WEEKLY EPIDEMIOLOGICAL REPORT

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WER SRI LANKA 2008

Child survival: Where we stand - Part I

In 2006, for the first time in recent history, the total number of annual deaths among children under the age of five fell below 10 million, to 9.7 million. This represents a 60 per cent drop in the rate of child mortality since 1960. However, there is no room for complacency. The loss of 9.7 million young lives each year is unacceptable, especially when many of these deaths are preventable. And despite progress, the world is not yet on track to achieve the Millennium Development Goal target of a two-thirds reduction in the rate of child mortality by 2015.

The current situation

What is a life worth? Most of us would sacrifice a great deal to save a single child. Yet somehow on a global scale, our priorities have become blurred. Every day, on average more than 26,000 children under the age of five die around the world, mostly from preventable causes. Nearly all of them live in the developing world or, more precisely, in 60 developing countries. More than one third of these children die during the first month of life, usually at home and without access to essential health services and basic commodities that might save their lives.

Some children succumb to respiratory or diarrhoeal infections that are no longer threats in industrialized countries or to early childhood diseases that are easily prevented through vaccines, such as measles. In up to half of under-five deaths an underlying cause is undernutrition, which deprives a young child's body and mind of the nutrients needed for growth and development.

Unsafe water, poor sanitation and inadequate hygiene also contribute to child mortality and morbidity. In 2006, the most recent year for which firm estimates are available, close to 9.7 million children died before their fifth birthday. Although the numbers have changed, the problem is no less poignant today than it was 25 years ago when the 'child survival revolution' was launched by the United Nations Children's Fund (UNICEF).

The current focus of the development community in relation to child survival is Millennium Development Goal 4 (MDG 4), which aims to reduce the global rate of under-five mortality by two thirds between 1990 and 2015. Since child deaths in 1990 numbered around 13 million in absolute terms, meeting MDG 4 implies that during the next seven years the number of child deaths must be cut in half – to fewer than 13,000 child deaths per day, or fewer than 5 million per year. The enormity of the challenge should not be underestimated. The world will have to reduce the number of child deaths between 2008 and 2015 at a far faster rate than it has managed since 1990.

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Moreover, the bulk of the efforts must be focused on the most difficult situations and circumstances: in the poorest countries, among the most impoverished, isolated , uneducated and marginalized districts and communities within nations ravaged by AIDS, conflict, weak governance and chronic underinvestment in public health systems and physical infrastructure. If the current trends continue, 4.3 million child deaths will occur in 2015 that could have been averted had MDG 4 been met

The under-five mortality rate : The indispensable gauge of child health

The under-five mortality rate, often known by its acronym U5MR or simply as the child mortality rate, indicates the probability of dying between birth and exactly five years of age, expressed per 1,000 live births, if subject to current mortality rates. It has several advantages as a barometer of child well-being in general and child health in particular. Firstly, it measures an 'outcome' of the development process rather than an 'input', such as per capita calorie availability or the number of doctors per 1,000 population – all of which are means to an end. Secondly, the U5MR is known to be the result of a wide variety of inputs: the nutritional status and the health oral rehydration therapy; the availability of maternal and child health services (including prenatal care); income and food availability in the family; the availability of safe drinking water and basic sanitation; and the overall safety of the child's environment, among other factors. Thirdy, the U5MR is less susceptible to the fallacy of the average than, for example, per capita gross national income (GNI per capita). This is because the natural scale does not allow the children of the rich to be 1,000 times as likely to survive, even if the human made scale does permit them to have 1,000 times as much income. In other words, it is much more difficult for a wealthy minority to affect a nation's U5MR, and it therefore presents a more accurate, if far from perfect, picture of the health status of the majority of children.

Underlying and structural causes of maternal and child motality: Maternal, newborn and under-five deaths and undernutrition have a number of common structural and underlying causes, including:

- Poorly resourced, unresponsive and culturally inappropriate health and nutritional services.
- Food insecurity.
- Inadequate feeding practices.
- Lack of hygiene and access to safe water or adequate sanitation.
- Female illiteracy.
- Early pregnancy.
- Discrimination and exclusion of mothers and children from access to essential health and nutritional services and commodities due to poverty and geographic or political marginalization.

