

From 2010 and beyond: Children should live past age 5

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Summary

All children have the right to live. The right to life is a fundamental, non-derogable right that for obvious reasons cannot be suspended in any circumstance. Millions of Filipino children, however, are denied this right, falling beyond the severely limited reach of government programs on immunization, food supplements, infant and young child feeding.

The Philippines counts among many developing countries, where large numbers of children, especially from economically disadvantaged households and communities, start dying after they are born. Findings on the infant mortality rate (IMR) and the under-five mortality rate (U5MR) clearly affirm the connections between children's health status and economic position: the poorest areas with the least access to the basic health needs of the very young also have the highest deaths recorded for every 1,000 infants and children under-five. Ensuring equity could prevent 40 percent of all child deaths, which occur largely among poor children who are comparatively more exposed to health risks and also have less access to preventive and curative interventions.



New policies and programs meant to fast-track progress, such as emergency neonatal care, have yet to show positive impact. With infant and under-five mortality still unacceptably high, there is much reason to challenge the government claims of a high probability of achieving Millennium Development Goal 4. Indicators for MDG 4 on reducing child mortality include both under-five and infant mortality rates, together with the proportion of 1 year-old children immunized against measles. To achieve this goal, and the target of reducing child mortality by two-thirds, there is an urgent need to mount effective and adequate responses.

Status, causes and trends

The Philippines is one of 68 countries where 97 percent of all neonatal, child and maternal deaths worldwide occur.¹ Children born in the Philippines are at a greater risk of dying than those born in other Asian countries.² Annually 82,000 children under five die in the country.

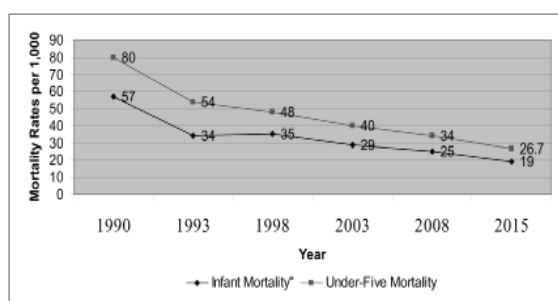
In 1990, the under-five mortality rate was 80 deaths per 1,000 live births; the goal is to reduce this by two-thirds come 2015. The infant mortality rate and the proportion of 1-year-old children immunized against measles are indicators of the progress in eliminating under-five mortality.

Neonatal mortality (NN): the probability of dying within the first month of life
Postneonatal mortality (PNN): the difference between infant and neonatal mortality
Infant mortality (1q0): the probability of dying before the first birthday
Under-five mortality (5q0): the probability of dying between birth and fifth birthday.
 All rates are expressed per 1,000 live births

Under-five, infant and neonatal mortality rate, and immunization status

Under-five mortality rates (U5MR) in the country decreased by more than half since 1990 (see Figure 1). However, the drastic drop in U5MR only took place from 1990 to 1993, and slowed down soon after. Overall, the base estimate decreased by only 34 percent to the current estimate of 34 deaths per thousand. This current U5MR (2008), although still way above the current regional average of 22 deaths per 1,000 live births, seems on track towards reaching the target of 26.7 (see Table 1). But a closer look at the data shows risks of reversing the decrease.

Figure 1. Infant and Child Mortality in the Philippines (Per 1,000 live births)



Source: 1990 and 1993 National Demographic Survey; 1998, 2003, 2008 National Demographic Health Survey

Infant mortality, which contributes to almost 70 percent of all under-five deaths, registered the barest improvements over the past two decades. As with U5MR, infant mortality rates (IMR), underwent a sharp decrease from 1990 to 1993, when the rate fell from 57 infant deaths per 1,000 live births to 34. But in 1998, the IMR increased slightly to 35, then slowly declined to 29 in 2003, until it reached 25 deaths in 2008 (see Table 1). The current rate is still high

Table 1. MDG 4 Indicators Status

MDG4 Indicator (in percent)	1990	1993	1998	2003	2008	2015	Government Assessment
Under-five mortality rate	80	54	48	40	34	26.7	High
Infant mortality rate	57	34	35	29	25	19	High
Proportion of 1 year-old children immunized against measles	78		71	70	76	100	High

Source: 1990 and 1993 National Demographic Survey; 1998, 2003, 2008 National Demographic Health Survey

¹ State of the World's Children 2009 report. 2009. United Nations Children's Fund (UNICEF).

² UNICEF.

compared to other countries in the region – Vietnam, Brunei, Singapore, Thailand, and Malaysia.

