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VIEWPOINT PAPER

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While there is a broad consensus to eliminate all preventable newborn, infant and child deaths, the experience since the 1990s has shown that this goal still remains aspirational despite remarkable progress achieved by most countries toward reaching the Millennium Development Goal 4 (MDG 4) that calls for reducing the under-five mortality rate by two-thirds between 1990 and 2015. The world has been able to reduce under-five mortality faster than at any other time during the past two decades, and about 50 countries have achieved or exceeded this goal. Despite these gains, child survival remains an urgent concern. Every day 17,000 children still die before their fifth birthday, mostly from preventable causes and treatable diseases, and many countries still have very high under-five mortality rates – particularly in Sub-Saharan Africa, home to all 12 countries with an under-five mortality rate of 100 deaths or more per 1,000 live births[1].

Through an intense multi-stakeholder process involving national governments, international community, civil society, academic researchers, and many other segments of society, a new post-2015 agenda is being formulated and new sustainable development goals will be decided at the sixty-ninth session of the General Assembly in September 2015. The latest proposal of the Open Working Group on Sustainable Development Goals in particular will serve as the basis for integrating sustainable development goals into the post-2015 development agenda[2], with as new goal (Goal 3.2) to end preventable deaths of newborns and children under five years of age by 2030. With millions of children still at risk of dying of preventable causes, maternal, newborn and child survival must remain at the heart of the post-2015 global development agenda.

Similar to MDG 4 target, the proposed new goals on child survival are formulated for under-five mortality and neonatal mortality given the importance of reducing all preventable child deaths under age five and the increasing share of under-five death occurred in the neonatal period (the first 28 days of life).

Pneumonia, diarrhoea and malaria still remain the main killers of children under age 5, and 44 per cent of under-five deaths occur in the neonatal period[3]. Neonatal deaths remain dominated by pregnancy-related factors (with preterm and intrapartum complications ranging between 48% and 61% of all neonatal deaths in all regions, and infections like sepsis, meningitis, pneumonia accounting for between 7% and 24%). While in the post-neonatal period, deaths from major infectious diseases (pneumonia, diarrhoea, malaria, meningitis, AIDS, measles) still account for nearly 70% in sub-Saharan Africa[4].

1 The UN Inter-agency Group for Child Mortality Estimation. *Levels and Trends in Child Mortality: Report 2014*. UNICEF. 2014. http://www.data.unicef.org/fckimages/uploads/1410869227_Child_Mortality_Report_2014.pdf

2 United Nations General Assembly (2014). A/68/970. *Report of the Open Working Group of the General Assembly on Sustainable Development Goals*. 12 Aug. 2014. http://sustainabledevelopment.un.org/owg.html

3 UNICEF (2014). *Committing to child survival: A Promise Renewed progress report 2014.* New York: UNICEF. http://files.unicef.org/publications/files/APR_2014_web_15Sept14.pdf

4 Liu, L., et al. (2014). "Global, regional, and national causes of child mortality in 2000-13, with projections to inform post-2015 priorities: an updated systematic analysis." *The Lancet*. 1 October 2014 doi: 10.1016/S0140-6736(14)61698-6

Many of these deaths are easily preventable with simple, cost-effective interventions administered before, during and immediately after birth[5]. In today's age of global consciousness, social media and virtual instant knowledge, it is fundamental for everyone to be aware that the necessary knowledge and technology exists to ensure that no child should die of preventable causes and no mother should die giving life through childbirth. In addition reducing child mortality in every country to levels associated with high-income countries is feasible by 2030. Not only we can, but we should as the review of cost-benefit analyses done by Fink[6] shows.

