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MDG4 – Hope or Despair for Africa?

ODM4: ¿esperanza o frustración para África?

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Abstract.

Sub-Saharan Africa is repeatedly painted as a failure in achieving the Millennium Development Goals (MDGs). This article focuses on MDG4 (reduction of two thirds in the under-five mortality rate between 1990 and 2015) and analyses the relative merit of the MDG framework as well as the success or failure of SSA in achieving this target. The authors argue that despite the positive impetus which the MDG4 target has represented for child health, it has failed to provide a framework within which equity considerations could be analysed, has detracted from the recognition of the importance of social determinants of health and has failed to highlight the interconnectedness of all MDGs. Further, whilst SSA is fairing worst in terms of MDG4, some countries have managed to get on track to achieve MDG4 or improve the health prospects of their children. A combination of intervention scale-up, additional resource allocation, health systems strengthening approach, partly explain these successes. Overall however, real challenges remain: lack of international and national resources, lack of health systems strengthening, lack of human resources at all levels of the health system, limited social protection mechanisms, slow 'diagonalisation' of programmes, and persistent environmental and socio-political factors.

Keywords: Millenium Development Goals; Child Health; Health Systems.

Resumen.

Se suele señalar que los Objetivos de Desarrollo del Milenio (ODM) no se han conseguido en el África Subsahariana. Este artículo se centra en el cuarto ODM (reducir en dos tercios la tasa de mortalidad en niños menores de cinco años entre 1990 y 2015): analizando el papel ejercido por los ODM y el grado de cumplimiento de dicho objetivo en el África Subsahariana. Los autores argumentan que, a pesar del impulso que el ODM4 ha supuesto para la salud infantil, no ha logrado desarrollar un marco en el que se puedan analizar cuestiones tales como la equidad, además de haber desviado la atención de otros elementos importantes como los condicionantes sociales de la salud y no haber sabido mostrar las interconexiones existentes entre los diferentes ODM. Por otro lado, a pesar del fracaso relativo del África Subsahariana, algunos países han llevado a cabo actuaciones para encaminarse hacia la consecución de este objetivo o simplemente la mejora de las perspectivas de salud infantil. Su éxito se puede explicar por una combinación de una mayor intervención, una mayor dotación de recursos y el fortalecimiento de los sistemas de salud. En cualquier caso, los verdaderos retos aún permanecen: falta de recursos nacionales e internacionales, debilidad de los sistemas de salud, escasez de recursos humanos en todos los niveles de los mismos, mecanismos de protección social muy limitados, lenta "diagonalización" de los programas y persistencia de los factores ambientales y socio-políticos.

Palabras clave: Objetivos de Desarrollo del Milenio; Salud infantil; Sistemas de salud.

JEL Classification: N37, I18

1. Introduction.

In September 2010, at the UN Millennium Summit in New York, the world will assess its progress against the 8 Millennium Development Goals (MDGs). The MDGs were agreed by nearly all UN Member States in 2000 and represented a series of targets to be achieved by 2015. For the past ten years, these targets have managed to focus international attention on key indicators which represent the relative level of human and social development of low-income countries. With only five years left, progress and failures will be gauged, and renewed political and financial commitments will be called for, without which these goals may not be met.

MDG4, which aims for a reduction of two thirds in the under-five mortality rate between 1990 and 2015, is one of the targets most lagging behind, particularly in sub-Saharan Africa (SSA). In this article the authors argue that, whilst MDG4 has been an important tool to hold governments to account, it fails to recognise the importance of equity, has unfairly and systematically presented sub-Saharan Africa as a failure, and, by failing to recognise the interconnectedness of all health-related MDGs, and all of the MDGs more broadly, has undermined a health systems approach, pitching diseases and target groups against each other in competition for scarce resources.

The authors will paint a more nuanced picture of the progress made in SSA on MDG4, by identifying those SSA countries that have made significant progress towards MDG 4 and offering analysis about the factors that may have enabled that progress. The authors will finally identify a number of challenges that must be addressed in order to see further improvements in under-five mortality across SSA by 2015.

2. Why MDG4 Matters.

MDG4 is arguably the most important MDGs. First, because almost all of the world's governments are signatories to the UN Convention on the Rights of the Child (CRC), which includes clear rights to health, nutrition and survival.

This means that nearly all States have a binding obligation, enshrined in international law, to respect, protect and realise children's right to survival. Yet these rights remain elusive to millions of families in low-income countries: 8.8 million under-fives died in 2008 from mainly preventable causes (UNICEF, 2009) even though the interventions needed to prevent at least two-third of these deaths are known (Black, Morris and Bryce, 2003) and are cost-effective (ibid). This fact alone should support the case for defining a target that seeks to improve the survival rates for children under five.

Second, progress on newborn and child survival has been described as an important measure of the overall health and development of a society (UNICEF, 2008) and as the best barometer of both wider social and economic progress (Sen, 1998) and social justice. This is not only because the health of a country's children determines the future prospects of that society, but also because under-five mortality can act as a "snapshot" indicator for overall development, including economic development (ibid). Unlike purely economic measures, such as GNP/capita, looking at disaggregated data about newborn and child survival can provide an indication of not just income levels at the national level but how those national incomes are being distributed and whether they are translated into improved standards of living across society. In addition, newborn and child survival rates tell us about factors that are important for human development beyond just national income, including the availability and accessibility of basic services such as healthcare, education, and water and sanitation, and the relative quality of living standards. Indeed, under-five mortality correlates more than virtually any other development indicator with various aspects of human development (Ranis et al, 2005). Significant evidence shows the negative impact of child illnesses and malnutrition on cognitive development and intellectual performance, school enrolment and attendance, which impairs final educational achievement (WHO, 2005). Intrauterine growth retardation and malnutrition during early childhood also have long-term effects on body size and strength with implications for productivity in adulthood (ibid).

