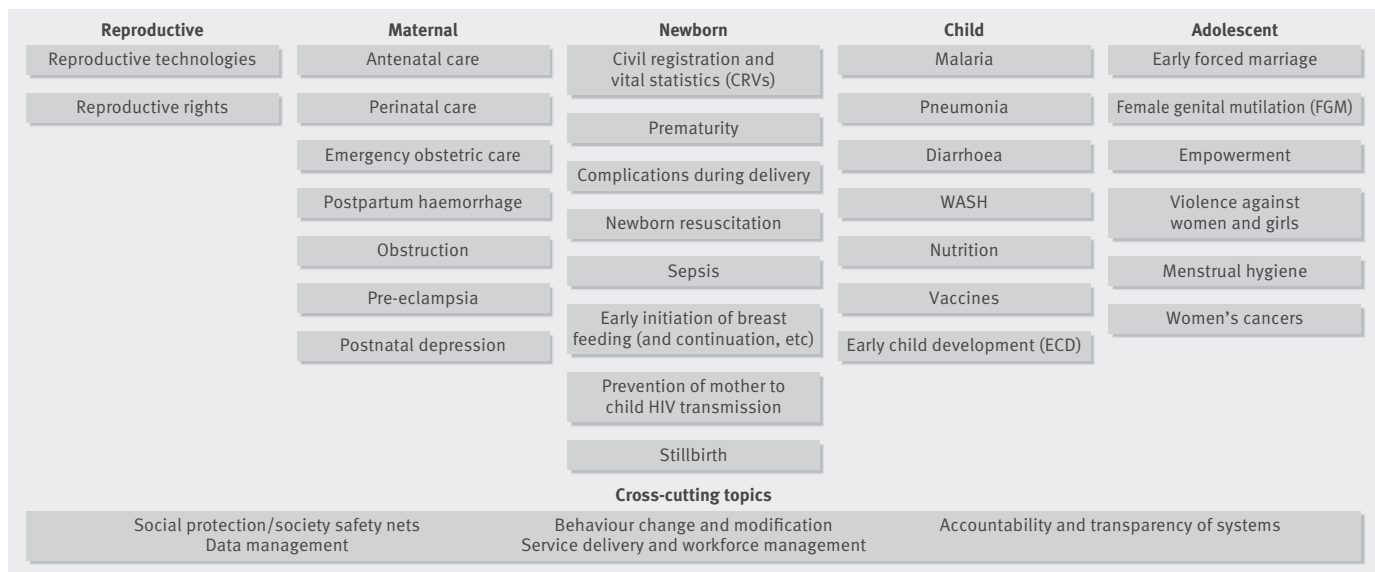
Curation may show that some innovations are not quite ready for investment because they have not reached the stage of scientific proof of concept or because their business plan is poorly developed. This highlights the need for bridge financing in the range of \$250 to \$1m and also for mentoring through investment readiness programmes such as Lemelson/Venture Well, Duke SEAD, Villgro, GSBI, and NESST.

A neutral body associated with the UN can gain the confidence of investors and governments. The Innovation Working Group can stimulate, organise, and finance curation exercises in the sub-topics shown in the figure so that the most promising innovations can be scaled up through brokering and investment, ultimately achieving impact. WHO has a track record of providing technical assistance to governments and can lend expertise. The working group's neutrality is crucial, because investors seek a trustworthy list of investment opportunities that is free of conflicts of interest and has transparent criteria and governance processes.

BOX 2: INNOVATIONS IN PIPELINE (WITH KEY SOURCES)

- Saving Lives at Birth (USAID, Gates Foundation, Grand Challenges Canada, Norway, UKAid, Korean International Cooperation Agency)
- Saving Brains (Grand Challenges Canada and partners including Aga Khan Foundation Canada, World Vision Canada and the Norlien, Bernard van Leer, Maria Cecilia Souto Vidigal, and UBS Optimus Foundations)
- All Children Thriving, and Putting Women and Girls at Center of Development (Gates Foundation and partners including Brazil and India)
- Global Innovation Fund, DIV@USAID, Gates Grand Challenges Explorations, Grand Challenges Canada Stars in Global Health, and similar innovations
- Grand Challenges projects in India, Brazil China, Israel, and Peru and nascent initiatives in Thailand and ASEAN countries
- Every Woman Every Child Innovation Working Group's Catalytic mhealth Grants Program, supported by Norad through UN Foundation

In addition, there are individual company pipelines, from small and medium enterprises to multinational corporations, and universities are a key source of innovation



Sub-topics among innovations in the pipeline for women's, children's, and adolescents' health

Brokering

Brokering is the process of investment due diligence and of matching innovations to investors. Brokers need a "line of sight to the entire community," including looking "backward" to curation and "forward" to investment, to effectively link innovators and investors. Communication of the curation effort is important to the marketing of the investment opportunity, conveying messages of the product's benefits and, critically, that it is "doable," given a sound investment thesis. Lessons can be learnt here from other impact investment organisations, such as the Global Health Investment Fund.

There is no successful systematic evaluation of experience of offering social investments to investors. As Judith Rodin of the Rockefeller Foundation has pointed out, trillions of dollars in private capital are sitting on the sidelines.⁵ Investors require trustworthy channels and an effective and neutral deal sourcing process through which to make investments that have an impact. An impact investment manager is needed to broker such opportunities.

The week of the UN General Assembly, and the annual Every Woman Every Child innovation sector session, are opportunities to celebrate private sector commitments in the form of brokered deals. Examples of brokered deals announced at the assembly include the Odon device (2013) and inhaled oxytocin (2014).

Health ministries have an important role in selecting innovations on the basis of need. The Innovation Working Group can help by creating "a global platform that thinks locally." This platform would provide user feedback from frontline staff and bring other benefits to countries in terms of procurement and distribution. The ultimate goal is to

create a culture of innovation in health ministries. As a neutral platform, the innovation group can take the lead on brokering and the development of brokering models, including using the annual UN General Assembly as a brokering platform and to celebrate successful deals. This is one important way for the EWEC innovation marketplace to add value.

Investment

Investment is the process of decision making for public and private funding of innovations of more than \$1m. We need ways to access new pools of capital, such as private sector investors, and to mobilise countries' domestic resources. Investors include multinational companies, impact investors, venture philanthropists, "angels," venture capital funds, civil society organisations, foundations, and governments. The innovation marketplace is not itself an investment fund but provides channels that increase opportunities to invest in innovation. Investment can also be enhanced by online platforms such as the Canadian government's "Convergence" platform, which will help create partnerships for new blended finance investment vehicles.

Innovation in women's, children's, and adolescents' health, and in particular its shared global governance through the Grand Challenges initiatives (<http://grandchallenges.org>), has great potential as a domestic resource mobilisation strategy to help countries reach the sustainable development goals.⁶ Countries support their own innovators because this leads to social and economic development and jobs. Country plans under the UN global financing facility—a recently launched mechanism that pools resources to fund women's, children's, and adolescents' health programmes in low and middle income countries—will provide a

means of financing innovations. Nothing drives innovation like market demand. Scaling up and adoption of innovative service delivery approaches and new technologies by countries is associated with an annual decline of about 2% per year in the under 5 mortality rate.⁷

Imagine a scenario whereby a health minister can survey the national gaps in care, match these gaps to innovations in the EWEC marketplace, and finance the scaling up of these innovations through procurement, by using domestic resources or the UN global financing facility. Ultimately, countries are the biggest investors in innovation as it is scaled up, and health ministries institutionalise these innovations. Such a system optimises country leadership and the lifesaving and life improving power of innovation for women's and children's health.

Civil society organisations are another source of finance and are well positioned to adopt and scale up innovations. The same foundations and development agencies that helped create the pipeline at proof of concept stage will also help finance the most promising innovations, serving to further reduce risk for subsequent private and public investors.

Although beyond the scope of the innovation marketplace, a country's regulatory environment influences the adoption of innovations. International technical agencies such as WHO have a valuable role in making recommendations in support of health interventions, including innovations. More generally, mechanisms that focus on creating enabling environments for national health systems to absorb innovations, including the lessons learnt from scaling innovations in other countries, would be useful.

Conclusion

In 2010, the challenge for Every Woman Every Child was to create a pipeline of innovations. In 2015, a pipeline of over 1000 innovations in women's, children's, and adolescents' health has been created, and the challenge now is to scale them up. A key strategy of the Innovation Working Group will be to link existing activities and gaps in care and to create a global marketplace for the innovations, where they meet investors so that they can be scaled up sustainably and achieve widespread impact. The innovation model developed for women's, children's, and adolescents' health may also be useful to pave the way from innovation to impact for other sustainable development goals in the post-2015 era.

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Financing women's, children's, and adolescents' health

While global investment in women's, children's, and adolescents' health has increased in recent years, significant gaps remain. **Geir Lie and colleagues** propose five strategic shifts in financing

Better health is not a cost; it is a benefit, and there is strong evidence that investing in health and in women, children, and adolescents yields significant benefits to society and the economy.¹⁻⁵ The primary benefits can be measured in terms not only of saved lives but also longer and healthier lives. The secondary benefits are economic and manifest themselves in productivity gains and economic progress. Recent estimates have noted that as much as 25% of growth in full income (which measures the full economic benefit of better health as valued by individuals) in low and middle income countries between 2000 and 2011 resulted from improvements in health.²

However, far too many newborns, children, adolescents, and women still die from preventable conditions every year, and far too few have reliable access to good quality health services. Scaling up from the current levels of healthcare coverage to the global convergence targets (that is, a mortality rate among under 5s of no more than 16 deaths per 1000 live births, an annual death rate from AIDS of 8/100 000 population, and an annual death rate from tuberculosis of 4/100 000 population²) currently faces a significant financing gap. The World Bank has estimated that \$33.3bn (£21.4bn; €30.4bn) would be needed in 2015 alone in the 63 high burden, low and lower middle income countries included in the "Countdown to 2015" initiative (www.countdown2015mnch.org), equivalent to \$10 per person.⁶

Methods

The paper was based on a literature review and synthesis of evidence from relevant

KEY MESSAGES

Evidence is strong that investing in women, children, and adolescents yields significant health and economic benefits. Global investment in women's, children's, and adolescents' health has risen in recent years.