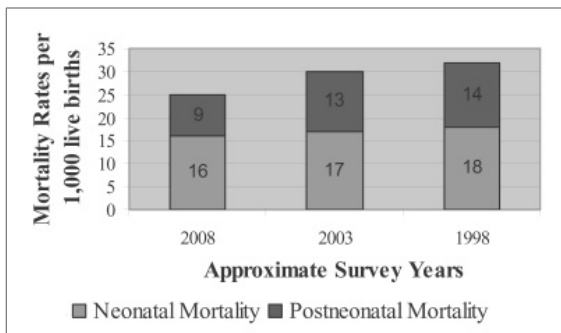
From 1990 to 1993, under-five and infant mortality rates decreased by 43 percent and 32 percent respectively. The sharp drop can be attributed to the massive, nationwide campaign on vaccination launched by the Department of Health (DOH) to achieve the Universal Child Immunization Goal. One of the most popular and successful was Oplan Alis Disease launched by then DOH Secretary Juan Flavie.

However, the decline in the past decade of fully immunized children may have eroded MDG 4 gains. As indicated in the last decade, progress in reducing U5MR and IMR has decelerated.

Newborn deaths

Further analysis of the infant mortality rates show that up to 70 percent are caused by neonatal deaths. Sixteen neonates in a thousand live births in the Philippines die before they reach their first month of life (see Figure 2).

Figure 2. Infant Mortality Ratio Composition



Source: 2008 National Demographic Health Survey

Neonatal and post-neonatal deaths decreased the slowest over the past 20 years, with a rate of less than 10 percent from 1990 to 2008.

Causes of under-five, infant, and neonatal mortality

Globally, under-nutrition has been found to cause more than one-third of child deaths. The majority of under-five mortalities are due to neonatal complications, pneumonia, diarrhea, measles, meningitis, and other diseases, coupled with malnutrition. For infant

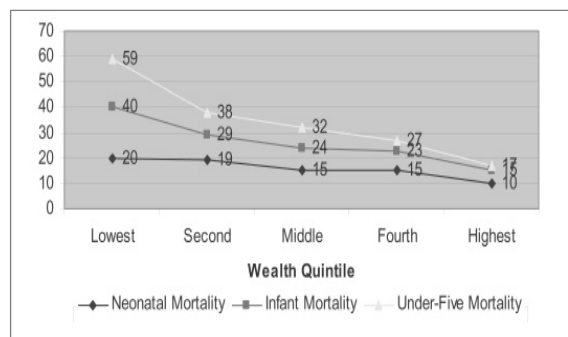
deaths, the three most common causes are bacterial sepsis, pneumonia, and disorders related to short gestation and low birth weight.

Neonatal deaths in the Philippines were caused by preterm birth (28 percent), asphyxia (23 percent), sepsis/pneumonia (26 percent), congenital anomaly (8 percent), tetanus (7 percent) and diarrhea (3 percent). Indirect causes are maternal-related risk factors, newborn-related risk factors, and low birth weight (13 percent) due to pre-maturity and poor intra-uterine growth rate.

Disparities in infant and under-five mortality

Under-five and infant mortality rates registered the highest in the Autonomous Region in Muslim Mindanao (ARMM), followed by Eastern Visayas,³ throughout the 10 years preceding the 2008 official data. Both U5MR and IMR cut across demographic differences but are most prevalent in the rural areas and among the poorest sections of society. In every 1,000 live births, 59 poor children die before they turn 5 years of age; while 40 poor infants barely reach their 1st year (see Figure 3). The U5MR and the IMR are 2.7 and 2.3 times higher, respectively, amongst the poorest households compared to those in the highest income quintile. The same pattern is seen in the rate of neonatal deaths. In the rural areas, the ratios are 49 in 1,000 births for U5MR and 35 in /1,000 births for IMR.

Figure 3. Child Mortality Rates by Wealth Status



Disabling factors

Links have been found between the mothers' educational attainment and child mortality rates. Approximately 1 in every 10 children (or 136 in 1,000)

³ In ARMM, under-five mortality rate is highest at 94 deaths per 1000 live births, while infant mortality is at 56 deaths per 1000 live births. Eastern Visayas comes in second with 64/1000 for under-five mortality, and 45/1000 for infant mortality.

Table 2: Immunization Status

	1998	2000	2003	2006	2008	2010	2015
Measles (1-12 months)	71%		70%		76%		100%
All Basic Vaccinations (1-12 months)		87%	60%	83%	70%	95%	100%
All Basic Vaccinations (12-23 months)	73%		70%		80%		100%

Source: 1998, 2003, 2008 National Demographic Health Survey (NDHS)
2000 and 2006 Field Health Service Information System

born to mothers with no education had a lesser chance of reaching their 5th birthday when compared to mothers with education. The trend also manifests in IMR with 87 infants out of 1,000 live births who do not live beyond a year.

Current data also shows gender disparity in the U5MR where more male children (41/1000) die than their female (34/1000) counterparts. This is also true for infant and neonatal mortality rates. This is a trend that has grown stronger over the past 10 years.