The urgent attention which should be given to child mortality seems justified from a human, legal, social and economic perspective, and in that sense the MDG4 has, at least rhetorically, served to set child survival at the core of the development agenda.

3. What is Wrong with MDG4.

Whilst it is important for the excessive deaths of children in low-income countries to be afforded international recognition through a specific MDG target, a number of limitations of the target itself must be recognised.

Firstly, equity considerations have been forgotten, despite the fact that the Millennium Declaration, which gave rise to the MDGs, was rooted in a human rights approach and lists equality and solidarity (whereby global challenges are managed in a way that distributes the costs and benefits fairly) as fundamental

values considered to be essential to international relations in the twenty-first century (UN, 2000). Despite these underlying principles, the MDGs themselves were conceived without specifying which groups would benefit from their attainment. For example, the MDG4 target uses national averages. Thus progress towards it could be achieved by delivering improved health services to the wealthier groups, thereby marginalising the poorest and most in need of care (Gwatkin, 2005).

The importance of considering equity when talking about progress towards the MDGs is clear when we examine the patterns of inequity in MDG 4. It is a simple fact that children belonging to disadvantaged groups – the poor, women, racial/ethnic minorities or other marginalised groups who have persistently been subject to exclusion or discrimination – die earlier than children belonging to the most advantaged groups (Braveman, 2006). Premature death does not strike people randomly, but very systematically affects certain groups of people much more than others. (Kent, 1991). These inequities exist both between and within countries.

A child born in Sub-Saharan Africa for example can expect to live, on average, 52 years, whereas a child born in Western Europe can expect to live 80 years.[1] The life expectancy rates we still see in Sub-Saharan Africa have not been seen in Western Europe since Victorian times. (Save the Children, 2010) In a full 40 countries, children have less chance of living to the age of 5 than a child in the UK has of living to the age of 65 (ibid).

Inequities in under-five mortality within countries are often as great as or greater than those between countries (UN, 2009). Within virtually all countries the health indicators for the poorest, least educated, geographically or ethnically marginalised groups are many times lower than those for 'better-off' strata of the population (Countdown, 2010). The extent of disparity in under-five mortality varies widely by country: with children in the poorest 20% of society as much as 5.3 times more likely to die before the age of five than children in the richest 20%For example, in Zambia the poorest 20% of children are 1.1 times more likely to die before their fifth birthday than the richest 20% of children, in Ghana the poorest children are 1.7 times more likely to die than the richest, and in Nigeria the poorest children are 2.5 times more likely to die than the richest children (Save the Children, 2010).

Failing to include equity dimensions within the monitoring process for the MDGs has resulted in a situation where national governments can be praised for their development achievements without specific attention to who has benefited. For example, urban populations are often the easiest to reach when delivering health services and in countries with high urban population density, improving the health of this cohort can deliver quick wins (in numerical terms). Cote D'Ivoire, for example, has reduced its average under five mortality rate from 150 (deaths per 1,000 live births) in 1990 to 114 in 2010. This

[1] Data from UN Population Division, http://esa.un.org/unpp/index.asp?panel=1.

progress has been achieved by extending coverage to the relatively better off (Singh, 2006). As a result, the wealthiest children are accessing 80% of necessary interventions whilst the poorest only have access to about 40% (Countdown, 2010). Malawi on the other hand has dramatically reduced its U5MR from 225 in 1990 to 100 in 2010 with the wealthiest children getting access to 65% of the necessary interventions and the poorest accessing 62% (ibid). These different experiences must be recognised and a disaggregated analysis at country level between wealth quintiles must be included in future MDG4 analysis. Scaling up interventions to the national level and ensuring that segments of the population, mainly the most marginalised, are not excluded is of course not an easy task (Mangham and Hanson, 2010).

The second biggest problem with the health related MDGs is the artificial divide it has created between profoundly linked health issues (such as MDG5 and 4 which in practice can't be separated – how can assisting in a woman's delivery not result in assisting the newborn?), and the resulting vertical or disease-specific approaches it has encouraged (WHO, 2008), which despite some levels of synergies, have undermined health systems strengthening in low-income contexts (WHO, 2010).

In practice, all of the MDGs are closely related. MDG4 and MDG5 are particularly closely linked: 536,000 women and girls die every year, leaving 1 million children motherless. Evidence shows that infants whose mothers die within the first six weeks of their lives are more likely to die before reaching age two than infants whose mothers survive (UNICEF, 2008). Similarly, a recent study in rural Bangladesh found that the probability of survival to age 10 years was 24% in children whose mothers died before their tenth birthday, compared with 89% in those whose mothers remained alive (Ronsmans et al, 2010) In rural Haiti, if a mother dies, it is significantly less likely that the surviving child will receive immunisations for TB and measles or that the child will receive vitamin A supplements (Anderson et al., 2007).

More than one third of child deaths worldwide are also attributable to undernutrition (MDG1), which equates to 3.5 million child deaths annually (Black et al., 2010). Indeed, undernourished children are more likely to both be affected by disease and die as a result of diseases and nutrition interventions such as vitamin A supplements can reduce child mortality by 23% (ibid). In the developing world however, the proportion of children under five years of age who were underweight declined by only five percentage points from 1990 to 2007 — from 31 per cent to 26 per cent (UN, 2009) and from 31 per cent in 1990 to 27 per cent in 2008 in SSA (UN 2010)."

Evidence also shows that "children of mothers with more education (MDG2), on average, are healthier and have lower mortality rates. Educated mothers for example immunise their children 50 per cent more than mothers who are not educated at all (UNICEF, 2001). It is also estimated that a single year of female schooling reduces fertility by 10%. In Nigeria, women who have more than

secondary education have an average of 2.9 children whilst women with no education have 7.3 children[2] (GoNigeria, 2009).