There is a big gap between current levels of investment and current and future resource needs for reproductive, maternal, newborn, child, and adolescent health. Strategic shifts in the financing landscape could reduce this significant gap in a post-2015 world.

documents, including "grey" (not formally published) literature, datasets, and the latest estimates from the World Bank, the Partnership for Maternal, Newborn & Child Health, and the World Health Organization (WHO). In addition to the latest evidence, and informed by a synthesis of existing research, a consensus on the manuscript was reached by the Financing Working Group of the Global Strategy for Women's, Children's and Adolescents' Health. A draft of the paper was circulated for public consultation and was finalised in line with the comments received.

Background to the global strategy

Launched in 2010 by the secretary general of the United Nations, the Global Strategy for Women's and Children's Health has fuelled efforts to deliver the UN millennium development goals. The Global Strategy and the Every Woman Every Child advocacy movement have promoted collective action, joint messaging, and effective partnerships.

By 2014 the strategy had gathered more than 400 commitments from more than 300 partners around the world, ranging from governments, civil society organisations, foundations, and academia to professional groups, businesses, and international organisations. The Partnership for Maternal, Newborn & Child Health has estimated that financial pledges to the strategy reached almost \$60bn in 2011-15, 18% of which (almost \$11bn) was contributed by 27 low income countries.⁷ Of the 20 largest pledges, several were represented by global partnerships, countries, foundations, non-governmental organisations, multilateral organisations, and the private sector.⁷ Disbursement of these pledged funds has grown steadily, and by May 2014 almost 60% (\$34.2bn) had been disbursed. This figure relates to financial commitments only: in addition to these, many commitments made to the global strategy are not easily monetised, so potentially more has been committed than the numbers alone are showing.

Despite the global economic downturn, the world has remained resolute in its pledges to the Global Strategy for Women's and Children's health. Official development assistance disbursements for reproductive, maternal, neonatal, and child health has

risen by an average of 11% a year.⁷ (The Muskoka method⁸ was used to calculate this figure.)

Although pledges to women's and children's health remain strong on the world stage, this has not necessarily been the case at the country level. Recent (2010 to 2013) data on health expenditure show that governments in 12 countries (Benin, Burkina Faso, Cambodia, Cote d'Ivoire, Democratic Republic of the Congo, Gambia, Niger, Sierra Leone, Tajikistan, Tanzania, Togo, and Uganda) are the smallest funding source for reproductive, maternal, neonatal, and child health, at 21% of overall funding in each country, whereas external resources contribute 30%.⁹ Although in some cases "aid fungibility" (use of aid in ways not intended by the donors when disbursing the funds) may have contributed to this, by crowding out government and private sector funding, it still leaves households as the main source of funding for reproductive, maternal, neonatal, and child health, at 49% of all expenditure in these countries.

Post-2015 financing framework: understanding the resources needed

As the world transitions from the UN millennium development goals to a post-2015 world of sustainable development goals, a considerable part of the agenda for reproductive, maternal, newborn, child, and adolescent health remains unfinished, despite the progress made so far.

The current need for resourcing highlights in a dramatic way the urgency of scaling up financing. Although this scaling up can be financed by countries' expected economic growth (given that this growth will far exceed the estimated cost of financing health over the 2015-2030 period²), challenges lie ahead.

Challenges facing the financing landscape

The current gap in financing can be bridged only through dramatic increases from domestic and international sources and from both public and private sectors. However, over the next few years we expect big shifts in the global economic picture, in the health financing landscape, and more broadly in the development financing landscape.

Economic growth has the potential to provide considerable resources, but the transition of countries from low income to middle

income status is often accompanied by widening inequities between rich and poor people and by insufficient prioritisation of health. Poor targeting, inadequate use of evidence, and fragmented financing reduce the efficiency of existing investments. The poor state of civil registration and vital statistics systems hampers the ability to monitor progress and base decisions on sound evidence. The lack of a skilled health workforce, particularly at the community level in many countries, robs health systems of their first line of preventive action and defence and also a crucial employment opportunity in poor communities.

An analysis conducted by the Bill and Melinda Gates Foundation shows that between 2014 and 2030 an estimated 41 countries are expected to graduate from the World Bank's fund for the poorest countries, the International Development Association.¹⁰ Additionally, 15 countries are expected to graduate from the African Development Bank's Africa Development Fund, 15 are expected to graduate from the Asian Development Bank's Asian Development Fund, and as many as 38 are expected to graduate from the Global Alliance on Vaccines and Immunization.¹⁰ Such graduations can be welcomed as a sign of prosperity and progress but must also be managed carefully to ensure that citizens at the greatest risk are not left behind.

Experience has shown that this increased "funding for health" will not occur automatically: while in low income countries each percentage point increase in economic growth is associated with growth in government spending on health of more than one percentage point, in lower middle income countries the associated growth is less than half a percentage point.¹¹ The effect of this smaller rise in spending is compounded by the fact that, as countries reach lower middle income status, development assistance for health begins to fall, as donors' graduation policies start to take effect. These combined effects can create major challenges for countries, particularly given that they often come at the same time as the countries are dealing with other issues, such as decentralisation, a greater need to tackle inequity (including pockets of vulnerability), and a shift to a growing burden of non-communicable disease.

Five strategic shifts

We propose five strategic shifts in the financing landscape for women's, children's, and adolescents' health in the post-2015 world.

Value for money

Achieving value for money must be made a priority. Countries must increase their share

of total pooled health expenditure, reduce barriers to the reallocation of these funds towards priority services and beneficiaries, and implement strategic purchasing and performance based financing. These steps require a better dialogue between finance and health ministries to leverage more efficient and equitable domestic financing.

Countries' ability to use taxation to expand the overall fiscal envelope must be strengthened, and they must promote dialogue with their finance ministries and sub-national bodies on reducing regressive subsidies and reallocating the resources that are freed to programmes that target poor people. They could also explore new ways to generate domestic health revenues, such as through expansion of "sin taxes," debt swaps, and the floating of bonds marketed to diaspora communities.

Integrated approach

We must break down the separate silos of financing for women's, children's, and adolescents' health, including in the areas of nutrition and communicable disease. This will require enhanced collaboration between the international agencies in strengthening health systems and moving towards universal health coverage so as to reach hard to reach populations, while strengthening the funding base for activities with clear collective benefits, such as the eradication of malaria.

Conflict settings

We must develop a better mechanism for financing the health of women and children who live in conflict or post-conflict settings. Currently, over half of all child and maternal deaths occur in areas that are in conflict or just recovering from conflict. Developing new ways to finance health improvements among people in these settings, as well as to increase accountability for the results, needs to be prioritised. One approach would be to create pooled funds that transfer funding to frontline providers through performance contracts. These pools would be governed through participatory mechanisms and placed under citizens' control.

Innovative financing models

We should foster innovative financing models at the global, regional, and national levels. Innovative financing mobilised nearly \$100bn for health and development between 2001 and 2013, and such financing has grown by about 11% a year.¹² One example of innovation is to shift a portion of the domestic financing into the future by using health bonds as a bridge to meet upfront financing needs.

This would create more fiscal space in the short term for domestic expenditure,

especially in those countries facing graduation. Countries could strengthen health bonds by securing credit enhancement mechanisms (for example, guarantees and performance payments to "buy down" interest rates) through multilateral development banks or bilateral agencies (or both). In addition, such instruments could "crowd in" private capital, targeting investors such as sovereign wealth funds, corporate treasuries, and private investors, who are increasingly looking for investments with joint economic and social returns and who are willing to accept some risk for greater reward. The recently announced partnership between the Global Financing Facility and the International Bank for Reconstruction and Development, is an excellent opportunity to put this into practice, as does emerging thinking within the Global Fund to Fight AIDS, Tuberculosis and Malaria and in USAID.

Incentivising innovation

We must explicitly focus on financing and incentivising innovation. The pipeline of innovation for women's, children's, and adolescents' health is the most robust it has ever been. However, without attention to the financing and regulatory pathways that enable these innovations to be scaled up, there will be substantial delays in getting lifesaving innovations to the women, children, and adolescents who need them most. We should develop pathways for private investment and innovative financing approaches, so that the quality of health-care, and people's access to it, can be scaled up.

As much as possible, programmes supported by donors will integrate a results focused approach (such as results based financing or output based aid) with attention to building aid flows into countries' public finance management systems. Programmes should include support for institution building—in particular, strong health purchasing agencies and related governance and accountability measures. Although the toolbox of innovative financing options could not be fuller, few examples of this type of financing are yet operating on a substantial scale. By actively encouraging investment and creating a dialogue about major gaps and how innovative financing approaches might help fill them, we stand a better chance of these investments having a large scale impact.

Conclusions

The wide financing gap will not be bridged unless we completely re-imagine the way our various sources of financing for healthcare are organised—and will not be bridged

through harmonisation alone, which is necessary but not sufficient. We need more creativity in examining the inter-relations between existing sources of funds.

We call for an unprecedented funding effort over the coming 5-10 years to finance the next phase of the Global Strategy for Women's, Children's and Adolescents' Health and to bring to bear, in a collaborative fashion, the entire range of financing opportunities outlined here—domestic and international, public, and private—to accomplish this task. Agreements to close the overall gap would need to be discussed at a country level and included as part of the post-2015 overall monitoring framework.

Countries should seek to reap the full benefits and financial capabilities of the multilateral development banks, such as the World Bank Group, Inter-American Development Bank, African Development Bank, Asian Development Bank, and Islamic Development Bank. The emerging New Development Bank may also present an opportunity once it is up and running. Grant financing available from bilateral organisations such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, Gavi (the Vaccine Alliance), UNICEF, and other pooled funds could complement the multilateral development bank platforms.

The financing mobilised so far in support of Every Woman Every Child, and the remarkable reductions in suffering and death that this has enabled, proves that success is possible. Now, we must reach even

further and bring our collective will and creativity to bear, to finance not only a reduction in but an end to preventable child and maternal deaths by 2030, along with an end to the epidemics of HIV and AIDS, tuberculosis, and malaria.

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Women's, children's, and adolescents' health in humanitarian and other crises

The worst rates of preventable mortality and morbidity among women, adolescents, and children occur in humanitarian and other crises. **Sarah Zeid and colleagues** discuss the specific attention that is needed for women, adolescents, and children in crises and fragile settings

The millennium development goals highlighted women's and children's health and galvanised unprecedented efforts by and between governments, civil society, the private sector, and development organisations to meet the needs of the world's poorest people. However, as global, national, and local partners work to build on the momentum of the goals with an ambitious post-2015 development agenda, crises and fragile settings have devastating effects on individuals' and families' wellbeing, physical security, and future prospects. Urgent attention is needed to ensure that sexual and reproductive health interventions—vital for the health and dignity of women, children, and adolescents—are available and accessible to those in emergency settings.