The unevenness of immunization also comes into the picture of significant U5MR and IMR. The aim in 1986 was to eradicate measles by 2008. By 1990, eight out of ten children had their measles vaccination before they reached age one. By 1998, the number decreased to seven, then settled back to almost eight by 2008 (see Table 2).

A fully immunized child (FIC) has received all basic vaccinations. The National Health objective for 2010 is increase the number of FIC to 95 percent. Field data shows that the proportion of fully immunized children decreased to 83 percent in 2006 from 87 percent in 2000. NDHS data shows conflicting information as immunization rates increased to 70 percent in 2008 from 60 percent in 2003. The data further indicates that one out of every five children is not fully immunized.

Six out ten children were immunized against the six preventable childhood diseases - tuberculosis, diphtheria, pertussis, tetanus, polio, and measles before they turned 2 years old in 1998. This increased to seven in 2003, then to eight in 2008.

Male children, living in urban areas (82 percent), are first-borns (85 percent), come from the richest quintile (87 percent), and whose mothers reached college level or higher (87 percent) are more likely to have been immunized against the six preventable childhood diseases.

Immunization coverage also varies largely by region. Western Visayas has the highest vaccination coverage rate (92 percent). Predictably, the highest U5MR and IMR, occur in ARMM, whose immunization coverage is the lowest at 31 percent.

Understanding infant and under-five mortality

More than half of childhood deaths happen before children turn five. Half of the deaths of Filipino children under five years old happen in the first 28 days of life. Half of the neonatal deaths occur during the first 2 days of life with the following as causes: birth asphyxia (31 percent), complications of prematurity (30 percent) and severe infection (19 percent). This stage between birth to five years of age is critical to survival. In the Philippines a child is almost 14 times more likely to die during the first month of life than a child born in a developed country.⁴

This means that the majority of under-five deaths are newborns. Health experts assert that the MDG 4 can only be achieved if neonatal deaths are halved. With neonatal mortality remaining almost unchanged for the past decade, it is highly unlikely that infant and under-five mortality will be reduced to zero.

This emphasizes that quality care must be provided to mothers and newborns at this earliest stage of life outside their mother's womb. Deaths during the first week of life are mostly due to inadequate or inappropriate care during pregnancy, childbirth, or the first critical hours after birth.

After the first week of life, deaths mostly occur from infections acquired after birth, either at the health facility or at home. Most neonatal deaths, whether during the period immediately after birth or later, can be avoided with low cost interventions that do not require sophisticated technology. Granting that infants survive these infections, they are still at risk of suffering life-long disability.

⁴ UNICEF study.

Infant and under-five malnutrition increases threats to children's survival beyond five years

For the past decade, a significant percentage of 0-5 year old children have remained malnourished. The proportion of underweight, stunted and wasted preschool children⁵ decreased slightly from 1998 to 2008. At present, 26 out of every 100 preschoolers are underweight; 28 out of every 100 are stunted or have lower height than that of normal; and 6 out of every 100 are wasted or thin (see Table 3).

Table 3. Malnutrition Status of Children 0-59 months old

0-59 months	1998	2003	2008
Underweight	38%	28%	26%
Stunted	32%	30%	28%
Wasted	6.9%	5.5%	6.0%
Overweight		1.4%	2%
Anemia at 6-11 months	57%	66%	
Anemia at 12-24 months		53%	

Source: 1998, 2003, and 2008 National Nutrition Survey

From 2003-2005, the number of underweight children decreased by 1.1 percent annually, however, from 2005 to 2008 there was significant increase in underweight (24.6 percent to 26.2 percent) and stunted (26.3 percent to 27.9 percent) preschoolers. The level of stunted children translates to about 3.1 million preschoolers.

The prevalence of overweight and obese children increased in the last decade. Obesity shows another face of malnutrition with children and adults suffering from under-nutrition but with excessive weight gain.

The prevalence of anemia among infants from six months to less than one year has increased throughout the years. From 57 in every 100 infants in 1998, it has risen to 66 in every 100 infants in 2003. Iron deficiency anemia leads to short attention spans and ultimately impacts on the child's ability to learn.

In addition, the prevalence of Vitamin A deficiency disorders (VADD) among children 6 months

to 5 years of age increased from 35.3 percent in 1993 to 40.1 percent in 2003. It is important to note that the prevalence of VADD weakens the immune system and increases a child's risk of dying from diarrhea and measles by 20-24 percent.

Data also confirms the positive correlation of birth weight and child mortality. The healthier and less underweight children are, the lesser the chances for early death.

Regional disparities further provide evidence of these links. The top 10 poorest regions in the country such as ARMM, Eastern Visayas, and Bicol where health services are lacking, inaccessible and/or barely accessed, are also where U5MR and IMR are the highest. They are also the most food-insecure regions, and as a consequence, children are more undernourished compared to others. The National Nutrition Council (NNC) confirms that under-nutrition is more pronounced in Visayas and Mindanao.

