

THE STATE OF LATIN AMERICAN AND CARIBBEAN CHILDREN 2008



Child Survival

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Brazil: An indigenous girl holds onto her younger sister.

Introduction

Child survival in Latin America and the Caribbean: 'On track', but inequities in health care and survival rates remain marked

Every year, the United Nations Children's Fund (UNICEF) publishes *The State of the World's Children*, the most comprehensive and authoritative report on the world's youngest citizens. *The State of the World's Children 2008*, published in January 2008, examines the global realities of child survival and the prospects for meeting the health-related Millennium Development Goals (MDGs) – the targets set by the world community in 2000 for eradicating poverty, reducing child and maternal mortality, combating disease, ensuring environmental sustainability and providing access to affordable medicines in developing countries.

This year, UNICEF is publishing its third annual regional edition for the Latin America and Caribbean region under a new title – *The State of Latin American and Caribbean Children 2008*. This volume and other regional editions

complement *The State of the World's Children 2008*, sharpening from a worldwide to a regional perspective the global report's focus on trends in child survival and health, and outlining possible solutions – by means of programmes, policies and partnerships – to accelerate progress in meeting the Millennium Development Goals. A particular focus is on the three priority countries – Brazil, Haiti and Mexico – that have the highest rates or highest numbers of child deaths in the region.

The report outlines broad priorities that are required to accelerate progress on child and maternal health in general, and to reduce inequality in health-care provision and health outcomes in particular. Although the region is well on track to meet Millennium Development Goal 4, which seeks to reduce the under-five mortality rate by two thirds between 1990 and

2006, and other health-related MDGs, it is clear that many communities and groups – differentiated by income, ethnicity, gender and geographic location in particular – are at risk of remaining excluded from essential quality primary health-care services.

The State of Latin American and Caribbean Children 2008 highlights the need for clear priorities in both health-care provision and macro policies to address rising health inequities in the region. To promote equitable health-care provision, the report calls for:

- Promotion of community partnerships for maternal, newborn and child health.
- Health systems development for outcomes and equity, including expanding resources for health, removing bottlenecks to health service delivery and targeting excluded groups to achieve universal coverage of key interventions.
- Addressing the need for more skilled workers.



Venezuela (Bolivarian Republic of): An indigenous woman sits with her young daughter in their home.

At the macro level, the report outlines five key areas in which unified efforts are required. These include:

- Political commitment at all levels of government and civil society, including clearly defined goals and operational targets, and greater harmonization of partnerships.
- Greater collection and dissemination of disaggregated data and analysis to accurately assess gaps and disparities.
- Technical innovation in health care and communications technology.
- Investment in institutional care and training and retention of skilled health workers.
- Creating a supportive environment for maternal and child health and gender equality.

A call for unity and a focus on equity permeates the report from beginning to end. The basis for action – data, research, evaluation, frameworks, programmes and partnerships – is well established. *The State of Latin American and Caribbean Children 2008* concludes that it is time to address health inequities among children and women in the region, both as a matter of social justice and to ensure that the benefits of meeting the health-related Millennium Development Goals do not bypass those women and children who are traditionally and currently excluded.

Figure 1.1

Countries and territories of Latin America and the Caribbean

Antigua and Barbuda; Argentina; Bahamas; Barbados; Belize; Bolivia; Brazil; Chile; Colombia; Costa Rica; Cuba; Dominica; Dominican Republic; Ecuador; El Salvador; Grenada; Guatemala; Guyana; Haiti; Honduras; Jamaica; Mexico; Nicaragua; Panama; Paraguay; Peru; Saint Kitts and Nevis; Saint Lucia; Saint Vincent and the Grenadines; Suriname; Trinidad and Tobago; Uruguay; Venezuela (Bolivarian Republic of)

* The term 'non-industrialized regions' refers to those regions outside of UNICEF standard classification for industrialized countries/territories. 'Non-industrialized regions' include Central and Eastern Europe and the Commonwealth of Independent States, East Asia and the Pacific, Latin America and the Caribbean, the Middle East and North Africa, South Asia and sub-Saharan Africa. The country classification for the industrialized countries can be found in UNICEF's *The State of the World's Children 2008*, p. 148.



Guatemala: A mother and child take refuge at a shelter after losing their home in a mudslide.