This paper highlights the critical needs for reproductive, maternal, newborn, child, and adolescent health in emergency settings and, based on evidence, offers key recommendations to effectively tackle these needs.

Methods

This paper is based on a desk review of evidence and inputs from public consultations and expert meetings organised as part of the new Global Strategy for Women's, Children's and Adolescents' Health. UNFPA

KEY MESSAGES

Meeting the health needs of women, children, and adolescents in crises and fragile settings is the most fundamental step on the pathway to both sustain the gains of the millennium development goals and achieve the sustainable development goals

Strategic action to tackle and prioritise support for reproductive, maternal, newborn, child, and adolescent health is fundamental to human dignity

Such action must be more context sensitive, adapted to and for changing circumstances and across the life course

The health interventions and overall response to crises in humanitarian and fragile settings must be better anticipated, planned, and resourced

organised an expert meeting in Abu Dhabi on 10-11 February 2015, hosted by the government of the United Arab Emirates. This meeting, chaired by Princess Sarah Zeid, focused on sexual, reproductive, maternal, newborn, and adolescent health in humanitarian and fragile settings, with the purpose of formulating policy recommendations for incorporation into the revised Global Strategy of the United Nations secretary general's Every Woman Every Child initiative. A draft of this paper was circulated for public comment through a consultation process and finalised based on the responses received.

Women, children, and adolescents are adversely affected in humanitarian crises

The worst mortality and morbidity rates for women and children occur in chaotic environments that are caused by, and create, breakdowns in governance, rule of law, and support systems. They are characterised by destruction of public infrastructure including health facilities, massive population displacement, insecurity, and a collapse of the social contract. Hostilities may be actively directed at stigmatised populations, and governments may become hostile to displaced populations.

More than 80% of the 25 and 44 countries classified as making either “no progress” or “insufficient progress” towards millennium development goals 5 (to improve maternal health) and 4 (to reduce child mortality rates), respectively, have suffered a recent conflict, recurring natural disasters, or both. Worldwide, women and children are up to 14 times more likely than men to die in a disaster.¹ Over 75% of 84 million people in need of humanitarian assistance in 2014 were women and children, the majority of whom were impoverished.²⁻³ Poor people suffer most from natural disasters—95% of disaster fatalities occur in low and middle income countries.⁴

In the 50 most fragile states (based on OECD data),⁵ 60% of preventable maternal deaths⁶ and 53% of preventable under 5 deaths⁷ take place in settings of conflict, displacement, and natural disasters. Neonatal mortality is highest in these circumstances. In 2012 99% of the 2.9 million newborns

deaths and 2.6 million stillbirths occurred in low and middle income countries, many of which had been affected by complex humanitarian emergencies.⁸⁻⁹ More than 250 million children under the age of 5 live in countries affected by armed conflicts.¹⁰

At any given time 4% of disaster affected populations are pregnant, about 15% of whom will experience an obstetric complication.¹¹ Risks associated with childbearing are compounded for girls who are exposed to forced or transactional sex.¹² Without access to emergency obstetric services, many women and girls will die during pregnancy or childbirth, and many more suffer preventable long term health consequences.¹³

Women and adolescent girls, especially those in fragile or hostile settings, face gender based exclusion, marginalisation, and exploitation, including sex and gender based violence. Gender inequality is a barrier to accessing essential services, and contributes to harmful practices such as early and forced marriage. These can increase during emergencies, resulting in early pregnancies that further threaten girls' lives.¹⁴⁻¹⁵ Older women and women and girls with disabilities or HIV are at heightened risk and require special measures.¹⁶⁻¹⁷

In countries emerging from conflict continued lack of access to healthcare, psychological and social support, and justice, coupled with ongoing sex and gender based violence, impede recovery and development. Often countries' longer term development planning processes fail to include preparedness, response, and recovery. Globally, many sustainable development goal targets will not be reached without tailored attention to sustainable, inclusive development for women and children in humanitarian and other crises.¹⁰

Broadening the scope of Global Strategy

Rising numbers of young people combined with declining fertility and the right investments can lead to a “demographic dividend,” which is a boost in economic productivity owing to more people in the workforce with fewer dependants.¹⁸ In this context the importance of women's, children's, and ado-

lescents' health needs in crises and fragile settings is the most fundamental step on the pathway to both sustain the gains of the millennium development goals and achieve the sustainable development goals.

The next Every Woman Every Child Global Strategy must be people centred and guided by both human rights norms and humanitarian principles. It must fully integrate humanitarian and sustainable development action through a "contiguuum approach," which means tackling relief, recovery, and development simultaneously rather than consecutively.¹⁹

Efforts must be driven by demand, owned by and accountable to local communities, and aimed at reinforcing social networks at the household and community levels that enhance quality of life. Young people and women must be empowered as they are the true "first responders" to a crisis.²⁰ Boys and men should also be engaged to support better sexual and reproductive health outcomes—their positive contributions to these are largely unexplored. We propose five recommendations for achieving more sustainable development for women, children, and adolescents in crises.

Firstly, health sector interventions should be more agile. Planning resilience with communities is important so that their capability and capacity to respond to humanitarian shocks is enhanced, and the severity and duration of any deviation from the path to sustainable development is reduced.²¹ To this end, health sector planning and intervention should be shaped by population data, respond to health sector risk assessments and local hazards, and be tailored to specific needs. To address inequities, health services (including commodities, supplies, and human resources) and

BOX 1 RECOMMENDED INTERVENTIONS FOR NEWBORNS AND CHILDREN

Key health matters to be tackled

- Newborns: preterm, low birth weight, sepsis, intrapartum complications
- Children: malaria, pneumonia, diarrhoea, measles, malnutrition, and mental health and wellbeing

Health interventions

Newborns

- Preventive care: Thermal care, protection and promotion of immediate and exclusive breast feeding, prevention and care of low birth weight, chlorhexidine for umbilical cord care, vaccination, dexamethasone, toxycolics, hygiene, prevention of mother to child transmission of HIV
- Treatment: kangaroo care, antibiotics, newborn resuscitation and intensive care, intrapartum care, emergency obstetrics care, oxygen, antiretroviral treatment

Children

- Preventive care: Longlasting insecticide treated bed nets and indoor residual spraying of insecticides, measles vaccination, infant and young child feeding interventions, adequate complementary feeding, psychosocial health
- Treatment: Antibiotics, artemisinin based combination therapy, oral rehydration salts, zinc, vitamin A, ready to use therapeutic foods, mental health support
- Delivery models: transit site clinics, community based care such as integrated community case management and community based management of acute malnutrition, home based care.
- Campaigns: mass measles vaccinations, distribution of insecticide treated bed nets, child health days, mass malaria care, chemotherapy

Non-health interventions

- Water, sanitation, and hygiene
- Nutritional status screening of infant and growth monitoring
- Communication and education on child and maternal nutrition in emergencies
- Micronutrients distribution for children 6-59 months
- Early childhood development
- Child friendly spaces
- Basic education
- Child protection
- Psychosocial support
- Birth certificates and registration
- Early stimulation
- Cause of death surveillance

Health system enablers

Resilience

- Age and sex disaggregated data to assess populations in need and reached
- Integrate risk assessment and analysis into resilient systems and services
- Develop capacity of health systems to have flexible and adaptable financing and service delivery, trained and available staff, priority drugs available when needed, reliable information systems, and leadership and governance that take into account emergency risk
- Newborn cause of death notification and audit
- Include children in the design, planning, and implementation of health policies and programmes from preparedness to the onset of an emergency
- Re-establishment of or repairs to healthcare infrastructure, support of referral system
- Strengthen routinely used laboratories and disease surveillance systems

Innovation

- Pneumococcal vaccine, rotavirus, *Haemophilus influenzae* type B vaccine, dispersible tablets, single dose vaccines, single dose antibiotics, vaccines that don't need to be kept cold, remote monitoring and teaching, m-health
- Micronutrient powder
- Newborns: Prefilled, single use injection device filled with gentamicin, cycloheximid for cord care, Doppler technology, gestational age estimate methods, aspartate aminotransferase AST for preterm labour at home, simplified antibiotic therapy for sepsis in young infants

BOX 2 RECOMMENDED INTERVENTIONS FOR ADOLESCENTS

Key health matters to be tackled

- Early pregnancy, HIV/AIDS and other sexually transmitted infections, unsafe abortion, sexual and gender based violence (including child early forced marriage and female genital mutilation), menstrual hygiene, nutritional deficiencies, traumas

Health interventions

- Preventive care: Contraception, condoms, emergency contraception, prevention of sexual and gender based violence, mental health, sexuality education, life skills, maternal healthcare including family planning counselling, voluntary counselling and testing for HIV, iron and folic acid supplements
- Treatment: Treatment of traumas and orthopaedic surgery, emergency obstetric and neonatal care services, contraception, nutrition, comprehensive abortion care, clinical care for survivors of sexual violence, treatment of sexually transmitted infections, emergency skilled birth attendance, postnatal care including for postpartum depression, antiretroviral treatment
- Delivery models: Flexible and integrated adolescent friendly health services, temporary clinics that are community based and mobile, provision of comprehensive sexual and reproductive health services for adolescents at a single site, home based care, education and outreach through non-health facilities, safe spaces, adolescent adaptation of minimum initial services package and assessment
- Kits: Menstrual hygiene kits (dignity kits), post-rape kits, sexually transmitted infection kits, contraception kits

Non-health interventions

- Ensure schooling options through targeted support (safe passage, financial support to families) and vocational training
- Access to life skills and comprehensive sexuality education in and out of schools
- Protection of girls from child marriage
- Systems for adolescent participation in decision making (especially for girls) at community, provincial, and national levels
- Strengthen links between programmes and referral pathways and coordination between sectors, including protection, education and livelihoods, for a holistic, multisectoral response
- Safe spaces, especially for girls

Health system enablers

Resilience

- Data disaggregated for age, sex, and disability
- Qualified and dedicated adolescent sexual and reproductive health staff, including clinical staff (community health workers, nurses, midwives, doctors, paramedics, nationals and international volunteers)
- Surveillance of priority illnesses including malnutrition and mortality
- Include adolescents in the design, planning, and implementation from the onset of an emergency, as well as in monitoring and evaluating projects
- Community and parental involvement