Regions with relatively better indicators for children's health and mortality are not without areas of high vulnerability. Anecdotal information repeatedly cites the desperate practice of 'pag-pag' - scavenging through the garbage of fast food chains to find anything edible.

Based on the results of the Food Insecurity and Vulnerability Information and Mapping Systems (FIVIMS) under the NNC, food insecurity in the Philippines emerged as most intense in ARMM and prevalent as well in varying degrees across 49 provinces (see Table 4).

Malnutrition has intergenerational effects

The health and nutrition of women during pre-pregnancy significantly affects the level of vulnerability to maternal mortality, the chances of fetal development, and the survival, growth and development after birth. Fetal life development has profound and irreversible effects on a child's brain development and mental capacity.

Women's under-nutrition during pre-pregnancy, pregnancy and childbirth is linked with deliveries of

⁵ **Underweight** - A condition in which the child's weight is less than that of normal children of the same age and is measured using weight-for-age as indicator.

Stunted - A condition in which the child's height is less than that of normal children of the same age and is measured using height-for-age as indicator.

Wasted - A condition in which the child's weight is less than that of normal children of the same height and is measured using weight-for-height as indicator.

* Based on the Food and Nutrition (FNRI)-PPS standards.

Table 4. List of Nutritionally Vulnerable Regions (FIVIMS, 2004)

<p>CLUSTER 3 Vulnerable</p>	<p>Region 1</p> <ul style="list-style-type: none"> ▪ La Union <p>CAR</p> <ul style="list-style-type: none"> ▪ Abra ▪ Ifugao ▪ Mountain Province <p>CALABARZON</p> <ul style="list-style-type: none"> ▪ Quezon <p>MIMAROPA</p> <ul style="list-style-type: none"> ▪ Marinduque ▪ Occidental Mindoro ▪ Palawan ▪ Romblon <p>Region 5</p> <ul style="list-style-type: none"> ▪ Albay ▪ Camarines Norte ▪ Camarines Sur ▪ Catanduanes ▪ Sorsogon 	<p>Region 6</p> <ul style="list-style-type: none"> ▪ Aklan ▪ Antique ▪ Iloilo ▪ Negros Occidental <p>Region 7</p> <ul style="list-style-type: none"> ▪ Bohol <p>Region 8</p> <ul style="list-style-type: none"> ▪ Leyte ▪ Eastern Samar ▪ Northern Samar ▪ Samar ▪ Southern Leyte <p>Region 9</p> <ul style="list-style-type: none"> ▪ Zamboanga del Sur 	<p>Region 10</p> <ul style="list-style-type: none"> ▪ Camiguin ▪ Misamis Occidental ▪ Lanao del Norte <p>Region 11</p> <ul style="list-style-type: none"> ▪ Davao del Norte ▪ Davao del Sur <p>Region 12</p> <ul style="list-style-type: none"> ▪ Cotabato ▪ Sarangani ▪ South Cotabato ▪ Sultan Kudarat <p>CARAGA</p> <ul style="list-style-type: none"> ▪ Agusan del Norte ▪ Agusan del Sur ▪ Surigao del Norte ▪ Surigao del Sur
<p>CLUSTER 4 (Very Vulnerable)</p>	<p>CAR</p> <ul style="list-style-type: none"> ▪ Apayao <p>Region 6</p> <ul style="list-style-type: none"> ▪ Capiz 	<p>Region 7</p> <ul style="list-style-type: none"> ▪ Negros Oriental <p>Region 9</p> <ul style="list-style-type: none"> ▪ Zamboanga del Norte <p>Region 10</p> <ul style="list-style-type: none"> ▪ Bukidnon 	<p>ARMM</p> <ul style="list-style-type: none"> ▪ Lanao del Sur ▪ Maguindano ▪ Basilan
<p>CLUSTER 5 (Very, Very Vulnerable)</p>	<p>Region 5</p> <ul style="list-style-type: none"> ▪ Masbate 	<p>ARMM</p> <ul style="list-style-type: none"> ▪ Sulu ▪ Tawi-Tawi 	

Source: NNC 2006 Briefing Kit; www.nnc.gov.ph

small, low birth weight babies who are likely to end up malnourished as well. Well-nourished and healthy women, on the other hand, who received adequate nutrients before and during pregnancy delivered healthy babies. From 2005 to 2008, the National Nutrition Survey indicated a 1.7 percentage point rise in the proportion of nutritionally at-risk pregnant women (see Table 5).

Birth weight is an important indicator of a newborn's health status. Babies born with low birth weight⁶ generally have higher rates of morbidity and mortality. A decrease in the proportion of births with low birth weight contributes to reducing child mortality.