Despite this understanding, and the clear circular links between all of the MDGs, there has been little systematic effort to integrate the design, implementation and evaluation of programmes across goals and across the sectors that are responsible for them (Gakidou et al., 2007). Further, the way the goals have been conceptualised fails to consider the intersection of different clusters of rights (for example, the ways in which deprivation of children's right to protection from violence and abuse can also deprive them of their right to education or health).

Another issue lies in the cost associated with achieving the health-related MDGs. Whilst this cost will depend on many factors –including the size of the population at risk, type of illness, demographic and socio-economic factors, geography and infrastructure and availability of health workers' (Johns and Tan Torres 2005)–, the calculation has been attempted many times (lately by the High level Taskforce on Innovative International Financing for Health Systems[3] and the Countdown Group). The Taskforce is asking for US$36 to US$45 billion in 2015 for all health-related MDGs (The Taskforce, 2009) whilst the Countdown group is calling for $60billion by 2015 for MDGs4 and 5 specifically (Countdown, 2010).

How many billions will be required to achieve MDG4 in particular is therefore not yet settled, although the one certainty is that not enough billions are available in current aid budgets, both for MDG4 in particular and for health related MDGs in general. With the limited and insufficient pot of funding available, the MDG agenda generally has had the perverse effect of pitching MDGs against each other. HIV/ Aids activists (MDG6), maternal health activists (MDG5) and child health activists (MDG4) have particularly vied for these limited resources, necessarily dissociating their needs to those of other health related groups. The result has been an unhelpful and unrealistic disjoint in the health approach, with specific issues such as HIV/ AIDS getting substantially more than other health systems related issues. One study that ranked donor spending by MDGs for example, found that almost all donors focused on HIV/AIDs, whereas other goals (namely 3,4 and 5) were relatively neglected (Thiele, 2007).

The design of the MDG target and the ensuing bias against countries particularly in sub-Saharan Africa should also be noted. As demonstrated by Easterly (2008), examining data going back to the 1960s shows that the higher the initial mortality rates, the lower the subsequent percentage reduction in mortality (Easterly, 2008: 15; Clemens, Kenny and Moss 2007). The relative reduction chosen as the goal was therefore always less likely to

[2] Authors' analysis from National Population Commission (NPC) and ICF Macro (2009) *Nigeria Demographic and Health Survey 2008: Key Findings*. http://www.measuredhs.com/pubs/pdf/SR173/SR173.pdf (accessed 23 February 2010).
[3] Hereafter 'The Taskforce'.

be met by high mortality countries. In the 1990s, sub-Saharan Africa had the highest mortality rates for children under five and as such was less likely than any other region to achieve this target. Earlier targets for reducing under-five mortality were expressed in absolute values. In 1980, for instance, a 2000 target was set to reduce infant mortality to 120 per 1,000 live births in the poorest countries and to 50 in all other countries (Vandemoortele , 2009). SSA generally has therefore been unfairly set for failure. Furthermore, targets are universal rather than context-specific, hence targets can be achieved pushed by some countries while others lag behind.

Finally, the MDG4 target suffers from a lack of reliable data: original data is often missing, the distinction between predictions and actual measurements is often unclear, methods used for prediction are rarely shared, census data uses age-relevant groups: and there is suspected over-estimation of mortality in sub-Saharan Africa, due mainly to a lack of data (Murray et al., 2007:1740). Knoll Raiaratnam et al for example highlight that in 2008, UNICEF reported that Thailand had the fastest rate of decline in the world of under-five mortality rates, whilst in 2009, the same institution reported that Thailand had only the 47th fastest rate of decline; in the same year, a UNPD report stated that the country had the fourth fastest rate of decline (Knoll Rajaratnam et al., 2010:2). There is clearly an issue with data sources and calculations, which is unhelpful when asserting whether countries are implementing successful policies, even more so when attempting to aggregate across regions.

On a more positive note, "the MDGs were meant as a major motivational device to increase development efforts in and on behalf of poor countries, and the resulting publicity and aid increases suggest they can claim considerable achievement on that score (Easterly, 2007). Some have also praised the goals on the basis that they have influenced policies and outcomes in many countries. A study found, for example, that the majority of countries had tailored the global targets to their national context (Vandemoortele, 2009). A survey of the perceived impact of the MDGs on 118 countries showed that "86% of countries reported to have undertaken some adaptation of one or more of the goals, their targets or associated indicators (ibid):" If countries are using the MDGs as an impetus to work towards making improvements in human development across their societies, the goals serve an important purpose.

Recognising the positive and negative impacts that the MDG4 target has had on international and national health policy, has there actually been any improvement in under-five mortality rates in SSA?

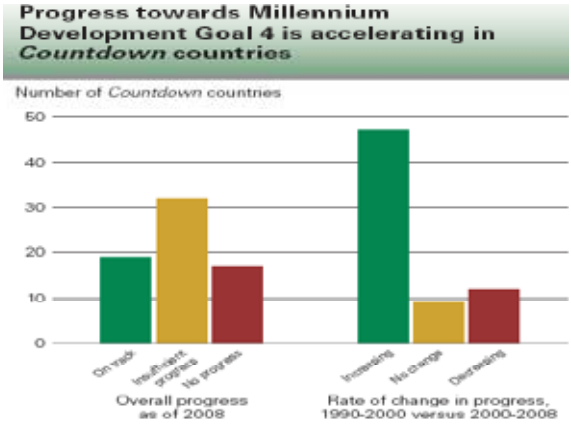
4. PROGRESS WITH MDG4 IN SSA.