Innovation

- Use of social media to promote access to quality health information and information sharing
- Flexible outreach strategies, including transportation budgets in view of reaching adolescents in insecure environments and otherwise hard to reach areas
- Focusing on adolescent and youth specific potential for, and actual contributions to, community resilience, response, and recovery as part of sustainable development

BOX 3 RECOMMENDED INTERVENTIONS FOR WOMEN

Key health matters to be tackled

- Pregnancy and childbirth, sexual and gender based violence, family planning, tuberculosis, HIV/AIDS, sexually transmitted infections, situation specific diseases (for example, Ebola virus disease and cholera), mental health (including post-traumatic stress, trauma) and malnutrition

Health interventions

- In the event of a humanitarian emergency, ensure that the minimum initial services package is implemented and coordinated
- Preventive care: Sex education, prevention of sexual and gender based violence, contraception (with a focus on long acting, emergency contraceptives), post-exposure prophylaxis, menstrual hygiene management, HIV prevention, micronutrients, antenatal care
- Treatment: Skilled birth attendance, emergency obstetric and neonatal care services, caesarean section, comprehensive abortion care, treatment of sexually transmitted infections, postnatal care including for postpartum depression, treatment of traumas and orthopaedic surgery, clinical management of rape including post-exposure prophylaxis, antiretroviral treatment
- Delivery models: minimum initial services package, efficient referral, mobile clinics, community based service delivery
- Medical devices and kits: Manual vacuum aspiration, vacuum extraction, Doppler for fetal monitoring, prefilled single use injection device for Depo-Provera

Non-health interventions

- Water, sanitation, and hygiene: hygiene education, ensure functioning in health facilities for staff and patients, and manage medical care waste
- Safe spaces for women
- Baby friendly spaces
- Psychosocial care including for post-traumatic stress
- Conflict sensitive programmes that promote women's and young people's engagement in peace building
- Reparations and justice mechanisms (for example, for sexual and gender based violence); documenting evidence of human rights abuses
- Promote women's and young people's participation in decision making and all levels of humanitarian response

Health system enablers

Resilience

- Foster stewardship and ownership of local health authorities
- Human resources strategies: task sharing, protection and retention of health workers, increasing numbers of female service providers including community

based health workers and midwives, capacity building in multi-hazard risk assessment, disaster preparedness, surveillance, infection prevention and control,

- Promotion of policies that enable sexual and reproductive health and associated commodities for all phases of the emergency
- Service delivery, logistics, and supply chain: re-establishment and repairs of infrastructure, supportive referral system
- Suspend user fees where these apply and may be a barrier to access
- Open source database with health management information system, disaggregated data for sex, age, and disability of populations affected by the emergency to monitor equity of access
- Accountability and quality strategies

Innovation

- Use social media and mobile technologies for communications, data management, cash transfers, programming, crowd sourcing, and monitoring
- Non-pneumatic anti-shock garments for postpartum haemorrhage
- Telemedicine and new methods of rapid diagnostics and new vaccines

interventions must be available, accessible, acceptable, accountable, and of high quality. Some populations may be outside the reach of governments but will be accessible nonetheless by humanitarian organisations. Of central importance are adequately trained, resourced, and secure healthcare workers, requiring mechanisms to ensure security and safety.

Secondly, investment in stronger, more resilient healthcare and support systems is required for more reliable and secure access to essential health services and to life saving commodities, such as those necessary to protect women and adolescent girls from unwanted pregnancies to reduce the burden of sexually transmitted infections and HIV/AIDS. The ability to respond during times of crisis should be built into health systems, to absorb shocks, adapt to changed circumstances, and return to optimal levels of functionality as soon as possible. Multisector engagement of national and local stakeholders, such as ministries of health and education and local communities, in disaster risk assessment and emergency preparedness must be prioritised. The police and military should understand health is an essential part of human security.

Thirdly, communications technology, including social media, should be used more effectively. It offers opportunities to better influence health seeking behaviour, to support health workers, to help adapt health systems to local contexts, and to ensure greater accountability of all stakeholders. If communities and individuals are better connected they are able to support each other, share knowledge, and demand accountability of systems.²²

Fourthly, accountability should be at the centre of strategy. There should be a new emphasis on “rolling down” accountability to local communities and individuals who live with the effects of decisions taken elsewhere. This can be reinforced through adherence to principles of good governance and supported by systems that enable participation of all stakeholders in civil society, especially at local levels.

Finally, reliable, flexible financial flows are needed outside of state led mechanisms. This is critical in humanitarian contexts where crises result in the collapse of government capacity to finance, manage, and deliver services. However, funding of risk assessment, preparedness, and recovery is also critical, and requires stronger alignment between development and humanitarian financial flows, which is best achieved by sustainable development planning over several years by countries.

Critical interventions throughout life

Tailored intervention packages are recommended for greater effectiveness in humanitarian and fragile settings. Reliable and timely funding to support these interventions is critical, and governments of affected countries and international donors must prioritise these interventions. Based on guidelines set by UN agencies and major governmental and civil society organisations in emergency response, we recommend the critical interventions for children and newborns (box 1), adolescents (box 2), and adult women (box 3). A full list of the sources used to make these recommendations are available in the data supplement on thebmj.com.

Conclusion

Humanitarian needs are increasing, and we must ensure that essential healthcare services and lifesaving interventions are available in even the worst of times. Strategic action to tackle and prioritise support for reproductive, maternal, newborn, child, and adolescent health is fundamental to human dignity. Such action must be more context sensitive, adapted to and for changing circumstances and across the life course. The health interventions and overall response to crises in humanitarian and fragile settings must be better anticipated, planned, and resourced.

More than ever we need the Every Woman Every Child and humanitarian communities to come together, to support each other's efforts, and to work in more complementary ways. We need cooperation between and

across humanitarian and development stakeholders not only to bridge gaps but also to maximise the opportunities for sustained impact on the health and wellbeing of women, children, and young people.

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Accountability in the 2015 Global Strategy for Women's, Children's and Adolescents' Health

Julian Schweitzer describes the steps taken to ensure accountability in the 2015 Global Strategy and why it is important to success

As the era of the millennium development goals (MDGs) draws to a close, each year some 6.3 million children under the age of 5, 289 000 women, 2.8 million newborns, and 1.3 million adolescents still die from preventable causes. Others experience illness and disability, generating enormous loss and costs. An additional 2.6 million babies are stillborn. Building on the 2010 Global Strategy for Women and Children, the forthcoming 2015 Global Strategy for Women's, Children's and Adolescents' Health¹ aims by 2030 to end these preventable deaths and to achieve a "grand convergence" in health, giving every woman, child, and adolescent an equal chance to survive and thrive. As every preventable death is an affront to human rights,² the 2015 strategy has human rights at its core. It will be country led, universal, sustainable, equity enhancing, evidence based, partnership driven, and people centred. Robust, country led, multi-stakeholder, and participatory accountability processes, with independent review, unified reporting, and follow-up actions at all levels will be key to monitor and review progress and make the necessary policy adjustments to ensure success.³

Methods

A working group convened by the governments of Tanzania and Canada (see appendix) prepared proposals for the

KEY MESSAGES

We need a strong, inclusive, transparent, rights based and independent accountability process, based on experience implementing health aspects of human rights treaties, the MDGs, the 2010 strategy, and other health initiatives. All the stakeholders in women's, children's, and adolescents' health must be engaged to achieve the convergence goals of the 2015 strategy.

Key processes and institutions at the country, regional, and global level need to be strengthened and supported.

The 2015 strategy will create a unified global accountability mechanism with links to key intergovernmental mechanisms to ensure appropriate actions

accountability framework in the 2015 strategy.¹ In the absence of a comprehensive review of the accountability processes proposed by CoIA, the group reviewed relevant country and global reports, including on the implementation of the 2010 strategy.⁴ Other accountability processes, such as nutrition and education, were also reviewed and are cited below. Consultations were held with stakeholders during 2015, including two review meetings with government, academic, civil society, private sector, youth, and international agency representation.

The right to health

The right to the enjoyment of the highest attainable standard of physical and mental health was first articulated in the 1946 Constitution of WHO. Since then, nine international human rights treaties have recognised or referred to the right to health or to elements of it.⁵ Every state has ratified at least one such treaty and has committed to protecting this right through international declarations and domestic legislation and policies. In recent years, there has been increasing attention paid to the right to the highest attainable standard of health—for example, by bodies that monitor human rights treaties, by WHO, and by the Commission on Human Rights (now the Human Rights Council), which in 2002 created the mandate of "Special Rapporteur" on the right of everyone to the highest attainable standard of physical and mental health. These initiatives have clarified the nature of the right to health and its achievement. States have the primary obligation to respect, protect, and promote the human rights of the people living in their territory and in turn must guarantee the right to health to the maximum of their available resources, even if these are tight. While steps might depend on the specific context, all states must move towards meeting their obligations to respect, protect, and fulfil.⁶

Mechanisms of accountability, crucial to ensure that state obligations concerning the right to health are respected, take place at national, regional, and international levels. They involve various contributors, such as the state itself, NGOs and civil society, national human rights institutions, and international treaty bodies. Accountability

compels a state to explain what it is doing, why, and how. Without prescription of exact domestic formulas for accountability and redress, the right to health can be realised and monitored through various mechanisms. At a minimum, however, all accountability mechanisms must be accessible, transparent, and effective.

Administrative and political mechanisms are complementary or parallel to judicial accountability mechanisms. For instance, the development of a national health policy or strategy, linked to work plans and participatory budgets, plays an important role in ensuring government accountability. Indicators based on human rights support the effective monitoring of key health outcomes and some of the processes to achieve them. Many groups, including health professionals, play key roles.⁶ Policy, budget, or public expenditure reviews and governmental monitoring mechanisms hold the government to account in relation to its obligations towards health rights. Some health services have independent or internal systems to receive complaints or suggestions and offer redress. Furthermore, impact assessments and other studies allow policy makers to anticipate the likely and actual impact of policies on the enjoyment of the right to health.