1 Child survival in Latin America and the Caribbean – Where we stand

Latin America and the Caribbean is vibrant in the diversity of its people, culture and natural environment. Yet it is also a region where the majority of countries share a similar colonial past and a more recent memory of tumultuous economic and political trends. The region is undergoing rapid change. Since the catastrophic declines in income of the 1980s and the economic shocks of the 1990s, it has steadily recuperated and become increasingly more urban and affluent. Socio-economic changes have been accompanied by an epidemiological transition, or a growing burden of deaths caused by non-communicable ‘diseases of affluence’, such as heart disease, cancer

and stroke. Although Latin America and the Caribbean had one of the highest per capita incomes for non-industrialized regions* in 2006, the health of the region’s most vulnerable children and their mothers is still a cause for concern.

In 2006, the latest year for which firm estimates are currently available, approximately 308,000 children in Latin America and the Caribbean died before their fifth birthday, mostly from causes that could be prevented by extending primary health-care interventions to provinces and communities that are currently missing out.¹ Of these deaths, approximately 42 per cent occurred during the neonatal period

– the first month of life – owing to such causes as low birthweight, asphyxia and sepsis.² Significant numbers of under-five deaths are also caused by such preventable infectious diseases and conditions as pneumonia and rotavirus infection.

Because improving maternal health and nutrition and providing quality reproductive health services are pivotal to addressing many of the underlying causes of neonatal mortality, maternal health and neonatal health are intrinsically linked. Yet referral mechanisms for obstetrical

* For definition of non-industrialized regions, see page 2.

care and access to facility-based care for mothers and newborns remains a challenge for some communities. About 16 per cent of the region's children under age five suffer from moderate to severe stunting, a condition that exacerbates the impact of disease. Unsafe drinking water and poor sanitation facilities, prevalent in rural areas in particular, also contribute to child mortality and morbidity, as do accidents and violence.

The State of Latin American and Caribbean Children 2008 provides an analysis of the current state of child survival in the region. At its core is perhaps the greatest of all health challenges in the region: reducing inequities in access to quality primary health care. As this report shows, the young children and mothers most at risk of exclusion from essential services are disproportionately from the poorest families; living in overcrowded and unsanitary conditions in the peri-urban areas or slums in and around big cities; from socially-excluded indigenous and Afro-descendent communities; and belonging to often-forgotten, hard-to-reach communities in rural areas.

Since faster progress towards the health objectives of the Millennium Development Goals (MDGs) will not necessarily reduce inequalities in access to health services within countries, understanding how to address the persistent disparities in child health outcomes is pivotal to ensuring that marginalized and impoverished children and mothers in Latin America and the Caribbean are given the opportunity to survive and thrive.

Progress on child survival

MDG 4: Reduce child mortality

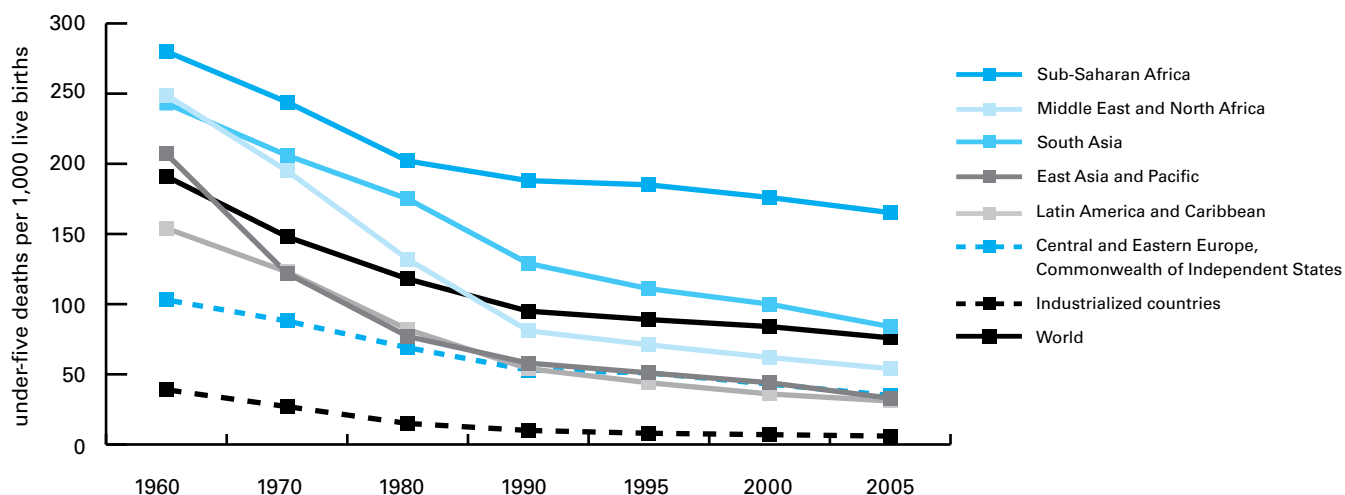
For the development community, the current child survival focus is Millennium Development Goal 4, which aims to reduce the global rate of under-five mortality by two thirds between the benchmark year of 1990 and the target year of 2015. Since 1960 – the earliest year for which the annual number of child deaths is available – the region has made remarkable strides in reducing children's deaths, owing to a combination of factors: an expansion of primary health services