As shown above, the intimate link between the mother and her child affects a newborn's chance for

Table 5. Malnutrition in Pregnant and Lactating Women

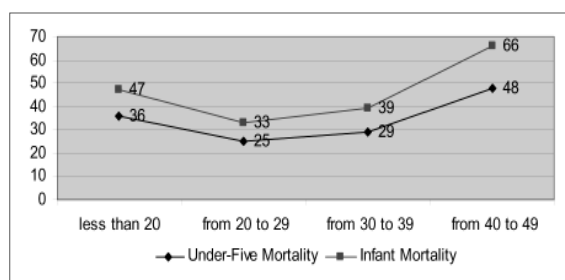
	2003	2005	2008
Underweight Pregnant Women	27%		
Underweight Lactating Women	11%	14%	13%

Source: 2003, 2005, and 2008 National Nutrition Survey

survival and health. Though there are several seemingly indirect factors that affect newborns, the most important of these are maternal conditions that pose risks to the infant: the mother's age at first pregnancy (greater risk before 20 years or after 35 years of age)

⁶ Babies weighing less than 2.5 kilograms at birth are categorized among those with low birth weights.

Figure 4. Infant and Under-five Mortality according to Mother's Age



(see Figure 4), child spacing (less than 3 years since last birth), the mother's poor nutritional status and history of illness.

Government policy, programs, and services

In the past 10 years, the Department of Health (DOH) implemented various health interventions to combat infant and under-five mortality. These include improving infant and young child feeding practices (e.g., breastfeeding and complementary feeding from six months onwards, providing immunization and food supplements, and ensuring neonatal and maternal care.

Infant and young child feeding practices

The National Policy and Plan of Action on Infant and Young Child Feeding (IYCF) (2005-2010) was a breakthrough in child health initiatives with breastfeeding as the core campaign. The plan centers on ensuring and strengthening the implementation of existing policies on breastfeeding, revitalizing nationwide advocacy and campaigns, and introducing breastfeeding complementary feeding practices.

The IYCF also pushes for measures that would enable working mothers to continue breastfeeding. In line with this, and facilitated with DOH's help, a coalition was established to monitor the implementation of the Milk Code as well as the other breastfeeding policies. It counteracts the persistent moves of milk companies to push their products, which could potentially derail breastfeeding campaigns.

Breastfeeding

A number of breastfeeding policies and programs are in place: (a) the Mother Baby Friendly Hospital Initiative, mandating all hospitals to fully protect, promote and support breastfeeding and rooming-in practices; (b)

the Milk Code (Executive Order No. 51), promoting and protecting breastfeeding by prohibiting the marketing and provision of breast milk supplements and substitutes in health facilities, as well as ensuring the proper use these substitutes through adequate information; and c) the Rooming-In and Breastfeeding Act (Republic Act 7600), ensuring a conducive breastfeeding environment upon birth. This enabling policy environment has led to the establishment of breastfeeding-friendly settings: workplace, health facilities, public places (i.e. shopping malls) and within communities.

Despite the proliferation of policies on breastfeeding, breastfeeding prevalence has not significantly gained ground. Worse, exclusive breastfeeding decreased from 37% in 1998 to 34% in 2003, then remained at 34 percent up to the present (see Table 6). Exclusive breastfeeding still falls significantly below the government target of 80 percent. Exclusive breastfeeding of infants up to six months maximizes the benefits of immunity and nutrition. Improving breastfeeding and complementary feeding of Filipino infants and young children could prevent 16,000 deaths, primarily from diarrhea, pneumonia, neonatal sepsis and hypothermia.

Table 6. Breastfeeding Prevalence

	1998	2003	2008
Breastfed	88%	87%	88%
Exclusive Breastfeeding of children aged 4-5 months	37%	34%	34%

Source: 1998, 2003, and 2008 National Demographic Health Survey

In 2003, only 16 percent of newborns were exclusively breastfed for four to five months of age, while 13 percent were never breastfed at all. Data for 2008 shows a slight decrease in non-breastfed children which was down to 12 percent.

Supplementation of breastfeeding with other liquids and foods occurs too early. Among infants less than six months old, almost a third (30 percent) were found to have been given water, other liquids and food in addition to breast milk. Official 2003 data also shows that 4 out of every 10 infants were fed formula milk.

Because breastmilk is more readily accessible and requires no financial costs, it is more prevalent amongst women who live in rural areas (92 percent), with no education (92 percent), of the poorest quintile (94

percent), who gave birth at home (91 percent) and were assisted by a hilot, a traditional birthing attendant (92 percent). It is in the poorest and least developed regions such as Bicol and the Cordillera Administrative Region where children are more likely to be breastfed (95 and 94 percent, respectively). Children from the more urbanized regions such as CALABARZON and NCR exhibited less breastfeeding prevalence at 77 percent and 80 percent, respectively.