Fink's perspective on the Copenhagen Consensus rightly emphasizes the growing need to focus more attention and efforts on reducing not only post-neonatal mortality, but also neonatal mortality between 2015 and 2030, and offers some assessment of the feasibility and cost-effectiveness of this investment. The paper reviews some of the potentials for substantial improvements, but also highlights some of the remaining challenges in this endeavor. It is, however, critical to keep in mind the wide variety of conditions and needs across countries, and that any benefit-cost estimation, no matter its intent, relies on a number of simplifications and assumptions. The scaling-up of many of these interventions, in particular, and especially their sustainability relies on a continuum of care, but foremost timely and affordable access to skilled health care provider. However, expanded and sustainable access to such skill manpower face tremendous challenges in many countries: while most of the population still lives in rural or remote areas, medical care remains often concentrated in major urban areas, and many countries face challenges to provide adequate health care services and community outreach nationwide.

UNICEF analysis using household survey data reveals that too many mothers and newborns miss out on key interventions that can save their lives[7]. Globally, only around half of all women (53%) receive the recommended minimum of four antenatal care visits during their pregnancy. In 2012, about 30 per cent of births were delivered without the help of a skilled health care provider. Quality care for pregnant women and newborns is lacking, even for babies and mothers who have contact with the health system. The UNICEF's 10 countries analysis suggests that less than 10 per cent of mothers who saw a skilled health provider during pregnancy received a set of eight key interventions. Similarly in these countries less than 10 per cent of all babies who were delivered by a skilled health professional went on to receive seven needed interventions including early initiation of breastfeeding and postnatal care. Improving health services and providing cost-effective and high-impact interventions that address the needs of women and newborns across the continuum of care with an emphasis on care around the time of birth remains critical to save the lives of mothers and their children.

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5 Jones, G., et al. (2003). "How many child deaths can we prevent this year?" *Lancet* 362(9377):65-71. doi:10.1016/S0140-6736(03)13811-1 ; Darmstadt, G.L., et al. (2005). "Evidence-based, cost-effective interventions: how many newborn babies can we save?" *The Lancet* 365(9463):977-988. doi: 10.1016/S0140-6736(05)71088-6 ; Bhutta, Z.A. et al. (2008). "What works? Interventions for maternal and child undernutrition and survival." *The Lancet* 371(9610):417-440. doi: 10.1016/S0140-6736(07)61693-6

6 Fink, G. (2014). *Copenhagen Consensus Perspective Paper on Infant Mortality*.

7 UNICEF (2014). *Committing to child survival: A Promise Renewed progress report 2014.* New York: UNICEF. (accessed 7 Dec. 2014) http://files.unicef.org/publications/files/APR_2014_web_15Sept14.pdf

The study by Fink confirms previous studies that substantial effort is needed to end preventable child deaths. It is also worth noting as Liu et al. (2014) have pointed out in their paper that "the global effect will be dependent on high coverage of the most effective interventions, on the biggest causes of death, in the places with the most deaths".

In this context two targets seem the most compatible with all the goals, objectives and cost-benefit analyses done so far for the post-2015 agenda:

(a) By 2030, end preventable newborn deaths by reducing, in all countries, the neonatal mortality rate to 12 or less deaths per 1000 live births following the target of the *Every Newborn Action Plan*[8]

(b) By 2030, end preventable child deaths by reducing, in all countries, the under-five mortality rate to 25 or less deaths per 1000 live births (or, if they are already below that level, to sustain the progress, with a focus on reducing inequalities at the sub-national level) following the target of *A Promise Renewed*[9]

Redoubled efforts and accelerated progress are required for many countries to achieve these targets. Countries need to turn their pledges into practical action to scale up progress on newborn and child survival by sharpening national strategies for reproductive, maternal, newborn and child health, setting costed targets and monitoring progress. Child Survival is a shared responsibility. Progress is more possible through the coordinated efforts of the public, private and civil society sectors, working together to improve outcomes in nutrition, water and sanitation, health, education and other sectors that impact outcomes for women and children. As the Executive Director of UNICEF Anthony Lake pointed out, "our shared promise to give every child the best possible start in life must remain the rallying cry of every society, every government, every community, and every family…for every child."