Political mechanisms, together with monitoring and advocacy by NGOs and civil society, also contribute to accountability. Civil society organisations use indicators, benchmarks, impact assessments, and budgetary analysis to hold governments and other service providers accountable. Judicial mechanisms can also provide remedies. Incorporation into domestic laws of international instruments recognising the right to health can considerably strengthen the scope and effectiveness of remedial measures, by enabling courts to adjudicate violations by direct reference to the International Covenant on Economic, Social, and Cultural Rights.⁶

Accountability in the 2015 strategy

Accountability builds on experience gained over the past decades, particularly since the advent of the MDGs in 2000. In addition to the measures described above, the 2005 Paris Declaration on Aid Effectiveness called for mutual accountability, with donors and

BOX 1: BANGLADESH CIVIL AND VITAL REGISTRATION—PROGRESS AND CHALLENGES¹⁵

- Public facilities in Bangladesh report deaths, and these data are available at the national level
- Deaths at most non-government facilities, however, go unreported. Hospital deaths are not reported to the relevant statistical agency
- Causes of death are not yet recorded/mentioned in the death register in a manner consistent with ICD-10 (international statistical classification of diseases, 10th revision)
- Accuracy, completeness, and quality of recording and reporting are not always at an acceptable standard
- Community births and deaths are now reported electronically and cover the whole country
- Maternal-perinatal death review based on verbal autopsy without medical certification is in the pilot phase in four districts and will be scaled up in another three districts, but resources are insufficient
- There is weak coordination between the agency responsible for statistics and the ministry of health and family welfare (MOHFW), with both collecting data independently
- Data on fertility and mortality under statistically valid random sampling are in place and published every year
- Other survey data on vital statistics are also generated by the MOHFW from time to time, but data quality is a concern
- A health and demographic surveillance system providing regular and timely health data does not yet exist

partners both accountable for development results.⁷ Since 2010, a group of countries and donors known as IHP+ (International Health Partnership) have joined together to provide “an independent assessment of results at country level and of the performance of each signatory individually as well as collectively.”⁸

The 2011 UN Commission on Information and Accountability for Women’s and Children’s Health (CoIA), recognising the crucial links between human rights and health in human rights treaties, included a framework for global reporting, oversight, and accountability for women’s and children’s health and the strengthening of links with mechanisms for human rights.⁹ The commission recommended improvements in vital registration, health indicators, information and communications technology, resource tracking, reaching women and children, national oversight, transparency, and aid reporting. An independent Expert Review Group (iERG) has reported regularly to the UN secretary general on implementing the 2010 strategy and the CoIA recommendations.¹⁰ The CoIA definition of accountability⁹—a cyclical process of monitoring, review, and action that emphasises human rights principles of equality, non-discrimination, transparency, and partnership—is now widely accepted in global health and will be used in this paper.

Some progress

The 2010 strategy had four accountability themes:

- national leadership
- country monitoring and evaluation
- reducing the reporting burdens on poor countries. These countries often find

themselves at the receiving end of multiple demands for data from donors and partners

- tracking commitments.

There was no explicit reference to human rights. High level political leadership, public-private partnerships, increased resources, and civil society participation have contributed to progress, particularly on vital registration, information, tracking of resources, and oversight.^{11 12} Over 50 countries have prepared country accountability frameworks, with WHO participation.¹³

Serious challenges remain

The previously cited CoIA and iERG reports note weak national accountability mechanisms, lack of transparent data, and health systems under pressure to deliver ambitious political goals, with limited worker and management capacity. “Multiple information-collection systems have emerged, each with its own process for tracking financial and non-financial commitments” (CoIA). “The success of the post-2015 agenda will be judged by the way the current rhetoric on accountability is translated into mechanisms for robust and independent monitoring, transparent and participatory review and effective and responsive action” (iERG).

A preliminary assessment in 2014 by the Every Woman, Every Child (EWEC) movement identified progress but also different dimensions of accountability that needed strengthening.¹⁴ Weak data, such as those on births and deaths, use of resources, or quality of services, make it more difficult to devise appropriate policies and solutions and to ensure that resources are prioritised in favour of poor women, children, and adolescents. Poor data can also result in misallocation of resources and inappropriate policies. Bangla-

desh is an example of a country showing advances and challenges (box 1).

What have we learnt?

The experience of implementing accountability frameworks arising from the human rights treaties, the efforts to achieve the MDGs, and the EWEC movement since 2010 provide some key messages and principles for a rights based accountability framework. This is not a comprehensive list—others will emerge as the 2015 strategy is implemented and more evidence emerges on the impact of such frameworks on outcomes.

The accountability framework for the 2015 strategy

The accountability framework builds on these lessons together with the experience in other sectors.^{21 22 23} The 2015 strategy will likely be launched at the same time as the SDGs, and relevant SDG and strategy indicators are being aligned to minimise overload and confusion between competing data needs. Through its support for the 2015 strategy, the newly created Global Financing Facility (GFF) will also play an important role in providing additional resources for accountability.²⁴ Efforts are under way to align the strategy accountability framework with existing global initiatives, such as Family Planning 2020, to minimise additional demands for data and monitoring.

Accountability principles

As countries and contexts differ considerably, a single “accountability blueprint” would not work. Rather, based on experience over the past decades, the accountability working group enunciated a core set of accountability principles for the 2015 strategy:

- adherence to human rights including the rights of women, children, and adolescents to receive quality and respectful services
- the rights of communities and civil society to participate in monitoring, review, and action, and
- the key roles and responsibilities of the different stakeholders in the health sector, from governments and international agencies, to the private sector, civil society, and, above all, the women, children, and adolescents who have the right to survive and thrive.

In some cases, accountability can be assigned to a single stakeholder—for example, the accountability of a government to provide basic health services. In other cases we are talking of mutual accountability—for example, the accountability of partners in an international health partnership to

BOX 2: DESIGNING ACCOUNTABILITY FRAMEWORKS—THE KEY MESSAGES

- *Focus on equity and human rights*—The accountability framework, both at country and global levels, needs a firm human rights focus in the nine legally binding international treaties that address health related rights and have corresponding mechanisms to monitor implementation.⁵ Information needs to be disaggregated by sex, income, and geography to ensure that at risk and vulnerable populations are prioritised
- *Country ownership and oversight is paramount*—Despite decades of efforts at harmonisation, there are still parallel initiatives and data demands by the development partners and sometimes by different country agencies.⁸ As ever increasing proportions of financing come from domestic resources, the demand for data, review, and action must be home generated, researched, and owned. Countries such as Tanzania, Nigeria, Rwanda, and Bangladesh are developing accountability systems that focus on the local level and, in some cases, the engagement of civil society. Other countries have issued targets, such as birth attendance by a skilled provider, which can be tracked by civil society¹³
- *Don't forget the "health enhancing" sectors*—A recent study highlighted the large contribution of "non-health" sectors (such as water and sanitation, girls' education, etc) to health outcomes for women and children.³ These sectors need to be engaged—for example, through process indicators measuring the extent of partnership between the relevant ministries and agencies. Indicators that directly measure issues such as access to clean water and sanitation can be used as important proxy indicators for maternal and newborn health
- *Value for money*—Those countries that have achieved the health MDGs also achieved better value for money and targeting of resources, as well as spending more^{16 17}
- *Include and engage the private non-profit and for profit sectors* that provide the bulk of health services and even financing in many countries, but have been largely ignored in the accountability debate
- *Engage communities and civil society*¹⁸—Civil society and local communities must be engaged in issues that affect them and their decision making—for example, on spending priorities and access to and quality of healthcare. Participation is a critical element of a rights based approach. A randomised control trial in Uganda found that community based monitoring had a profound effect on quality and uptake of services and outcomes.¹⁹ Other community based mechanisms include assessments of the impact on human rights, reviews of maternal death, health tribunals, and local and traditional courts²⁰
- At sub-national levels there needs to be a *focus on diverse settings*—so that, for example, "hot spots" in areas of high need and/or areas with lack of services are highlighted and large geographical and social inequities in health outcomes can be addressed
- *The accountability process needs to be transparent, freely accessible, and independently verifiable*, with open access to data and scorecards
- International agencies need to ensure mutual consistency of their data
- To avoid confusion and overload at the country level, the 2015 strategy indicators will be *aligned with the SDG health goals and indicators and broader SDG goals and indicators* that have an impact on health
- Finally, there need to be *much stronger linkages* between the three parts of a rights based accountability framework: monitoring, review, and remedial action

BOX 3: GLOBAL STRATEGY 2015 ACCOUNTABILITY PRINCIPLES

- The purpose, functions, and deliverables of the accountability mechanism in terms of a dynamic process of monitoring, review, and remedial actions must be clear, transparent, and inclusive of all stakeholders
- Social accountability—defined as an approach towards building accountability that relies on civic engagement, in which ordinary citizens and/or civil society organisations participate directly or indirectly in exacting accountability²⁵—is critical. Evidence of the impact of social accountability in Uganda has been previously cited
- Accountability mechanisms should embody health rights (including sexual and reproductive rights) and equity with appropriate reference to human rights instruments and treaty monitoring bodies. In this regard the rights of adolescent girls to receive access to quality sexual and reproductive health services are paramount. The 2015 strategy accountability processes must therefore be coordinated with other accountability processes, including human rights, enacted by UN and intergovernmental institutions and be aligned with SDG accountability processes
- The highest levels of political authority, including government leaders, parliaments, intergovernmental processes, representative bodies such as the Inter-Parliamentary Union, regional and global bodies, and assemblies such as the African Union and the World Health Assembly, must also be engaged, as must national and sub-national institutions, particularly in devolved governments. All are crucial to ensure that the findings of the accountability process are used to shape subsequent investments, budgets, policies, and programmes
- Accountability mechanisms should, if possible, be independent. Both real and perceptions of conflict of interest should be avoided. Accountability mechanisms should have established procedures to enable open and transparent engagement with key constituencies
- Regular and open reporting: data, scorecards, reports, etc, should be accessible, usable, and verifiable by civil society, communities, and researchers. Monitoring should increasingly focus on outputs/outcomes, rather than inputs. Monitoring is not just about data but includes qualitative issues and adherence to rights. Monitoring of accountability processes and engagement of key parties is also important
- National reviews should span the various administrative levels where services are delivered and should be linked to relevant national and sub-national planning and budget cycles. This will be facilitated through strengthening capacity for participatory monitoring and accountability at the local, sub-national, and national levels
- The institutions carrying out the accountability process should collect data from various sources. Health systems data as well as independent (for example, citizen collected) data on access, quality, and equity of health services should be reviewed
- Resources: the accountability mechanism should be appropriately resourced
- Monitoring impact: the accountability mechanism themselves should be regularly reviewed.

mutually deliver agreed services. These core principles will themselves need regular review to ensure their continuing applicability and relevance.