and facility-based care; social insurance to facilitate access to health-care services; mass vaccination programmes; oral rehydration therapy; awareness of the importance of breastfeeding; and increased coverage of basic services, particularly improved drinking water and sanitation facilities. Socio-economic and demographic trends, such as rising educational levels (according to the latest estimates for the 2000–2006 period, 96 per cent of males and 97 per cent of females between ages 15 and 24 were literate) and declining fertility rates, further contributed to achieving and sustaining these gains.

Between 1990 and 2006, Latin America and the Caribbean achieved the fastest reduction in under-five mortality of any of the world's regions – at an average annual rate of 4.4 per cent.³ At present, the region as a whole is on track to meet MDG 4, having already achieved a 51 per cent reduction in its under-five mortality rate, from 55 deaths per 1,000 live births in 1990 to 27 per 1,000 live births in 2006. Together with the Central and Eastern Europe and Commonwealth of Independent States and the East Asia and the Pacific regions, Latin America

Figure 1.2

Latin America and the Caribbean has markedly reduced its under-five mortality rate since 1960



Source: UNICEF estimates based on the work of the Inter-agency Group for Child Mortality Estimation.

and the Caribbean has one of the lowest regional under-five mortality rates for non-industrialized regions. Only 1 in 37 children now dies before age five, compared with 1 in 18 in 1990 and 1 in 8 in 1970. The region still has some way to go to reach the low under-five mortality rates of the industrialized countries, where only 1 in every 167 children dies before the age of five.

Primary health care service provision

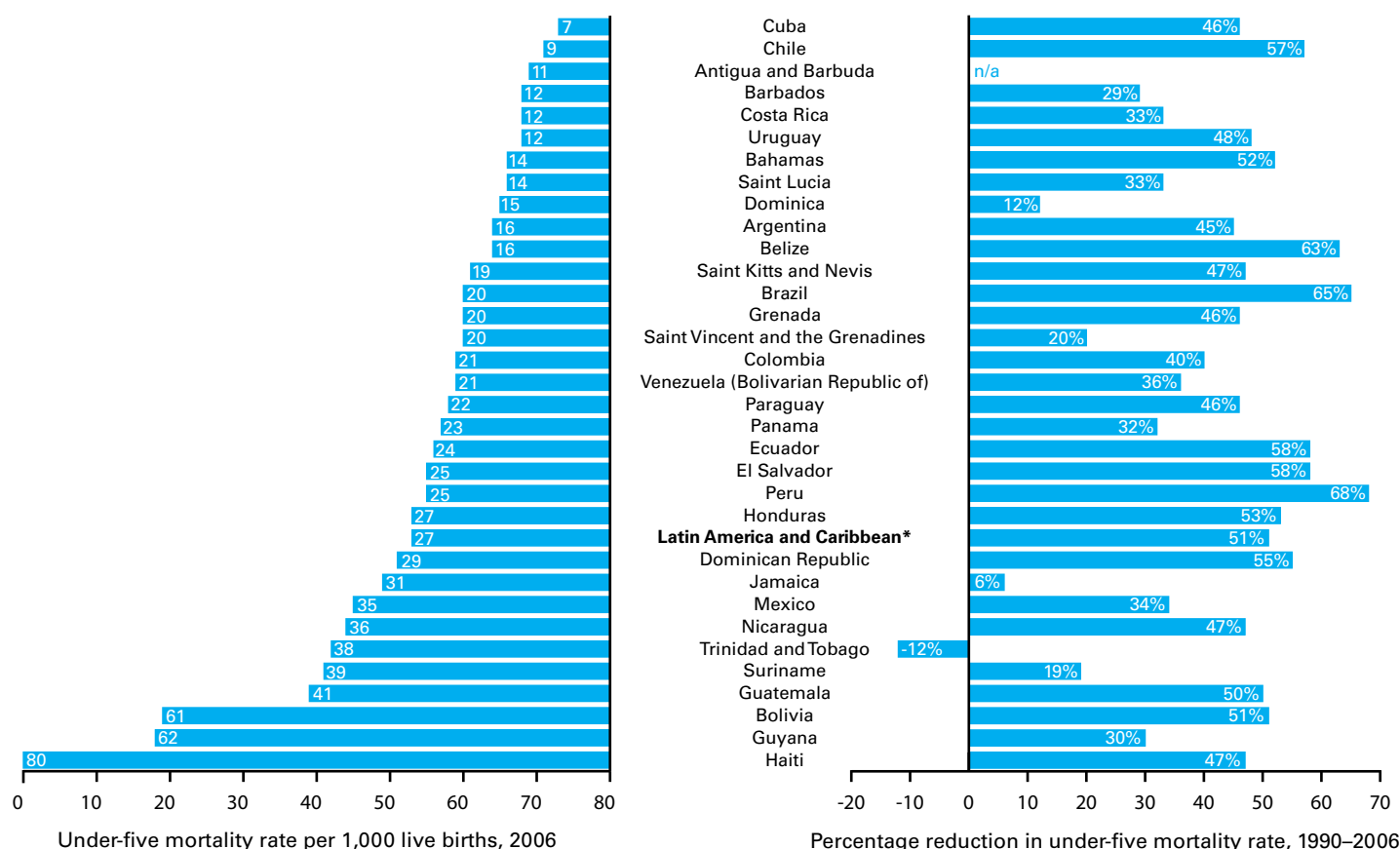
The key interventions needed to address the major causes of child deaths in Latin America and the Caribbean and elsewhere in the developing world are