These factors result in millions of unnecessary deaths each year. Their wide-ranging nature and interrelatedness require them to be addressed at different levels –community, household, service provider, government and international – in an integrated manner to maximize effectiveness and reach. The solutions to these impediments are well known, particularly those relating to the direct causes of maternal, neonatal and child deaths. The necessary interventions involve the provision of packages of essential primary health-care services for children across a continuum of care that spans pregnancy, childbirth and after delivery, leading to care for children in the crucial early years of life.

Of the 62 countries making no progress or insufficient progress towards the Millennium Development Goal on child survival, nearly 75 per cent are in Africa. In some countries in southern Africa, the prevalence of HIV and AIDS has reversed previously recorded declines in child mortality. Achieving the goal in these countries will require a concerted effort. Widespread adoption of basic health interventions, including early and exclusive breastfeeding, immunization, vitamin A supplementation and the use of insecticide-treated mosquito nets to prevent malaria, are essential to scaling up progress, in sub-Saharan Africa and elsewhere. More needs to be done to increase access to treatment and means of prevention, to address the devastating impact of pneumonia, diarrhoea, malaria, severe acute malnutrition and HIV. We know that lives can be saved when children have access to community-based health services, backed by a strong referral system. The focus must be on delivering key interventions at the community level, as part of integrated efforts to support the establishment of stronger national health systems. And particular attention must be paid to the special needs of women, mothers and of newborn children.

Source

The state of the world's children 2008 . United Nations Children's Fund (UNICEF) December 2007 [www.unicef.org]

Table 1: Vaccine-preventable Diseases & AFP

4th - 10th Oct 2008 (41st Week)

Disease	No. of Cases by Province									Number of cases during current week in 2008	Number of cases during same week in 2007	Total number of cases to date in 2008	Total number of cases to date in 2007	Difference between the number of cases to date between 2008 & 2007
	W	C	S	N	E	NW	NC	U	Sab					
Acute Flaccid Paralysis	00	00	00	00	00	00	00	00	00	00	01	79	65	+21.5%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	00.0%
Measles	00	01 NE=1	00	00	00	00	00	00	00	01	00	97	64	+51.6%
Tetanus	00	01 KD=1	00	00	00	00	00	00	00	01	02	31	30	+3.3%
Whooping Cough	02 GM=1 KL=1	00	00	00	00	00	00	00	00	02	01	43	35	+22.9%
Tuberculosis	63	03	14	01	09	08	`19	00	13	130	160	6508	8033	-14.4%

Table 2: Newly Introduced Notifiable Diseases

4th - 10th Oct 2008 (41st Week)

Disease	No. of Cases by Province									Number of cases during current week in 2008	Number of cases during same week in 2007	Total number of cases to date in 2008	Total number of cases to date in 2007	Difference between the number of cases to date between 2008 & 2007
	W	C	S	N	E	NW	NC	U	Sab					
Chicken-pox	19	05	21	00	04	02	03	05	14	73	42	4346	2715	+60.1%
Meningitis	01 CO=1	00	03 HA=1 GL=2	00	02 BT=1 KM=1	01 PU=1	02 PO=1 AP=1	00	02 KG=2	11	30	1048	541	+93.7%
Mumps	08	12	04	00	06	11	01	01	06	49	36	2391	1709	+39.9%

Key to Table 1 & 2

Provinces: W=Western, C=Central, S=Southern, N=North, E= East, NC=North Central, NW=North Western, U=Uva, Sab=Sabaragamuwa.

DPDHS Divisions: CB=Colombo, GM=Gampaha, KL=Kalutara, KD=Kandy, ML=Matale, NE=Nuwara Eliya, GL=Galle, HB=Hambantota, MT=Matara, JF=Jaffna, KN=Killinochchi, MN=Mannar, VA=Vavuniya, MU=Mullaitivu, BT=Batticaloa, AM=Ampara, TR=Trincomalee, KM=Kalmunai, KR=Kurunegala, PU=Puttalam, AP=Anuradhapura, PO=Polonnaruwa, BD=Badulla, MO=Moneragala, RP=Ratnapura, KG=Kegalle.

Table 3: Laboratory Surveillance of Dengue Fever 4th - 10th Oct 2008 (41tst Week)

Samples	Number tested		Number positive *		Serotypes									
					D_1		D_2		D_3		D_4		Negative	
	GT	AH	GT	AH	GT	AH	GT	AH	GT	AH	GT	AH	GT	AH
Number for current week	00	02	00	00	00	00	00	00	00	00	00	00	00	00
Total number to date in 2008	124	138	09	23	00	00	06	08	01	08	00	00	02	00

Sources: Genetech Molecular Diagnostics & School of Gene Technology, Colombo [GT] and Genetic Laboratory Asiri Surgical Hospital [AH]

* Not all positives are subjected to serotyping.