Balancing completeness and overload

The goals of the 2015 strategy are to survive (end preventable deaths), thrive (ensure improved health), and transform (expand

enabling environments). It will have broad coverage in six strategic areas:

- advancing country leadership
- maximising agency and potential
- strengthening health systems
- promoting community engagement
- enabling cross sector collaboration, and
- improving healthcare in humanitarian settings.

This is a comprehensive agenda, and it will be critical to avoid overloading already stressed country data and information systems with demands for additional data.⁹ Comprehensiveness, to ensure that policies, budgets, and services for women, children, and adolescents can be adequately monitored (including by the recipients of these services), has to be balanced against

Accountability—monitoring, review, and remedial action²¹

Monitoring—regular, timely, good quality, transparent, international standards	Review—inclusive, transparent, multiple inputs	Act—evidence based, transparent, timely
Country Data collection; annual performance reports and scorecards; special studies; CSO and academic reports; social accountability reports	Health sector, civil society, academic and other reviews; media reports; parliamentary committees, country level independent review bodies	Government budgets, plans and programmes; civil society and private sector budgets, plans and programmes, participatory budgeting and policy planning
Regional Regional monitoring report and scorecards (such as Africa Health Stats, CARMMA, ALMA, Africa Health Budget Network, Arrow); social accountability reports	(Sub)regional country peer review mechanisms; regional UN reviews (such as WHO regional committee, UN regional commission); regional groups such as African Union	Country action; regional initiatives
Global UN monitoring reports; CSO, academic reports (such as Countdown); commitment /expenditure reviews; social accountability reports; annual/biannual “state of RMNCAH” review	Such as UNGA, WHA, PPD, IPU; expert groups; stakeholder groups; “open” mechanisms	Country action; global initiatives and advocacy; funding decisions

CARMMA=Campaign on Accelerated Reduction of Maternal Mortality in Africa, ARROW=Asia-Pacific Research and Resource Center for Women, ALMA=Africa Leaders Malaria Alliance, UNGA=United Nations General Assembly, WHA=World Health Assembly, PPD=Partners for Population Development, IPU=Inter-Parliamentary Union, UNGA=UN General Assembly, WHA=World Health Assembly, CSO=Civil Society Organization, RMNCAH=Reproductive, Maternal, Newborn, Child, Adolescent Health.

feasibility, reliability, affordability, functionality, and access to data systems and their links with the broader SDG system (table).

Country accountability

Country governance and accountability processes depend on factors including the degree of centralisation/decentralisation

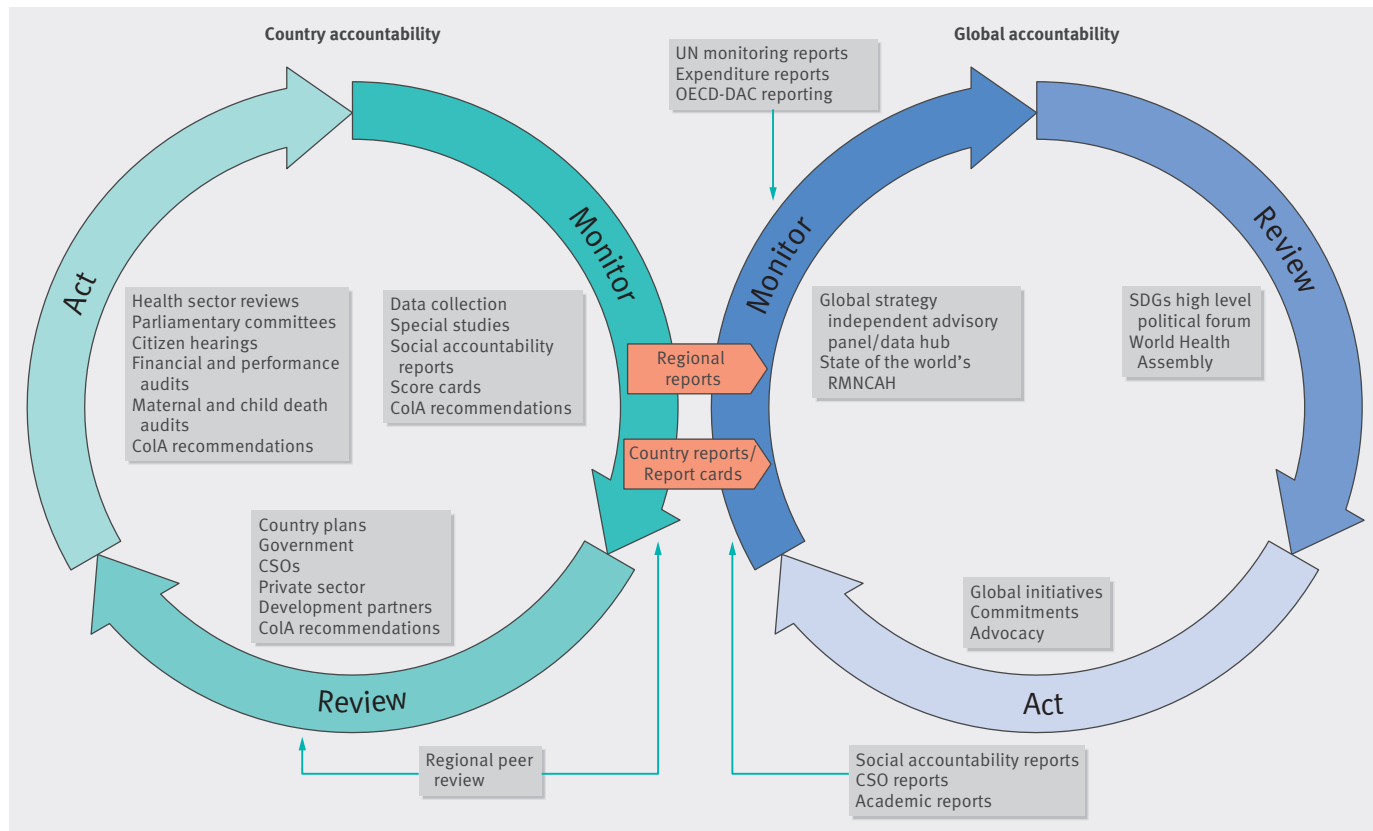
of health finance and delivery, the public-private interface, legal statutes, parliamentary oversight, the role of audit bodies, etc. The 2015 strategy accountability framework has to build on these processes while incorporating a complex range of data on health outcomes, service delivery, health finance and expenditures, social determinants, human

rights, adolescence, and contributions from non-health sectors, disaggregated by income, sex, and location.

Despite progress, there are still countries with weak or non-existent civil registration and vital statistics systems, national health accounts, health management information, and other data systems crucial for determining progress. Processes for review and remedial action can also be weak, with limited engagement with civil society and community. The 2011 CoIA recommendations on strengthening country capacity³ therefore need to be fully implemented, together with assistance to develop capacity for monitoring, evaluation, research, and advocacy, so that the outcomes of the accountability process can be translated into policy and action. Whatever the system of government, a baseline standard of reporting is planned so that progress can be compared across countries and regions. The global accountability system depends on accurate data from countries and is only as good as the sum of its country parts.

Regional mechanisms

Key regional country groupings and organisations play a major role with regional peer mechanisms to review progress and propose remedial action. Regional bodies will be essential to connect and reinforce linkages between global and national mechanisms – facilitating monitoring



Country and global accountability processes in the 2015 strategy

through regional web platforms (such as AfricanHealthStats.org, CARMMA, ALMA, African Health Budget Network, ARROW) supporting peer learning and review through regional meetings such as African Health Ministers, UN regional commissions, etc, and enabling action with support for countries to act on recommendations and recognition of countries that have exhibited progress and success.

Global mechanisms

Since 2010, various agencies, including the iERG, CoIA, Countdown to 2015, and the Partnership for Maternal, Newborn, and Child Health (PMNCH), have reported on achievements of the global strategy and highlighted issues for global attention. Each accountability process, however, has had separate mechanisms, with inadequate linkage between them and weak follow-up actions. Global accountability for the implementation of the global strategy will therefore be brought together under a unified mechanism that will prepare an annual report on the "State of Women's, Children's, and Adolescents' Health." The Partnership for Maternal, Newborn, and Child Health (PMNCH) will play a key coordinating role, with an independent advisory panel appointed by the UN secretary general to ensure greater independence in accountability. An agreed set of data for expenditures, outputs, and outcomes will be used by countries and their development partners, with global and regional bodies providing reviews and facilitating remedial actions (figure).

Review, dissemination, and action

A key lesson from the 2010 strategy was the need to ensure that the accountability process is linked to key intergovernmental mechanisms such as the World Health Assembly and the high level political forum established for the SDGs. Multinational and/or regional representative bodies, such as the Inter-Parliamentary Union (IPU), the

African Union, the Partnership for Population and Development, and UN regional economic offices also need to be engaged to ensure that the accountability reports are widely disseminated, discussed, and acted on by key decision makers at the national and international levels.

Contributor and sources: The author is senior fellow at Results for Development Institute. The article is based on the work carried out over the past few months by the accountability working group for the 2015 strategy, co-chaired by the governments of Tanzania and Canada, of which the author was a member, together with subsequent consultations organised by the Every Woman Every Child Movement for this strategy.

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Prioritising women's, children's, and adolescents' health in the post-2015 world

Lori McDougall and colleagues set out a three point agenda for strengthening advocacy: investing in multipartner national platforms for action; innovative communication circuits to unite advocacy; and multidonor funding mechanisms to scale up advocacy efforts

Since their adoption, the millennium development goals (MDGs) have played a crucial role in improving global health. The MDGs raised awareness of key priorities for health and development, stimulated policy and budget attention, and created a common agenda for action. Child health was prioritised by MDG 4 calling for a two thirds reduction of deaths in children under 5 years old, maternal health was promoted by MDG 5a calling for a three quarters reduction in maternal deaths by 2015, and the MDG 5b ambition was to ensure universal access to reproductive health. Despite significant progress, MDGs 4 and 5 will not be met. Other health goals, including MDG 6 (on HIV/AIDS, malaria, and tuberculosis) and MDG 1c (hunger), are marked by major gaps in progress for women and children.