well established and accepted. The most basic, yet important, services and practices identified include: skilled attendants at delivery and newborn care; care of low birthweight infants; hygiene promotion; prevention of mother-to-child transmission of HIV and paediatric treatment of AIDS; adequate nutrition, particularly in the form of early and exclusive breastfeeding during the first six months of life; complementary feeding combined with continued breastfeeding for at least two more years; micronutrient supplementation to boost immune systems; immunization to protect children against the six major vaccine-preventable diseases; oral rehydration therapy and zinc to combat diarrhoeal

disease; antibiotics to fight pneumonia; and insecticide-treated mosquito nets and effective medicines to prevent and treat malaria.

According to the latest estimates published in *The State of the World's Children 2008*, the region fares fairly well on many of the indicators related to child and maternal health that are explored in subsequent sections of this chapter. In summary, and as illustrated in Figure 1.4 on page 6, the region has among the highest rates of coverage for antenatal care and institutional delivery of babies, immunization, exclusive breastfeeding, and water and sanitation provision among the non-industrialized regions.

Figure 1.3 Levels and trends in under-five mortality in Latin America and the Caribbean



* Regional aggregate.

Source: UNICEF estimates based on the work of the Inter-agency Group for Child Mortality Estimation.



Venezuela (Bolivarian Republic of): An indigenous Wayuu woman breastfeeds her infant as she and her children wait to get vaccinated.

Figure 1.4

Indicators of primary health-care provision in Latin America and the Caribbean

	LATIN AMERICA AND CARIBBEAN	DEVELOPING COUNTRIES	INDUSTRIALIZED COUNTRIES
Maternal health care			
Antenatal care coverage (%; 2000–2006*)	94	75	-
Institutional delivery (%; 2000–2006*)	86	53	-
Neonatal health care			
Newborns protected against tetanus (%; 2006)	84	80	-
Infant and child health care			
Vitamin A supplementation coverage rate (%; 2000–2006*)	85	72	-
DPT3 immunization [†] (%; 2006)	92	78	96
Environmental health care			
Access to improved water sources (%; 2004)	91	80	100
Access to improved sanitation facilities (%; 2004)	77	50	100
Government spending on health			
Central government expenditure on health (% of GDP, 2000–2006*)	7	3	18

* Data refer to the most recent year available during the period specified.

[†] Percentage of infants who received three doses of diphtheria, pertussis and tetanus vaccine.

Source: UNICEF, *The State of the World's Children 2008*, Statistical Tables, pp. 109–153.