It is difficult to accurately report on progress towards MDG 4 due to the data issues mentioned previously. However, based on the –albeit imperfect–

data we do have available, we can estimate that at a global level, the under-five mortality rate has fallen by 28% since 1990 (UNICEF, 2009).[4] New data even suggests that worldwide mortality in children under-five has dropped from 11.9 million deaths in 1990 to 7.7 million deaths in 2010 (Murray et al 2010) and that reductions in under-five mortality have accelerated from 2000 to 2010 compared with 1990 to 2000 (ibid).

For the vast majority of countries, even the poorest, the trend in under-five mortality rates is in the right direction: 62 of the 68 of the *Countdown to 2015* countries[5] have seen reductions in their under-five mortality rate since 1990. Of the Countdown countries, 19 are on track to achieve MDG4 with 17 of those having reduced mortality by at least half (ibid).

Figure 1: Progress towards Millenium Development Goal 4 in Countdown Countries.



Source: Countdown (2010:7).

The fact remains however that MDG 4 is still one of the MDGs most unlikely to be achieved by 2015. In most countries, the under-five mortality rate has not declined fast enough to meet the target by 2015 (see Table 1), and nearly three quarters of the 68 *Countdown* countries are off track.

[4] Author's calculations based on data found in UNICEF (2009): *State of the World's Children 2010* report.

[5] The Countdown Initiative was established in 2005 and is a supra-institutional collaborative effort tracking progress for MDGs 1, 4 and 5 in 68 countries, which together account for 97% of maternal and child deaths.

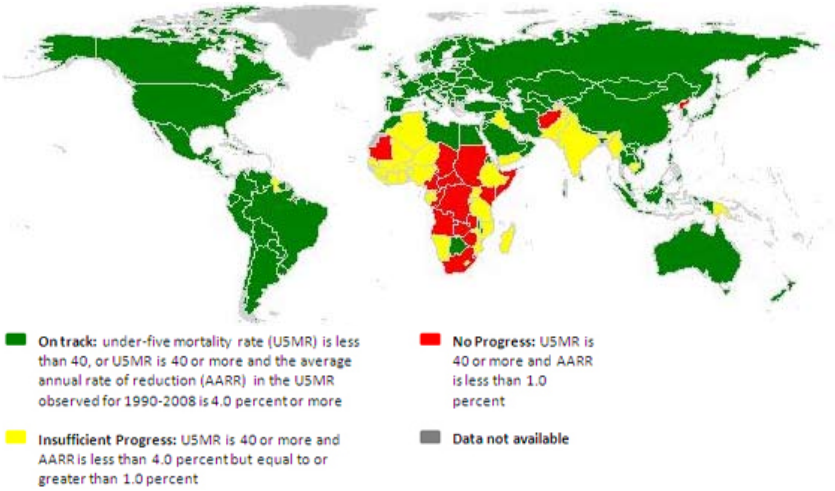
TABLE 1: U5MR HAS NOT DECLINED FAST ENOUGH TO MEET THE MDG TARGET (SELECTED COUNTRIES).

	1990	2008	MDG Target
Angola	260	220	87
Nigeria	230	186	77
Malawi	225	100	75
Ethiopia	210	109	70
Bangladesh	149	54	50
Pakistan	130	89	43
Sudan	124	109	41
Bolivia	122	54	41
India	116	69	39
Indonesia	86	41	29
Philippines	61	32	20
China	46	21	15

Notes: From *Countdown to 2015 Decade report (2000–2010). Taking stock of maternal, newborn and child survival*.

The levels of under-five mortality are highest in sub-Saharan Africa, where, in 2007, close to one in seven children died before his or her fifth birthday. Together with high levels of fertility, this has resulted in an increase in the absolute number of under-five deaths in the region- from 4.2 million in 1990 to 4.6 million in 2007. Sub-Saharan Africa now accounts for half of all deaths among children under five (UN, 2009): and is the region which has the highest concentration of countries that have made no progress towards MDG 4 (see Figure 2).

FIGURE 2: THE COUNTRIES MAKING NO PROGRESS TOWARDS MDG 4 ARE CONCENTRATED IN SUB-SAHARAN AFRICA



Note: From UNICEF, based on 2008 data.

The aggregate figures at the Sub-Saharan Africa level, however, mask a wide variety of different country experiences in terms of progress towards MDG 4 (see Tables 2 and 3). Three countries in Sub-Saharan Africa are currently on-track to meet MDG 4 – Botswana, Eritrea and Malawi - with impressive average annual rates of reduction in under-five mortality of between 2.7% and 5.3%[6].

37 Sub-Saharan African countries today are judged to have made insufficient or no progress towards MDG 4 between 1990 and 2008. Not one country in the West and Central Africa region is on-track to meet MDG 4.

Table 2: Summary of Progress Towards MDG 4 for all Sub-Saharan African Countdown to 2015 Countries.