Launched in 2010, the Global Strategy for Women's and Children's Health ("Global Strategy") has fuelled efforts to deliver the MDGs. The Global Strategy and the Every Woman Every Child advocacy movement have promoted collective action, joint messaging, and effective partnerships. These efforts have led to more money, improved policies and service delivery, and a new focus on accountability and multi-stakeholder partnerships (box 1).¹

To sustain progress beyond 2015, the Global Strategy is being updated to build on

KEY MESSAGES

Strengthening citizen led local action is core to the mission of advocacy and communication for the Global Strategy

Effective action requires investment in strong coordinating platforms among diverse stakeholders, led by respected champions

Building a robust investment case for advocacy requires greater attention to developing clear performance monitoring and evaluation indicators

Creating stronger advocacy partnerships within the health domain, and between health and other related sectors, is required to deliver the vision of the sustainable development goals

Advocacy is the process of bringing evidence and information to bear on the decision and ability to act in response to people's needs. Advocacy and communication shape opinion, crystallise common or shared thinking, mobilise action, and drive decision making. The result of advocacy and communication can be political will, the decision to mobilise resources, policy and planning, reprioritisation, and stronger accountability.

lessons learnt during the MDG era and to reflect the priorities of the new sustainable development goals to be adopted by governments in September 2015.

How did women's and children's health rise on the global agenda, and what can be learnt about how to sustain attention beyond 2015? What was the role of advocacy and communications in framing and communicating evidence, highlighting solutions and results, promoting joint action, and enabling voice and action among women, youth, families, and communities?

Applying Shiffman's health policy analysis framework of stakeholder power, ideas, context, and issue characteristics (table),⁷⁻⁹ we look at the experience of Every Woman Every Child during the past five years as a key factor in explaining the rise in prominence of these issues. Going forward, we consider how the updated Global Strategy can improve its performance as an advocacy

instrument for women's, children's, and adolescents' health, and then set these findings against an analysis of gaps and challenges, which inform the main section of this paper. We conclude with a three point agenda for action for advocacy and communications in the updated Global Strategy.

Methods

In the following sections, we summarise the findings of three qualitative approaches used to better understand the role and impact of the updated Global Strategy for Women's, Children's and Adolescents' Health, as well as lessons learnt from the initial years of the Global Strategy (2010-15). The first approach was a global stakeholder consultation process in late 2014 and early 2015 that captured the views of 4550 respondents.¹⁰ The second was to synthesise the views and conclusions from three teleconferences held during February

BOX 1: EVERY WOMAN EVERY CHILD: A JOINT PLATFORM FOR ACTION

In 2010, there was a high degree of consensus and commitment among stakeholders in reaching the 2015 millennium development goals (MDGs). There was a concentration on a "continuum of care" approach—in which reproductive, maternal, newborn, child, and adolescent health are understood to be inextricably linked—enhanced by integrated care across the life cycle and from home to hospital. A positive message of, "Progress is possible, it pays to invest" was adopted by partners based on best available evidence of epidemiological and economic progress. In an increasingly global public health environment of private-public alliances, the Every Woman Every Child movement was launched by UN secretary general Ban Ki-moon as a common advocacy platform for diverse stakeholders to work together to implement the Global Strategy for Women's and Children's Health and the MDGs.

The pay-off has been substantial: by 2014, there were more than 300 commitments from a diverse range of stakeholders (figure) through the Every Woman Every Child platform—a threefold increase from the launch in 2010.³⁻⁵ Financial pledges have risen to nearly \$60bn, with many additional, uncosted commitments aimed at strengthening policy, service delivery, and advocacy.² The Global Strategy has drawn attention not only to more resources, but to better use of those resources, brokering agreement on cost effective interventions, integrated efforts for scaling up, innovation, and joint funding channels.⁵

Such global campaigns can be a timely "hook" for stimulating national dialogue and brokering consensus about priorities and resources. They can also be a promise of greater external coordination and resource exchange, as well as an aid to mobilising new commitments among global stakeholders. For example, the G8 Muskoka Declaration in June 2010 of an additional \$5bn for maternal and child health⁶ paved the way to a successful launch of the Global Strategy for Women's and Children's Health in September 2010, which itself built on years of active health advocacy and increased visibility for maternal health issues.

Framework of determinants for political priority for the Global Strategy for Women's and Children's Health (2010-2015)

Description	Factors shaping political priority
Stakeholder power —The strength of the individuals and organisations concerned with the issue	Policy cohesion, leadership, guiding institutions, mobilisation of civil society—The EWEC movement, championed by UN secretary general Ban Ki-moon, brings together reproductive, maternal, newborn, child, and adolescent health stakeholders working through coordinating platforms such as the H4+ multilateral agencies, PMNCH (including more than 400 NGO members), Women Deliver, the Network of Global Leaders, and the Global Campaign for the Health MDGs.
Ideas —The ways in which those involved with the issue understand and portray it	Positioning within the health sector and among health and related sectors—The adoption of a RMNCAH "continuum of care" conceptual model has facilitated consensus across diverse policy constituencies, including governments, NGOs, health professionals, donors, private business, the UN, and academia. Positioning is important to ensure women's and children's health is seen as a human right as well as a determinant, outcome, and indicator of economic, social, and political development.
Political contexts —The environments in which stakeholders operate	Policy windows, global governance structure, convening and driving the process—The 2015 MDG framework, with twin goals on maternal and child health, opens policy window for urgent action. The Global Strategy legitimised as an agenda for national and regional action through inter-governmental resolutions and communiqués (UN 2010, World Health Assembly 2011, UN Human Rights Council on maternal mortality 2011, Inter-Parliamentary Union 2012) and frameworks (African Union integrates Global Strategy into policy frameworks, building on Maputo Plan of Action for SRHR, CARMMA, and Abuja Declaration).
Issue characteristics —Features of the problem	Credible data, evidence of gaps (severity of the problem), effective interventions available—Robust evidence on causes, solutions, trends, and gaps increasingly available through a wide range of sources, including Countdown to 2015, UN reports, <i>Lancet</i> special series, and others. Multi-stakeholder consensus on effective interventions brokered at global level, offering clear policy directions.

EWEC=Every Woman Every Child. PMNCH=Partnership for Maternal, Newborn & Child Health. NGO=non-governmental organisation. MDG=millennium development goal. RMNCAH=reproductive, maternal, newborn, child and adolescent health. SRHR=sexual and reproductive health and rights. CARMMA=Campaign for Accelerated Reduction of Maternal Mortality in Africa.

and March 2015 with advocacy leaders of the women's and children's health community and those who contributed to the Global Strategy consultation process. Thirdly, we conducted a literature search on definitions, theories, and examples of successful advocacy and communications practice as well as relevant conceptual frameworks for agenda-setting and issue-framing. The literature search enabled us to expand on the findings of the expert consultations and triangulate our own observations.

Problems

The implementation of the Global Strategy has been marked by challenges that have inhibited civic leadership and national ownership, and implementation of the top priorities identified within the strategy itself. Three of these challenges are discussed.

Lack of awareness and ownership of national commitments

While engagement with the Global Strategy has been consistently strong among global level stakeholders, at the country level it has been more variable. For example, in the first consultation report on the 2010-15 Global Strategy published in January 2015, respondents at country level commented that lack of country engagement with the Global Strategy was an important limitation (see www.womenchildrenpost2015.org). Important national stakeholders, including parliamentarians, have been unaware of pledges made by their country. This has inhibited their ability to engage with relevant policy and budget planning.

Many national stakeholders lack access to relevant platforms for policy dialogue and information sharing. Sub-national and national accountability systems, if rigorously monitored and connected to global

processes, are critical for ensuring monitoring, review, and remedial action. Civil society coalitions at sub-national, national, regional, and global levels can gather evidence for multi-stakeholder review processes and recommend remedies (see box 2). A large scale stakeholder survey on the Global Strategy (April 2015) found that more than 80% of respondents thought that global accountability did not affect country level processes. This indicates a clear role for local, citizen led processes.¹⁰

Stronger monitoring and evaluation for advocacy impact

Effective advocacy is the product of a complex mix of actors, context, and opportunity, making the impact of individual contributions difficult to measure.¹¹ Even so, advocates benefit from robust monitoring and evaluation approaches to assess progress and improve practices.⁴ Two specific prob-

BOX 2: STAKEHOLDER POWER DRIVES ISSUE ATTENTION: CITIZEN LED COALITIONS

Tanzania

The White Ribbon Alliance for Safe Motherhood Tanzania united civil society members, health professionals, academics, donors, and UN partners in a three year (2013-15) campaign to improve access to comprehensive emergency obstetric and newborn care (CEmONC) at health centres and with the help of qualified health workers. The campaign calls for a specific budget line item with funds for CEmONC in Tanzania's council health plans. As a result of tactical outreach aimed at communicating the gaps in access to CEmONC and its major causes (poor financing for CEmONC), media campaigning, and one-on-one meetings with key champions, the prime minister of Tanzania on the White Ribbon Day (15 March 2014) gave a directive that all councils establish a budget line for CEmONC with funds to ensure that these lifesaving services are available at health centres. The campaign has also yielded a petition on CEmONC signed by 16 428 citizens and 96 members of parliament.

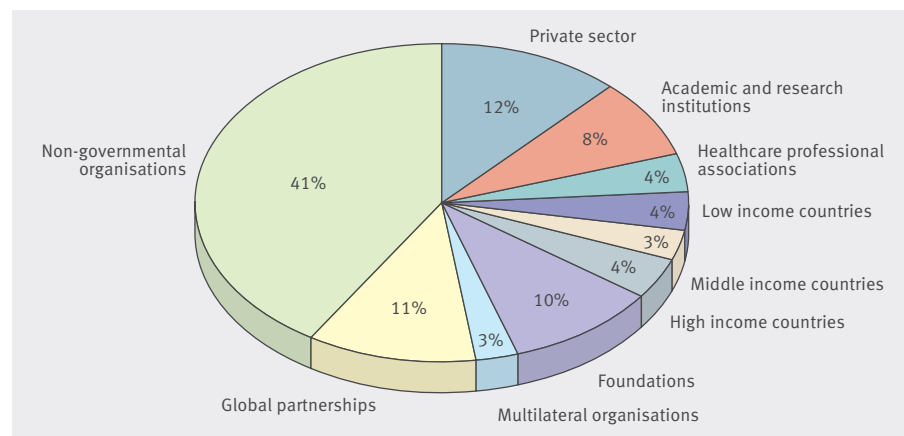
Nigeria

In support of improving accountability and aid alignment, including in relation to maternal and child health, CHESTRAD International and the IHP+Results Consortium worked with Nigeria's Senate Committee on Appropriations and the National Planning Commission to document the flow of official development assistance (ODA) into health and education and recommend improvements in managing aid flow. This report led to a parliamentary multi-stakeholder dialogue hosted by the Senate and Nigeria's Federal Ministry of Finance and the National Planning Commission, with participation from development partners and civil society. The dialogue resolved to better align ODA flows with appropriation processes, expand efforts at inclusive national budgeting and transparency, and establish a civil society aid effectiveness and accountability fund. This process also catalysed the creation of a new parliamentary committee on coordination and engagement with development partners in Nigeria.