Priority countries for child survival in Latin America and the Caribbean

For the large burden of child deaths that they share, in 2005 Brazil and Mexico were designated as two of 60 'priority countries' by Countdown to 2015 partners, a coalition of scientists, policymakers, activists and health-programme managers tracking progress in maternal, newborn and child mortality across the globe. Haiti was also identified as one of the 60 priority countries, given its high rate of under-five mortality, which was estimated at 80 per 1,000 live births in 2006.

The Countdown to 2015 gathers data on the progress countries are making as they broaden coverage of interventions that have proved effective in reducing child deaths. Early in the partnership, it was recognized that although every region of the world needed to accelerate progress, countries with the greatest numbers or the highest rates of under-five deaths should be prioritized. To this end, Countdown to 2015 partners, including UNICEF, identified the priority countries for child survival initiatives based on two criteria; countries with more than 50,000 deaths of children under five annually and countries with an annual under-five mortality rate of at least 90 per 1,000 live births. At the time these criteria were set, only three countries in the region – Brazil, Haiti and Mexico – satisfied them.

The Countdown 2015 partnership is set to meet again in April 2008, broadening the criteria to encompass maternal and newborn, as well as child, survival. It is unclear whether Brazil and Mexico, both of whom have made continued steady progress, will continue to be nominated as 'priority countries'. Brazil, with a rapid reduction in its under-five mortality rate between 1990 and 2006, has almost achieved Millennium Development Goal 4; Mexico, posting a 34 per cent reduction over the same period, is also on track. Despite progress, Haiti – which has seen a sharp fall in its under-five mortality rate since 1990, with a reduction of around 47 per cent since the reference year – will probably remain a priority country owing to its still high rate of child mortality. All three countries suffer from marked health inequities among population groups.

HAITI: INSUFFICIENT PROGRESS TOWARDS MILLENNIUM DEVELOPMENT GOALS 4 AND 5

The Caribbean island nation of Haiti is the poorest country in the western hemisphere, and more than half of the population lives on less than one dollar per day. A history of violence and political instability has weakened health systems, hampering delivery of basic services and humanitarian assistance to the most vulnerable. A considerable proportion of the population, primarily in rural areas, lacks access to basic health-care services.

Since the restoration of a democratically elected government in 2006, the situation is improving. Confidence in long-term stability is undermined, however, by an incomplete disarmament process, drug trafficking, challenges in security and judicial sector reform, and poor governance. Further, Haiti is prone to the effects of natural disasters such as floods, mudslides and hurricanes, which take their toll on many lives and on an already fragile physical infrastructure. One of the gravest human-caused factors increasing the likelihood of natural disaster is an extremely high rate of deforestation.

Haiti has seen a significant reduction in under-five deaths, from 152 per 1,000 live births in 1990 to 80 per 1,000 live births in 2006, but the country still registers the highest child mortality rates of the region. A large percentage of under-five deaths take place during the neonatal period. Maternal mortality is also a serious problem, with the number of maternal deaths from pregnancy-related causes estimated at a high 670 per 100,000 women in 2005.

The lack of adequate preventive measures is as crucial in the low survival rate of children under age

five as the availability of timely and cost-effective treatment options. According to the most recent available data, just a little more than half of the total population has access to improved sources of drinking water. A mere 30 per cent use improved sanitation facilities; in rural areas, this figure drops to 14 per cent.

It is no surprise that diarrhoeal disease is among the major killers of children under age five, because the illness is directly related to unsafe water and inadequate sanitation. Yet, less than half of the children suffering from diarrhoea in 2006 received oral rehydration therapy, the simplest and most cost-effective treatment when combined with continued feeding. Undernutrition among children younger than five, as evidenced in moderate and severe stunting, is at an alarming 24 per cent. Pneumonia and AIDS also account for a significant proportion of deaths.