High IMR and U5MR in the rural areas, however, stress the need to ensure other basic health requirements in the more disadvantaged regions such as easily accessible public health facilities and services and nutrition programs, to maximize and sustain the benefits from breastfeeding.

Causes of non-breastfeeding

Despite the well-documented benefits of breastfeeding, more privileged women living in urban areas and who have closer access to health delivery services are not practicing breastfeeding. This scenario may be a consequence of more women joining formal waged production and exercising greater autonomy and choice. Breastfeeding can also be daunting in work environments that are male-dominated and insensitive to gender-differentiated needs, such as those of lactating women. The rampant and aggressive advertising of formula milk promising healthier, smarter and happier children also have a dampening effect on breastfeeding.

The effects of sexism in culture, such as the objectification of women's breasts in media and advertising as solely for (men's) pleasure cannot be discounted. Using the breast as a source of milk may not be perceived as glamorous and, in effect unconsciously associated with poverty.

Complementary feeding

Children's physiological and behavioral development are at a critical stage from birth to two years of age. For their needs to be met, it is recommended that children be exclusively breastfed from birth to six months of age, and that complementary foods should only be introduced at six months of age. Frequent and on-demand breastfeeding should be continued until the child reaches the age of two years or beyond. As the child gets older and/or is no longer breastfed, the amount and variety of complementary foods should gradually increase.

Between 1998 and 2008, 55 percent of children ages 6-23 months were found to have been fed according to the recommended IYCF practices. Nearly all children of age 6-23 months (95 percent) were breastfed or given milk products, 4 out of 5 were given the recommended number of food groups (79 percent), while 7 out of 10 were fed at least the minimum number of times per day (65 percent).

Breastfed children were more likely than non-breastfed children to be fed according to the recommended IYCF practices in terms of frequency of feeding. Four out of every five (81 percent) breastfed children age 6-23 months were fed at least the minimum number of times per day, compared with 48 percent of non-breastfed children.

Feeding the recommended number of food groups is the same for both breastfed and non-breastfed children; 79 percent of both breastfed and non-breastfed children received the recommended number of food groups (that is, three or more food groups for breastfed children and four or more food groups for non-breastfed children).

For breastfed children, adherence to appropriate feeding practices does not vary by urban-rural residence and mother's education, but it does vary by wealth quintile, with children in wealthier households (middle to highest quintiles) receiving more appropriate feeding than children in poorer households (lowest and second quintiles).

Among non-breastfed children, those living in urban areas, whose mothers attended college, and belong to wealthier households, were more likely to receive appropriate feeding than other non-breastfed children. This directly correlates children's health with economic status.

Certainly, households can be informed about nutritious food they can prepare at minimal costs. However, nutritious food alone does not a healthy child make. Children of wealthier households also have more access to other essentials such as immunization and regular check-ups by health practitioners, not to mention having been born to mothers with possibly less physically taxing livelihoods and most likely, more resources to spend on their general well-being. The issues involved are also too complex and linked with other socio-cultural and economic factors to be simply addressed with providing information on more affordable and healthy food alternatives.

Instant, comfort, and status foods

Faster-paced lifestyles and choices constrained by financial limitations are only some of the factors for the tendency of Filipino households to consume more instant, comfort, and/or status types of food such as preservative-laden noodles and canned goods. Early exposure to so called “junk food” and “fast foods” instill bad eating habits at a young age, which children carry into their adult years. Aggressive and unregulated marketing, claiming health benefits of these processed foods, further fuels the drive for their consumption. It does not help that the government agencies themselves resort to mass dissemination of processed food among impoverished communities, especially in the aftermath of disaster events.

Micronutrient supplementation program

The micronutrient supplementation program of the DOH contributes to reducing IMR and U5MR through measures aimed at preventing and controlling micronutrient deficiencies. This targets children from poorer households who do not have access to nutritious food.

To decrease child and maternal mortality, the DOH adopted a life cycle approach in public health. DOH programs now attend to the needs from conception until death.

The micronutrient supplementation program focuses on VADD and iron deficiency anemia for both infants and their mothers. The trend in the distribution of vitamin A supplements to children has barely moved. In 1998, 72 percent of children under five years of age received supplements. There was a small increase to 76 percent in 2003 after which there has been no further improvement – also 76% in 2008.

Expanded program on immunization

The expanded program on immunization (EPI) and micronutrient supplementation adds to the various programs currently being implemented to contribute to reducing child mortality. The EPI aims to achieve universal immunization against seven common childhood diseases: tuberculosis, poliomyelitis, diphtheria, pertussis, tetanus, measles, and hepatitis B. Measles in particular, was targeted with the 1998 launch by the DOH of the Measles Elimination Campaign.

Although in place since 1979, EPI has not achieved the goal of universal coverage. This was a commitment made in 1986 when the country adopted

the Universal Child Immunization Goal, and vowed to (a) insure Full Immunized Child coverage of at least 90 percent in all provinces and cities; (b) eliminate measles by 2008; and (c) eliminate neonatal tetanus in the same year.