Data sources:

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Advocacy commitments for the Global Strategy for Women's and Children's Health by constituency (data from the PMNCH 2013 report²)

lems (both vital ingredients for success) are, firstly, the availability of adequate data and evidence with which advocates can take action and, secondly, robust methods for tracking advocacy impact.

Data and evidence—While the MDGs and the Global Strategy have been useful tools for advocacy, the lack of costed implementation plans and consolidated mechanisms for tracking resources and results have hampered its effectiveness. Greater transparency of government data and information, supported by stronger national data collection systems, will benefit advocacy efforts, as would greater emphasis on community based efforts to improve accountability. Examples of this policy effort are the national and sub-national “citizen hearings” bringing stakeholders and policymakers together in policy dialogue (see also: <http://whiteribbonalliance.org/campaigns/citizens-hearings-2015/>).¹²

Tracking impact—In regard to evaluating the effect of advocacy, the lack of standard indicators, processes, and structures for monitoring and reviewing the Global Strategy and Every Woman Every Child has hindered efforts to improve quality and impact. It has also made it more challenging to build an investment case for advocacy. For example, while it is relatively simple to measure “interim” or “process” indicators, such as the number of commitments made or media hits (box 3), it is often difficult to determine the extent to which a particular activity by a particular stakeholder or coalition contributes to broader national impact on policies or budgets.

Scaling financing for advocacy

Underfunding remains a barrier to successful advocacy. A recent survey of civil society organisations in Africa indicated that lack of financing was the most commonly cited bar-

rier to participating in multi-stakeholder platforms for reproductive, maternal, newborn, child, and adolescent health (see, for example, <http://chestrad-ngo.org/communications/publications-reports/>). Yet relatively few donors fund such advocacy, especially at national level. Governments often prefer not to make investments that could put them in the “line of fire.”

A review of progress of Global Strategy commitments made between 2010 and 2013 found that reproductive, maternal, newborn, and child health organisations were often understaffed. This resulted in a limited capacity for advocacy because of poor staff training and reluctance by donors to fund advocacy and related staff positions. The financial crisis of 2008 and the subsequent poor economic climate further destabilised funding for advocacy and thus the ability of partners to conduct advocacy.²

Priority actions

Successful advocacy in the post-2015 era will depend on the ability to identify how investments can deliver multiple goals across sectors, including in complex settings such as during a humanitarian emergency or conflict, where ill health is disproportionately clustered. This section sets out a three point agenda for effective advocacy and communications around the Global Strategy beyond 2015.

Invest in national multi-stakeholder platforms for advocacy and accountability
Uniting partners with disparate skills, disciplines, epistemic traditions, and networks for joint advocacy and providing these advocacy networks with timely information about commitments is critical to ensuring the implementation of the Global Strategy. This requires investment in leadership, coordination, and communication skills at all levels.

In 2012-13, for example, the Partnership for Maternal, Newborn & Child Health provided a small level of support for national coalitions of civil society organisations in 10 countries. This enabled joint advocacy and improved accountability, including for national commitments to the Global Strategy. In most of the participating countries, these are the first coalitions of civil society organisations to cover the entire continuum of care from preconception to child and adolescent health. The partnerships have resulted in a number of innovative approaches, such as a joint advocacy toolkit in Tanzania to increase the enrolment of youth in midwifery training; in Ghana, Indonesia, and Uganda, voluntary contribution schemes have been created to cover the cost of alliance activities.¹³

The most successful of these coalitions have established relationships with parlia-

BOX 3: MEASURING MEDIA IMPACT: BORN TOO SOON

Media advocacy can promote consensus on framing and solutions, generate attention on policy, and prompt united action among different stakeholders. An example is the 2012 launch of Born Too Soon: The Global Action Report on Preterm Birth, which highlighted preterm birth as the leading cause of newborn mortality. A communications campaign coordinated by the Partnership for Maternal, Newborn & Child Health brought together more than 50 partner organisations to advocate for attention to preterm birth. This included civil society groups such as the March of Dimes, corporations such as Johnson & Johnson, and health professional groups such as the International Paediatric Association, the International Confederation of Midwives, and the International Federation of Gynecology and Obstetrics.

The campaign reached an estimated media audience of 1.1 billion through the *Hindu*, the Xinhua news agency, the front page of the *New York Times*, and others. This was complemented by a television advert on CNN International with celebrity singer and parent Celine Dion, as well as a global Twitter “relay” and an interactive map on which Facebook members could “pin” their own stories of preterm birth. In total, Born Too Soon resulted in more than 30 new Every Woman Every Child commitments to preterm birth and newborn health. It catalysed the expansion of World Prematurity Day, with events in 70 countries in 2014. It also set the foundation for a broader policy effort, the Every Newborn Action Plan, supported by a resolution by 194 member states of the World Health Assembly in 2014.

Data sources:

March of Dimes, Partnership for Maternal Newborn & Child Health, Save the Children, World Health Organization. *Born Too Soon: the global action report on preterm birth*. WHO, 2012.

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BOX 4: IDEAS DRIVE ATTENTION TO ISSUES: LONDON SUMMIT AND FP2020

Family planning was framed in the Global Strategy as an important issue for investment and policy, creating a new hook for advocates to align and take action. A good example of this is the Family Planning 2020 (FP2020) initiative, which has emerged from the London Summit on Family Planning in 2012. The summit gained commitments from more than 20 governments and donor funding of \$2.6bn, elevating political commitment to modern contraceptives and reproductive health in support of the wider remit of the Global Strategy. Since 2013, more than \$1.3bn has been disbursed for family planning programmes. This has resulted in more than 8.4 million extra girls having access to modern contraception and at least 77 million unintended pregnancies avoided. The FP2020 example illustrates how global and national health advocacy fosters and builds on widespread agreement on the urgency of an issue.

Data source: Family Planning 2020 (FP2020). www.familyplanning2020.org.

ments and the media. In many countries in Asia and Africa, private media are a major growth industry. The media can be a powerful platform for voice and accountability, capturing public energy and anger, and shifting cultural norms. Yet, too often, the media are seen as a target for pre-packaged public relations campaigns and not as viable partners with essential networks and skills. Investment in partnerships with leading national and regional media networks, especially those focused on young media consumers, is an essential area for development. Social and behavioural change campaigns that stimulate positive individual behaviours, as well as positive changes within policy environments, are important ways of promoting community health and improving policy impact.¹⁴

Beyond 2015, these advocacy networks will need to integrate partners from health enhancing sectors, including those engaged in education, women's political and economic participation, access to clean water and sanitation, poverty reduction, and economic growth in line with the evidence of the importance of these sectors on health.¹⁵

Build digital platforms for knowledge and action

Advocacy operates in real time. National, regional, and global advocacy coalitions require timely, cost effective information "circuits" to source new evidence for action and to identify new opportunities for advocacy.

Improving the circulation of information increases the effectiveness of transnational advocacy. This is likely to be especially true beyond 2015, as the number and distribution of partners seeking to collaborate across sectors increases. Regional platforms can provide relevant support in this process. For instance, the African Union/CARMMA (Campaign on Accelerated Reduction of Maternal, Newborn and Child Mortality in Africa) has developed scorecards of indicators and a user friendly online database of indicators, helping member states track progress towards regional commitments such as the Maputo

Plan of Action on Sexual and Reproductive Health and Rights and the Abuja Call for Accelerated Action Towards Universal Access to HIV and AIDS, Tuberculosis and Malaria Services in Africa (see Africanhealthstats.org and <http://carmma.org/scorecards> for more information). When geared to local needs and priorities, and properly promoted for use, innovative web and mobile phone based approaches hold much promise, including in relation to advocacy, communication, and coalition development.¹⁰

Build flexible, multidonor funding mechanisms for advocacy

Effective advocacy requires reliable yet flexible financing to capture sudden and unexpected opportunities as well as to address longer term strategic goals. In the past, donor funding for advocacy has too often prioritised individual strategic plans, missing an opportunity to invest in broad based coalitions supporting collective goals. Recent promising efforts include the multidonor "Amplify Change" fund for sexual and reproductive health and rights, as well as support to the Every Woman Every Child movement from such donors as the Bill & Melinda Gates Foundation, Canada, Norway, and the Rockefeller Foundation.

Experience from the global nutrition community also bears out the benefits of pooled financing mechanisms. For example, pooled donor funding for civil society partners as part of the multipartner trust fund for the SUN (Scaling Up Nutrition) movement has enabled greater coordinated action. Of the 33 established and active SUN civil society alliances in countries, 27 are funded through this trust fund or by bilateral donors (see <http://scalingupnutrition.org/the-sun-network/civil-society-network>).

In line with the goals of Every Woman Every Child, the new Global Financing Facility (GFF)¹⁶ is designed to encourage increased commitments of domestic resources for health.¹⁷ This is a promising development, requiring multipartner domestic budget advocacy, including with media and parliamentarians, to mobilise and sustain domestic allocations for

health. Without such national and sub-national advocacy, the GFF ambitions are unlikely to be fully realised. It is important, therefore, for the GFF facility to support national advocacy, both in principle and in fact.

Conclusion

Advocacy and communication matter not for their own sake but because they are essential in facilitating the social and political pact that drives forward the Every Woman Every Child movement.

There are important lessons from the recent Global Strategy experience, especially in promoting country ownership and engaging with national and regional policy processes. Stronger evidence is needed about what works in advocacy, why it works, and how to measure and improve advocacy in the future. The updated Global Strategy provides an opportunity to further that learning and apply new techniques.

Going forward, advocacy success must be measured not by the quantity of global commitments taken in the name of citizens and countries, but the extent to which people themselves demand to be at the centre of the dialogue, insisting on their right to monitor, review, and act upon that to which they are entitled.

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