	Region (UNICEF classification)	Under-five mortality rate		Millennium Development Goal target 2015	Average annual rate of reduction (%) (1990-2008)	Progress Towards MDG 4
		1990	2008			
Botswana	Eastern and Southern Africa	50	31	17	2.7%	on track
Eritrea	Eastern and Southern Africa	150	58	50	5.3%	on track
Malawi	Eastern and Southern Africa	225	100	75	4.5%	on track
Ghana	West and Central Africa	118	76	39	2.4%	insufficient
Gabon	West and Central Africa	92	77	31	1.0%	insufficient
Lesotho	Eastern and Southern Africa	101	79	34	1.4%	insufficient
Togo	West and Central Africa	150	98	50	2.4%	insufficient
Tanzania, United Republic of	Eastern and Southern Africa	157	104	52	2.3%	insufficient
Madagascar	Eastern and Southern Africa	167	106	56	2.5%	insufficient
Gambia	West and Central Africa	153	106	51	2.0%	insufficient
Senegal	West and Central Africa	149	108	50	1.8%	insufficient
Ethiopia	Eastern and Southern Africa	210	109	70	3.6%	insufficient
Rwanda	Eastern and Southern Africa	174	112	58	2.4%	insufficient
Côte d'Ivoire	West and Central Africa	150	114	50	1.5%	insufficient
Benin	West and Central Africa	184	121	61	2.3%	insufficient
Mozambique	Eastern and Southern Africa	249	130	83	3.6%	insufficient
Uganda	Eastern and Southern Africa	186	135	62	1.8%	insufficient
Liberia	West and Central Africa	219	145	73	2.3%	insufficient
Guinea	West and Central Africa	231	146	77	2.5%	insufficient
Equatorial Guinea	West and Central Africa	198	148	66	1.6%	insufficient
Niger	West and Central Africa	305	167	102	3.3%	insufficient
Burkina Faso	West and Central Africa	201	169	67	1.0%	insufficient
Nigeria	West and Central Africa	230	186	77	1.2%	insufficient
Mali	West and Central Africa	250	194	83	1.4%	insufficient
Sierra Leone	West and Central Africa	278	194	93	2.0%	insufficient
Guinea-Bissau	West and Central Africa	240	195	80	1.2%	insufficient
South Africa	Eastern and Southern Africa	56	67	19	-1.0%	no progress
Swaziland	Eastern and Southern Africa	84	83	28	0.1%	no progress
Zimbabwe	Eastern and Southern Africa	79	96	26	-1.1%	no progress
Mauritania	West and Central Africa	129	118	43	0.5%	no progress
Congo	West and Central Africa	104	127	35	-1.1%	no progress
Kenya	Eastern and Southern Africa	105	128	35	-1.1%	no progress
Cameroon	West and Central Africa	149	131	50	0.7%	no progress
Zambia	Eastern and Southern Africa	172	148	57	0.8%	no progress
Burundi	Eastern and Southern Africa	189	168	63	0.7%	no progress
Central African Republic	West and Central Africa	178	173	59	0.2%	no progress
Congo, Democratic Republic of the	West and Central Africa	199	199	66	0.0%	no progress
Somalia	Eastern and Southern Africa	200	200	67	0.0%	no progress
Chad	West and Central Africa	201	209	67	-0.2%	no progress
Angola	Eastern and Southern Africa	260	220	87	0.9%	no progress

Notes: From *Countdown to 2015 Decade report (2000–2010). Taking stock of maternal, newborn and child survival*.

[6] Botswana and Malawi "graduated" to on-track status since the last Countdown report in 2008, whilst Eritrea retained its on-track status.

TABLE 3: SUMMARY OF PROGRESS FOR ALL AFRICAN COUNTRIES BETWEEN 1960 AND 1990.

	Mortality rate, under-5 (per 1,000)					
					Average annual rate of reduction	*Ration (1990/1960)*
Year	*1960*	*1970*	*1980*	*1990*	*(%)*	
Country/Group						
Sao Tome and Principe	108.5	105.6	102.7	99.9	0.26%	92%
Niger	354	330	320	320	0.32%	90%
Madagascar	186	180	175	168	0.32%	90%
Rwanda	205.5	209.4	212.7	175.5	0.49%	85%
Zambia	213	181	155	180	0.52%	85%
Liberia	288	262.5	235	235.1	0.61%	82%
Burundi	237.5	243.8	191	189.8	0.67%	80%
Nigeria	290	265	228	230	0.69%	79%
Angola	345	300	265	260	0.82%	75%
Mozambique	313	278	230	235	0.83%	75%
Ethiopia	273.4	240.7	211.9	204.4	0.84%	75%
Sierra Leone	390.1	368.4	319	290.1	0.85%	74%
Uganda	224	170	185	160	0.95%	71%
Congo, Dem. Rep.	302	245	210	205	1.07%	68%
Tanzania	241	218	175	161	1.11%	67%
Burkina Faso	308.3	287.3	241.2	205.9	1.11%	67%
Benin	296	252	214	185	1.25%	63%
Malawi	362	341.2	266.4	220.5	1.30%	61%
Sudan	208	172	142	120	1.41%	58%
Ghana	212.2	183	149.5	120.3	1.44%	57%
Togo	263.9	218.6	176.8	149.2	1.45%	57%
Cameroon	255	215	173	139	1.52%	55%
Congo, Rep.	198.3	142.3	102.1	102.7	1.61%	52%
Namibia	168	135	108	86	1.63%	51%
Mali	500	400	300	250	1.67%	50%
Lesotho	202.8	186.3	130.3	101.3	1.67%	50%
Central African Republic	348.8	231.7	188.7	172.8	1.68%	50%
Swaziland	225	196	143	110	1.70%	49%
Zimbabwe	157.9	134.9	107.9	76	1.73%	48%
Senegal	311.2	276.1	212.5	149.4	1.73%	48%
Kenya	205	156	115	97	1.76%	47%
Comoros	265	215	165	120	1.82%	45%
Mauritania	310	250	170	133	1.90%	43%
Gambia, The	360	311.1	214.3	152.6	1.92%	42%
Morocco	211	184	144	89	1.93%	42%
Botswana	173	142	84	58	2.22%	34%
Egypt, Arab Rep.	277.5	235.1	175.5	90.6	2.25%	33%
Mauritius	92	86	42	23.4	2.49%	25%
Seychelles	83	59	32	19	2.57%	23%
Tunisia	254	201	100	52	2.65%	20%
Libya	270	160	70	41	2.83%	15%
					Average	*58%*

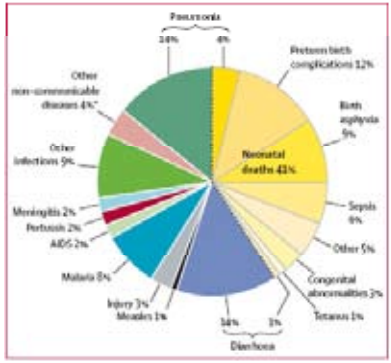
Source: Africa Development Indicators (Edition: January 2009):

The African tragic story does find resonance in these statistics. Yet if we examine the data through a more nuanced lens than that of "on-track" versus "off-track", we can identify some reasons to feel more optimistic about the prospects in some Sub-Saharan African countries. There are a number of countries, though deemed to have made "insufficient" progress towards MDG 4, that have still made significant reductions in under-five mortality: Between 1990 and 2008, Ghana, Togo, Madagascar, Ethiopia, Rwanda, Mozambique, Guinea and Niger have all reduced under-five mortality faster than the average rate of progress amongst the 68 *Countdown* countries.[7] Between 1960 and 1990, 19 African countries had managed to reduce their U5MR by more than 50% (15 of which in SSA).