The data shows the inability of the EPI and micronutrient program to provide vaccination and food supplements to all children. For more than a decade, over 30 percent of children were not immunized and did not receive supplements. This number has more or less remained the same, which means that a substantial number of children grow up unprotected from deadly childhood illnesses. These children who missed out on life-saving vaccinations and supplements may be the very children in child mortality figures, as both rates remained the same. In both programs of immunization and micronutrient supplementation, the higher the coverage, the lower the number of deaths among children.

Maternal, neonatal, child health, and nutrition

After years of planning, the DOH implemented the Maternal, Neonatal and Child Health and Nutrition (MNCHN) strategy in 2008 with the aim of rapidly reducing high maternal and child mortality rates. The MNCHN strategy institutes child survival strategies, delivery service packages, and continuum care across the life cycle stages. From various stakeholders coming together, women’s health teams have been created to expedite referrals, transportation and access to emergency obstetric care. More importantly, the MNCHN strategy addresses the stumbling blocks in increasing the modern contraceptive prevalence rate; antenatal care visits (at least four); skilled birth attendance and facility-based births; and the prevalence of fully immunized children.

The gradual transformation of health care facilities to provide emergency obstetric and neonatal care, benefit both mothers and newborns that face birth complications. The absence of this service is known to increase the risk of mortality.

Focus on newborns

Renewed focus on neonatal health and mortality, alongside implementation of the MNCHN strategy shows the DOH’s commitment to reducing child and maternal mortality.

Alarming data on neonatal mortality prompted the DOH to enact the Essential Newborn Care (ENC) protocol. Complementing the MNCHN strategy, the ENC

protocol is another comprehensive strategy seeking to improve the health of the newborn through interventions before and after delivery. A manual guiding the health workers and medical practitioners in providing evidence-based essential newborn care gives particular focus on the first few hours of life of the newborn.

The protocol guidelines categorize procedures into time-bound, non time-bound and unnecessary procedures. Time bound interventions should be routinely performed first. They include immediate drying, skin-to-skin contact followed by clamping of the cord after 1 to 3 minutes, non-separation of the newborn from the mother and breastfeeding initiation. Non time-bound interventions range from immunizations, eye care, Vitamin K administration, weighing and washing. The protocol also highlights unnecessary, but commonly practiced, procedures such as routine suctioning, routine separation from mothers of newborns for observation, administration of pre-lacteals like glucose water or formula, and footprinting.

Analyzing government initiatives

Four presidents – Aquino, Ramos, Estrada and Macapagal-Arroyo - had the power, the mandate, and the opportunity to eradicate under-five and infant deaths from 1990 to 2008. Public spending, however, showed no prioritization for health needs. National budgets consistently allocated minuscule amounts for the health sector. In the past 20 years, various campaigns on immunization, supplements and other child health interventions were also initiated, but with short-lived success and impact.

Only those with money (i.e., the rich) can fully pay for out-of-pocket payments and often they have generous health insurance. The near-poor and the lower middle classes can become impoverished to meet out-of-pocket payments for health care. (But the very poor don't even have pockets.

— *Dr. Alberto Romualdez,
Former Secretary of the Department of Health,
and Dean, Graduate School of Health Sciences
Pamantasan ng Lungsod ng Maynila*

However, the new direction of the DOH addressing maternal and neonatal mortality through the implementation of the MNCHN policy offers new hope. Implemented only in 2008, the policy involves completion of the basic and the comprehensive emergency care units within the next 2 – 3 years, with positive impacts expected to surface in the next 5-10 years.

Health financing

The health budget has always been too low to provide universal quality health coverage and allow access by the whole population. Even with the Millennium Development Goals mainstreamed into the Medium Term Philippine Development Plan, the appropriations for health have remained severely inadequate.

The child health programs as well as the MNCHN all fall under public health. Public health services tend to deteriorate with chronic budget deficits and the decline in government spending. From 1998-2010, the DOH share in the total national government spending decreased from 79 percent in 1998-2005 to 69 percent in 2006-2010.

In terms of GDP share, the DOH expenditure dropped significantly from 0.41 percent of GDP in 1998 to 0.17 percent in 2006 then rose slightly to 0.19 percent of GDP in 2007-2008. From recent data, it is now at 0.30 percent (2009-2010), though this is still below the international health financing standard of 5 percent of GDP. What is worrisome is that throughout the last decade, allocations for health did not improve at all.

The minimal resources of the DOH are further divided into four groups – policy advice, regulatory services, public health and hospital services. From 1998 to 2008, allocations for hospitals amounted to 60-70 percent of the DOH budget, while public health only received 10-20 percent. Increases in the last two years brought the public health budget to 31 percent, close to the 39 percent allocation to hospitals. This renewed priority given to public health may be due to the increasing urgency to meet the financial requirements necessary to achieve the MDGs for health.