In addition, the achievement of these targets have a greater chance of success when combined with other socioeconomic changes such as improved living conditions, greater access to education, and especially secondary education for girls, ending child marriage, delaying first unions and first births, and increasing time interval between births, expanding access to family planning options and fulfilling unmet need in modern family planning methods[10].

8 Lawn, J.E., et al. (2014). "Every Newborn: progress, priorities, and potential beyond survival." *The Lancet* 384(9938):189-205. doi: 10.1016/S0140-6736(14)60496-7

9 UNICEF (2014). *Committing to child survival: A Promise Renewed progress report 2014.* New York: UNICEF. (accessed 7 Dec. 2014) http://files.unicef.org/publications/files/APR_2014_web_15Sept14.pdf

10 United Nations, Department of Economic and Social Affairs, Population Division. (2013). Population Facts 2013/6 "Meeting Demand for Family Planning". New York: United Nations. Accessed 7 Dec. 2014 http://www.un.org/en/development/desa/population/publications/pdf/popfacts/popfacts_2013-6.pdf

In this endeavor, monitoring progress, and evaluating the effectiveness of interventions remain not only a need but a necessity to prioritize resources, and efforts. But timely monitoring remains challenging in many countries due to the persistent lack of nationwide registration of vital events[11]

Many countries remain without viable or complete vital registration systems to monitor levels and trends in, and causes of, child mortality. Only around 60 countries have such systems; the others rely mostly on household surveys or censuses to estimate child mortality. Modelling is often used to estimate mortality indicators, as less than 3% of the global causes of under-five deaths are medically certified. The UN Inter-agency Group for Child Mortality Estimation (http://www.childmortality.org/) regularly reviews and updates its estimation methods to provide the most accurate estimates possible and these estimates illustrate the challenges involved in reconciling differences in levels and trends that may exist between data sources for the same country and time periods. Over the medium or long term, strengthening of vital registration systems is imperative, both to improve the accuracy of mortality estimation, and to track more closely those children whose rights to health, education, equality and protection remain unrealized.

Therefore, as part of the Paris 21 agenda[12] and in the spirit of the Data Revolution surrounding the post-2015 agenda[13], we strongly support and encourage strengthening of existing statistical information systems (including population censuses and household surveys), and especially a regain of efforts and support to the full and complete registration of every births and deaths[14], as well as efforts to improve the monitoring of the health and survival of children through community health workers, health facilities, and civil registration with the aim to produce relevant vital statistics both at national, subnational and local levels.

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***Note: Views expressed in this paper are those of the authors and do not necessarily reflect those of the United Nations or UNICEF.

11 Only 60% of the 230 countries and areas register at least 90% of births occurred in the country (UNSD, 2012), and around 290 million children (or 45 per cent of all children under age five worldwide), do not possess a birth certificate (UNICEF, 2013). Only 47% of the countries and areas have reached at least 90% coverage for death registration (UNSD, 2012). Source: UNSD (2012). *Coverage of Birth and Death Registration*. Accessed 7 Dec. 2014. http://unstats.un.org/unsd/demographic/CRVS/CR_coverage.htm ; UNICEF (2013). *Every Child's Birth Right: Inequities and trends in birth registration*. New York: UNICEF. (accessed 7 Dec. 2014) http://www.unicef.org/publications/index_71514.html

12 http://www.paris21.org/

13 http://www.undatarevolution.org/

14 World Bank and WHO (2014). *Global Civil Registration and Vital Statistics Scaling up Investment Plan 2015-2024*, 28 May 2014 - http://www.worldbank.org/en/topic/health/publication/global-civil-registration-vital-statistics-scaling-up-investment

This paper was written for the Post-2015 Consensus Project by Patrick Gerland and Danzhen You, United National Population Division, DESA. The project brings together 60 teams of economists with NGOs, international agencies and businesses to identify the targets with the greatest benefit-to-cost ratio for the UN's post-2015 development goals.

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