NA= Not Available.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Whooping Cough, Human Rabies, Dengue Haemorrhagic Fever, Japanese Encephalitis, Chickenpox, Meningitis, Mumps.

Special Surveillance: Acute Flaccid Paralysis.

Table 4: Selected notifiable diseases reported by Medical Officers of Health

4th - 10th Oct 2008 (41th Week)

DPDHS Division	Dengue Fever / DHF*		Dysentery		Encephal -itis		Enteric Fever		Food Poisoning		Leptos-pirosis		Typhus Fever		Viral Hepatitis		Human-Rabies		Re-turns Re-ceived
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	%
Colombo	23	1372	01	216	00	14	10	124	00	91	30	813	00	03	02	96	00	00	**69**
Gampaha	11	832	05	176	01	20	02	49	02	103	29	667	00	07	03	154	00	06	**86**
Kalutara	04	409	10	268	00	11	02	59	06	26	27	515	00	03	02	41	00	02	**92**
Kandy	06	233	05	256	00	07	01	55	02	97	23	409	01	89	00	111	00	02	**76**
Matale	07	133	01	177	00	04	05	48	00	13	08	661	00	02	00	25	00	00	**100**
Nuwara	01	25	09	230	00	03	08	235	00	166	03	51	00	36	04	104	00	01	**92**
Galle	01	92	06	163	01	18	01	17	00	43	09	339	01	14	00	08	00	03	**71**
Hambantota	00	85	00	88	00	05	00	07	00	12	01	90	05	84	00	14	00	01	**91**
Matara	05	271	06	181	00	13	00	35	00	06	13	415	03	199	00	14	00	01	**94**
Jaffna	00	54	00	135	00	04	00	238	00	16	00	00	00	151	00	35	00	00	**00**
Kilinochchi	00	00	00	35	00	00	00	01	00	04	00	02	00	00	00	01	00	00	**00**
Mannar	00	25	00	21	00	06	00	155	00	00	00	00	00	01	00	14	00	00	**00**
Vavuniya	00	12	01	58	00	02	00	13	00	19	00	05	00	01	00	05	00	00	**75**
Mullaitivu	00	00	00	15	00	00	00	15	00	13	00	00	00	01	00	09	00	01	**00**
Batticaloa	00	85	00	129	00	07	03	25	00	29	00	08	00	00	00	89	00	07	**55**
Ampara	00	30	00	249	00	00	01	08	00	283	00	22	00	00	01	12	00	00	**29**
Trincomalee	00	177	03	97	00	01	00	13	00	14	00	30	00	16	00	13	00	00	**70**
Kurunegala	05	302	04	198	00	14	00	52	00	23	10	589	01	29	02	67	01	06	**89**
Puttalam	00	276	05	90	00	08	00	148	01	27	02	56	00	37	00	29	00	04	**67**
Anuradhapu	00	117	02	97	00	10	00	12	00	09	00	236	00	11	01	14	00	03	**79**
Polonnaruw	00	62	03	119	00	01	02	24	00	21	05	64	00	01	00	19	00	00	**71**
Badulla	00	81	07	413	00	05	01	119	01	96	03	60	01	106	01	132	00	01	**73**
Monaragala	01	53	01	319	00	03	03	39	02	119	00	90	02	97	00	44	00	00	**45**
Ratnapura	03	248	08	336	00	32	02	49	00	68	09	178	00	78	02	50	00	00	**72**
Kegalle	06	383	03	270	00	26	03	70	00	11	19	439	02	63	01	474	00	01	**73**
Kalmunai	00	36	01	241	00	02	00	09	00	16	00	03	00	03	00	24	00	00	**31**
SRI LANKA	**72**	**5393**	**81**	**4577**	**02**	**216**	**44**	**1619**	**14**	**1325**	**191**	**5742**	**16**	**1032**	**19**	**1598**	**01**	**39**	**70**

Source: Weekly Returns of Communicable Diseases (WRCD).

***Dengue Fever / DHF** refers to Dengue Fever / Dengue Haemorrhagic Fever.

****Timely** refers to returns received on or before 18October, 2008 Total number of reporting units =238. Number of reporting units data provided for the current week: 215

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