Of course the importance of recognising positive examples in SSA should not detract from the fact that more needs to be done to reduce under-five mortality in many countries across the continent. Of particular concern are the five countries that have seen an increase in under-five mortality between 1990 and 2008: South Africa, Zimbabwe, Congo, Kenya, and Chad. This is of particular concern since Zimbabwe, Kenya and Chad all had reduced their U5MR by more than 50% between 1960 and 1990. What factors have impeded progress in these countries and how can these be overcome?

5. What are the main challenges today?

Figure 3: Global Causes of Child Deaths.



Source: Black et al. (2010: 5).

As previously mentioned, in 2008, about 8.8 million children died worldwide before they reached the age of five. The main causes of deaths were infectious diseases (68%), with the largest percentages due to pneumonia

[7] The average annual rate of reduction for the 68 *Countdown* countries was 2.35%.

(18%), diarrhoea (15%), and malaria (8%), 41% (3.575 million) of deaths occurred in neonates, with preterm birth complications (12%), birth asphyxia (9%), sepsis (6%), and pneumonia (4%) the most important causes. 49% of child deaths occurred in five countries: India, Nigeria, Democratic Republic of the Congo, Pakistan, and China (Black et al., 2010:1)

The cost effective interventions that should be implemented to reduce the mortality rates in children are well known (Black, Morris, Bryce, 2003). The latest data shows that some interventions delivered routinely through outreach or scheduled in advance (such as vaccinations and vitamin A supplementation) have achieved and sustained high coverage (Countdown, 2010). Relatively new interventions that have received attention and resources, such as insecticide-treated nets and prevention of mother-to-child transmission of HIV, also show rapid gains. On the other hand, interventions that must be provided in response to acute need (such as treatment of childhood illnesses and caesarean sections) show little progress (ibid). Clearly whilst some progress has been made, there is still a lack of available specific life-saving interventions for children in SSA.

TABLE 4: CONSTRAINTS TO SCALING UP COST EFFECTIVE INTERVENTIONS.

Level of constraint	*Examples of constraints*
Community and household level	Lack of demand for interventions due to physical, financial and social barriers
Health services delivery level	Shortages and inappropriate distribution of adequate staff Weak information systems Lack of referral systems
Health sector policy and strategic management level	Weak management systems Decisions not evidence based Weak referral systems Weak regulation systems
Cross sectoral public policies	Bureaucracy Limited fiscal space for additional public expenditure
Environmental and contextual characteristics	Governance framework Political instability and insecurity Low commitment to social sectors Physical environment
Global level	Lack of donor harmonization - Number of Global health Initiatives Brain drain from high-income countries

Source: Adapted from the Taskforce (2009,b) and Mangham and Hanson (2010).

Many of the countries that have been able to affect major reductions in under-five mortality have done so by employing a set of basic technical interventions; increases in malaria prevention (including the percentage of children sleeping under insecticide treated bed nets): vitamin A supplementation, and improvements in prevention of mother-to-child transmission of HIV (more

important in some countries than others) are factors that appear to coincide with the average reductions in under-five mortality in the 11 SSA countries described above. Rwanda, Togo, Madagascar, Mozambique, Ethiopia, and Ghana made some of the greatest gains in the use of insecticide treated bed nets of the entire set of *Countdown to 2015* countries (Countdown, 2010).

Nutrition interventions also form part of the portfolio of interventions employed by the 11 SSA countries that have made greater progress towards MDG 4. For example, Guinea, Togo, Ghana, and Madagascar are among a small number of *Countdown to 2015* countries that have increased exclusive breastfeeding by more than 20% (Ibid.).

This begs the question: why have other SSA countries not been able to provide and scale up these simple, cost-effective interventions? What have been the barriers to scaling up?

Whilst each barrier merits attention, the authors have chosen, for space constraints, to concentrate on a specific set, namely those at the community, health systems and global levels.

Financial barriers at the household and community level.

Domestically, financial resources are limited. In SSA, health is mainly financed through out-of-pocket payments (OPP) of which user fees constitute the main source (McPake et al., 2008). The negative impact of user fees on access to healthcare and health outcomes, particularly for the most vulnerable, including children, has been widely documented (Sepehri and Chernomas, 2001) and a consensus for the need to remove user fees has now emerged. The UNGA side event '*Healthy Women, Healthy Children'* held in 2009 for example orchestrated strong commitments towards this goal by all major donors, including the UK government and the World Bank. The EU has issued clear Council conclusions to that effect (EU, 2010) and Margaret Chan, Director General of the World Health Organisation has also repeatedly supported this policy change[8]. Numerous African governments have also decided to remove user fees: Uganda in 2001, Burundi and Zambia in 2006, Liberia in 2007 for example, and many others have pledged to do so or strengthen free access to services at the point of use during the latest MDG Review Summit (New York, 2010).