Resources allocated to the MDGs have been low from the very beginning. This decade-long drought on resources for achieving the MDGs particularly on health has widened the gap, making the targets even more difficult to reach in the remaining five years before the 2015 deadline. The resource gap based on the “low cost” assumption on key public health interventions is estimated as follows (see Table 7):

- Php 15.5 billion for 2011 (0.17 percent of GDP or 63 percent of the DOH budget for 2010)
- Php 5.3 billion for 2012 (0.06 percent of GDP or 21 percent of the DOH budget 2010)
- Php 6.4 billion for 2013 (0.06 percent of GDP or 26 percent of the DOH budget for 2010)

Table 7. Low Cost Resource Gap Assumption on Health (in million pesos)

Low cost resource gap assumption	2010	2011	2012	2013	2014	2015
Expanded Program on Immunization: increase from 91% in 2010 to 95% in 2015	445	476	509	544	582	622
Micronutrient Supplementation: 100% coverage	85.0	88.1	91.2	94.4	97.6	100.8
BEmONC/CEmONC training	32.9	34.2	35.6	14.0	14.5	15.1
BEmONC/CEmONC facilities upgrading: 100% of deliveries are facility-based		6,975.0	6,975.0			
Total Public Health interventions	3,006.7	15,466.2	5,270.2	6,421.9	6,175.0	6,043.1

Source: 2010 DOH Multi-Year Spending Plan

These estimates project some improvement in the implementation of the delivery of public health services by avoiding wastage of resources. They also show attempts at pro-poor targeting in the delivery of several public health programs (namely, through micronutrient supplementation, reproductive health and management of children's illnesses). Non-poor households will have to self-finance these services. Estimates for the Basic Emergency Obstetric and Neonatal Care (BEmONC) and Comprehensive Emergency Obstetric and Neonatal Care (CEmONC) services further seem to assume that instead of just one year (2010), the upgrading of identified facilities and the training of personnel in these facilities will be staggered over two years (2011 and 2012).

Conclusions and Recommendations

In the Philippines, children lose out by default to enjoying the non-derogable right to life because of unmet state obligations already subscribed to, even before the MDGs, notably the International Convention on the Rights of the Child. That this right is restricted for Filipino children of economically marginalized households and communities makes the gap even more marked.

Interventions to reduce the IMR and the U5MR suffer further from want of making tight links with neonatal and maternal conditions. Newborn survival is inextricably linked to the health of the mother. Nowhere is this more evident than an even higher risk of death to newborns and infants whose mothers die in childbirth. Glaring inadequacies in women's reproductive health requirements should thus be a pre-requisite to carrying out any interventions aimed at reducing mortality among infants and children.

Significant amounts of time, resources and opportunities have already gone into attempts over the last decade to achieve MDG4, but there remains much ground to cover in the few remaining years before the 2015 deadline. Were the existing programs fully implemented and made accessible to the most marginalized and excluded, progress would be felt by those who need it the most.

The rise of Benigno Aquino III to the presidency has raised hopes among people of concrete improvements in their lives. Among his promises are the provision of universal health care within three years' time and the reform of the health insurance system to achieve universal coverage. Guaranteeing adequate resources for health would be a concrete, and urgently needed step in this direction, along with ensuring more efficient and responsive ways of implementing the following in the next five years:

1. Universalizing the coverage of existing immunization, food supplement, infant and young child feeding programs;
2. Ensuring enforcement of breastfeeding laws on marketing and rooming-in;
3. Increasing the public health budget to meet the global standard of five percent of GDP, and securing resources for filling the gaps in the implementation of emergency obstetric care services and facilities;
4. Funding and implementing the development of a health demographic standard to monitor and document infant and child morbidity and mortality among Muslim populations, indigenous peoples, youth and adolescent, and other high risk sectors, to come up with well-targeted policies and programs; and,

5. Revamping the health insurance system to ensure universal health coverage, reduce out-of-pocket health expenses, and to institute a progressive payment system subsidizing the less economically advantaged in society.

A critical key to achieving these is ensuring financing and other forms of resources for health. If debt repayments continue to be the top priority of public spending, the government is at the onset already bound to fail in fulfilling its commitment to the international health standard of allotting five percent of GDP to health. The MDGs, with MDG 4 in particular, would add to an already growing list of unfunded mandates that at best enhance the policy and legal environment for development goals but do little to improve people's lives on the ground.

Seeking well-resourced mandates has gained more urgency in the light of new obstacles in reducing child

mortality. Disasters triggered by climate change deepen pre-existing inequitable conditions, thereby increasing the intensity of adverse impacts on the health and well-being of the vulnerable and marginalized, such as women and children.

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