Yet the efforts to find alternative financing mechanisms so far have failed to generate substantial resources through more progressive alternatives (The Taskforce, 2009). The current drive for community based health insurance (CBHI): encouraged by the World Bank, continues to provide limited additional resources and only constitutes a partial improvement to the previous financial barriers to access for the most vulnerable (Erkman, 2004). As to the more promising taxation discourse, it continues to be dwarfed by ideological barriers. Indeed, whilst taxation is often recognised as one of the- if not the

[8] At the World Health Assembly which took place in Geneva between 18-2 May 2010 for example.

- most progressive form of financing healthcare, which offers the greatest prospect of achieving universal coverage (Mills, 2007). the dominant public financing literature focuses on the difficulties in developing this revenue generation approach and on the need to develop alternatives (McKinley and Kyrili, 2009).

Some SSA countries have implemented social protection programmes. Ghana for example has instituted a universal social protection programme as part of wider reforms to improve child health, which can, in part, help to explain its progress towards MDG 4. In 2000, Ghana launched a drive to extend social protection programmes for the poorest, often rural, households. These have predominantly aimed to improve health access, education and nutrition. Examples of the measures implemented in Ghana include the National Health Insurance Scheme, an education capitation grant paid to schools to ensure fee-free access, a free maternal health-care policy, a school feeding programme and a pilot cash-transfer programme (Save the Children, 2010).

Health systems barriers.

The most serious non-financial constraint to scaling up life-saving interventions is the lack of human resources for health. The World Health Report 2006 identified 57 countries, 36 of them in sub-Saharan Africa, where the density of health workers falls below the minimum threshold of 2.3/1000 population that is essential to achieve 80% skilled attendance at delivery (WHO 2006). There is an estimated shortage of health services providers of around 2.3 million in these countries, and if management and support workers are included, the gap reaches to the order of 4 million (ibid).

This shortage is the result of a combination of push and pull factors, including lack of adequate pay schemes, management structures and education systems. Health workers migrate from rural to urban areas, from public to private providers, and from low- to high-income countries. The scale up of these specific interventions will therefore not be achieved unless these push and pull factors are recognised and addressed (WHO, 2006).

All of the 11 countries that are on-track to meet MDG 4 or have made above average reductions in under-five mortality have increased the density of health workers since 1990, and in some cases by a staggering margin. Botswana has increased its health workers per 10,000 people from 3.1 to 30.5, and Ghana from 0.6 to 10.8 (Countdown, 2010). Many of these countries have also made changes not only in the number of health workers, but also in the way those health workers are deployed. Malawi, for example, has implemented a programme to manage childhood illness in an integrated way, which involves health surveillance assistants who are government paid, multi-purpose extension health workers, performing an integrated assessment of a child's health and treating appropriately (ibid.).

Environmental and contextual characteristics.

There are, of course, wider factors that contribute to the challenge of making progress towards MDG 4 in many SSA countries. Lack of transparent and accountable governance and political insecurity and armed conflict are two factors that are relevant in a number of SSA countries.

Many of the countries in SSA that have seen the least progress towards MDG 4 have ineffective public expenditure management – from budget preparation and execution to reporting and legislative oversight. This can have a substantial impact on the extent to which resources are available for spending on public health and nutrition, the timeliness with which those resources are delivered, and the level of equity in their distribution. In Cameroon, one of the few countries that saw an increase in under-five mortality rates, there are several breaks in the chain from budget approval to actual spending in health services, including a higher priority being placed on spending in sectors such as defence and general administration over social sector spending, weak oversight of budget and poor audit capacity, and of formal processes for the prioritization of the budget according to nationally agreed development policy framework (Save the Children, 2010). Lack of accountability and transparency in budgeting and governance more generally is by no means a problem confined to the continent of SSA, but it is a challenge for reducing under-five mortality and must be recognised.

Political insecurity and armed conflict are also important factors in the wider context that affect under-five mortality rates in a number of SSA countries. This, however, is not a sufficient reason to assume that no progress can be made towards MDG 4. Niger for example has suffered economic stagnation and decline, famine and nutritional crises, locust invasions, internal conflict and political instability, but has achieved significant reductions in under-five mortality - from 305 in 1990 to 167 in 2008 (Countdown, 2010).

This progress can be accounted for by a number of policy choices and programmatic interventions, including a variety of strategic plans that have been set since 2002 (for example, the Health Development Plan (PDS), the National AIDS Control Strategic Framework, and the Water and Sanitation Policy and Strategy): a drive to improve child immunisation, the introduction of health charge exemptions, and increases in health staff numbers and capacity (Save the Children, 2010). Of course, the current political instability and a concurrent food emergency in Niger threaten to reverse these fragile achievements, but this example still illustrates that it is possible to improve under-five mortality even in the face of instability and crisis.

Global level barriers.

Available financial resources.

The MDG targets were meant to become a major motivational device to increase development in low-income countries and have had the benefit of focusing efforts and resources of donors. Aid volumes for health have nearly quadrupled from 1990 to 2007 from US$5.6 billion to US$ 21.8bn

(Ravishankar et al. 2009). Maternal, newborn and child health has received US$5.4bn in 2008, from US$2.6bn in 2003 – from 3.7% in 2003 to 4.6% in 2008 of total ODA- (Pitt et al., 2010)[9].

There is evidence that overseas development aid directed towards maternal, newborn and child health has increased in many of these 11 countries over the period in which the reductions in under-five mortality have been observed. By comparing the data collected by the *Countdown to 2015* group in its 2008 and 2010 reports, we can see that in 6 of the 11 countries that have made significant reductions in under-five mortality, overseas development aid directed towards maternal, newborn and child health has increased by between 48% and 53% (see Table 5).

TABLE 5: INCREASE IN ODA FOR MATERNAL, NEWBORN AND CHILD HEALTH[10].

	Combined ODA for maternal, newborn and child health (US$ per child/live birth)		
	2004	2007	Increase
Malawi	25	54	54%
Ghana	23	45	49%
Togo	11	19	42%
Madagascar	13	27	52%
Ethiopia	14	29	52%
Niger	10	21	52%

Despite this increase in donor funds, as previously mentioned, the financing gap for MDGs 4 and 5 has been estimated at US$60bn by 2015 (The Countdown, 2010). For this gap to be filled would require a combination of donors holding true to their (numerous) promises, national governments respecting their past commitments (such as SSA countries allocating 15% of national budget to health as per the Abuja Declaration signed in 2001): and additional resources to be generated through international agreements (such as a Financial Transaction Tax or the widening of the tax base in SSA): Which of these options seems the more unrealistic, 5 years away from the 2015 deadline, is matter of perspective and relative optimism.

It is widely accepted that the majority of the G8 countries will fail to honour their past pledges, and particularly the promise of allocating 0.7% of GNI to aid. This seems even more likely with the current economic recession and general focus on domestic rather than international issues apparent across all G8 countries (Mangham and Hanson, 2010). Some donors have even reduced their aid budget, such as Ireland or Italy.

[9] These amounts reflect a 105% increase between 2003 and 2008, but no change relative to overall ODA for health, which also increased by 105% (Pitt et al., 2010).
[10] Authors' analysis based on Countdown to 2015 2008 and 2010 reports.

The drive to identify alternative and innovative financing mechanisms for health has generated intense interest since 2008, with the most exhaustive analysis having been undertaken by the Taskforce in 2008/9. Having analysed more than one hundred financing options, the Taskforce Working Groups held that an additional US$10billion a year could be generated for health (Taskforce Working Group 2, 2009). The final options retained by the Taskforce however were disappointing, with promises of just US$5.3bn over five years, the majority of which would be made-up of consumer-based voluntary levies (The Taskforce, 2009a,b,c). These offer very limited prospect to fill the financing gap or to ensure the realisation of the health-related MDGs (McCoy and Brikci, 2010). Undoubtedly therefore, the lack of resources has been and will continue to be a real limitation to the achievement of all health related MDGs, including MDG4.

The need for the diagonalisation.

The delivery of specific interventions was considered for some time to represent the best option for success and led to the creation of Global Health Initiatives (GHIs) such as the Global Fund to fight Aids, Tuberculosis and Malaria (GFATM) or the US President's Emergency Plan for AIDS Relief (PEPFAR). These GHIs brought additional resources for specific diseases. In 2007, investments through GHIs accounted for 23% of external financing for HIV, 57% for tuberculosis, and 60% for malaria (WHO, 2009).

These specific interventions have yielded some results. GHIs have also proven to hold other advantages, such as the expansion of civil society engagement in service delivery, increased responsiveness to community priorities, and increased coverage of specific interventions (WHO, 2009 and 2010). Yet these GHIs often fail to align to country priorities, which can result in skewed allocation of financial resources, reflecting GHIs priorities rather than national disease-burden (ibid). It has also been recognised that this specific targeting cannot be sustained in the long-run without attention to the health systems (WHO, 2009).

The recognition of the need to work through health systems – defined as all the people and actions whose primary purpose is to promote, restore or maintain health (WHO, 2000) – was crystallised in the World Health report 2000, and has gained momentum in the past couple of years, as evidenced by the drive for the GHIs to include funding for health systems strengthening. The GFATM, GAVI (Global Alliance for Vaccines and Immunisation) and the World Bank for example have been attempting to create a joint platform for health systems strengthening and all three have now reserved funding for strengthening health systems in their annual funding rounds.

The strengthening of health systems, also known as horizontal approach, away from disease specific, or vertical approaches, in concrete terms implies an attempt to address all six building blocks of a health system as defined by the WHO: leadership and governance, financing, service delivery, health

workforce, medical products and technologies, and information and evidence. This represents a much broader and complex agenda than the simple delivery of specific interventions to target groups. For example, unless all parts of the health system function, the purchased Oral rehydration Salts won't be bought for lack of financial resources, won't be distributed to the lowest levels of the health system for lack of infrastructure, won't be administered for lack of health personnel.

For improvement in health outcomes to be sustainable, health systems will therefore need to be strengthened. Specific targeting of the worst offs in urban areas or of harder to reach groups in rural areas will need to be accompanied by a strengthening of the entire health system to yield long term results.

6. Conclusions.

Five years away from the 2015 deadline, much still needs to happen for child health indicators to improve, particularly in SSA. The authors have argued that despite the positive impetus which the MDG4 target has represented for child health and the undisputable need for child health to be recognised as an international and national priority, it has failed to provide a framework within which equity considerations could be analysed, has detracted from the recognition of the importance of social determinants of health and more generally has failed to highlight the interconnectedness of all MDGs, leading to rhetorical and financial competition between MDGs advocates and funds. The MDG targets in general, and MDG4 specifically, have unfairly painted SSA as an overall failure. Unless better data is collected, how well SSA as a whole will be doing in terms of child survival may well remain guesswork rather than evidence-based. The authors have however shown that whilst SSA is fairing worst in terms of MDG4, all is not gloom and some countries have managed to either get on track to achieve MDG4 or substantially improve the health prospects of their children. A combination of intervention scale-up, additional resource allocation, health systems strengthening approach- including innovations in human resources policies- partly explain these successes. Overall however, real challenges remain if the cost effective interventions to achieve child health are to be rolled out: lack of international and national resources, lack of health systems strengthening, lack of human resources at all levels of the health system, limited social protection mechanisms, slow 'diagonalisation' of programmes, and persistent environmental and socio-political factors. Yet the very promising experiences of very different African countries such as Niger, Botswana or Malawi have shown that all is not lost in SSA, and that hope still exists for the improvement of child survival in the continent.

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