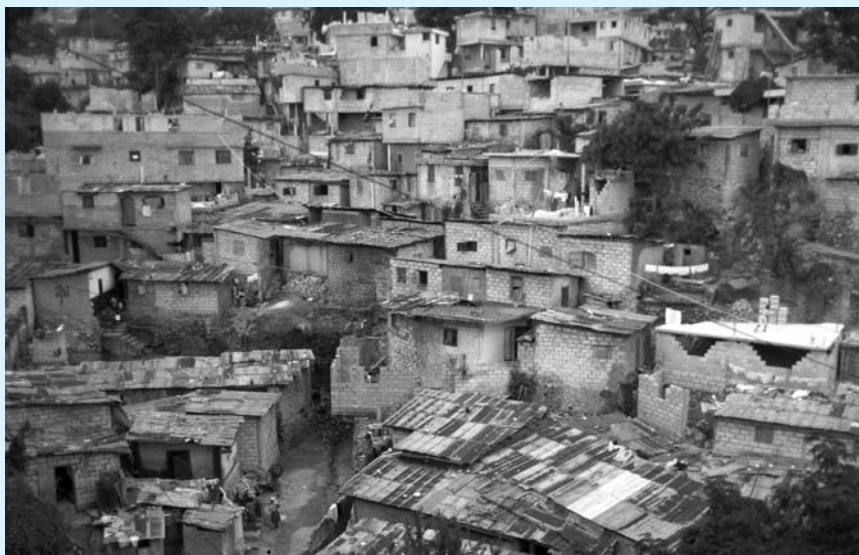
Haiti's HIV burden is the largest in the Caribbean, but there is evidence of a declining trend in rates of infection, and HIV prevalence among pregnant women appears to have stabilized during the past couple of years. More needs to be done, however, towards preventing infection and

providing antiretroviral treatment to reduce the risk of transmission to newborns. As of 2006, only about one fifth of HIV-infected pregnant women were receiving antiretroviral treatment to prevent mother-to-child transmission. Women's empowerment, especially in terms of their limited decision-making power in matters of sexual and reproductive health, will also need to be addressed to further curb the epidemic.

Alongside the right to health, the right to protection is an urgent issue for Haiti's children. Child labour and trafficking are pervasive. Other challenges include weak data collection and analysis systems, making it difficult to chart progress and setbacks on child health and protection.

Although efforts to make tangible improvements in the lives of Haiti's youngest citizens appear to be picking up speed in both the public and non-governmental sector, policy and action are still limited in scope. In a country where 1 in 13 children die before their fifth birthday, it is clear that business as usual will not suffice to meet the Millennium Development Goals and other commitments to child and maternal health and survival.

See References, page 39.



Haiti: A slum area in the city of Port-au-Prince.



Mexico: A group of children and women gather to receive nutrient supplements from the Oportunidades health and education support programme.

MEXICO: ON TRACK FOR MDGS 4 AND 5, BUT SOCIAL EXCLUSION REMAINS A CHALLENGE

The Government of Mexico's political commitment to implementing social policy has contributed to advancing the country's social goals, not the least of which is ensuring the health of its mothers and children.

Since the 1980s, large-scale public health interventions – including the Universal Vaccination Programme, the Clean Water Programme and National Health Weeks – have helped significantly reduce child mortality rates. Under-five mortality was brought down from 53 per 1,000 live births to 35 per 1,000 live births between 1990 and 2006, indicating the country is well on its way to achieving MDG 4. Although national capacity to provide health-care and immunization services for children is generally adequate, reaching vulnerable and excluded children remains an institutional challenge.

In 2000, 53 per cent of all under-five deaths in Mexico were attributed to neonatal causes. Given this large percentage, efforts must be sustained to reduce the number of deaths during the first 28 days of a child's life, and concurrently, to

improve maternal health. Among other major causes of preventable deaths among children under five were pneumonia (9 per cent), injuries (7 per cent) and diarrhoeal disease (5 per cent). In 2006, only an estimated 5 per cent of HIV-infected pregnant women received antiretroviral therapy to reduce the risk of mother-to-child transmission.

Like many of the countries in the region, Mexico is faced with the challenge of reducing inequalities between states and fulfilling the right to health of many indigenous children. In 2006, for example, an infant born in the southern, indigenous-populated state of Guerrero was more than twice as likely to die before reaching age one as a child born in the northern state of Nuevo León.

Mexico is on track to meet the MDG 1 target of halving, between 1990 and 2015, the proportion of people who suffer from hunger. More than 40 per cent of Mexican homes benefited from nutrition or supplementary food programmes in 2006, an increase from 23 per cent in 1999. Improving the nutritional status of all children, however, is still an incomplete part of the health-care agenda, with 13 per cent of children under five suffering from stunting, according to data collected between 1999 and 2006.

Poverty is a critical determinant of children's health and survival.

As of 2002, 906,000 children and adolescents under age 18 lived in extreme poverty (less than US\$1 a day). The Government's social policy has therefore focused on poverty reduction through Oportunidades (formerly PROGRESA), a conditional cash transfer programme to encourage education and preventive health and nutrition behaviours. Implemented in 1997, Oportunidades aims to ease the immediate burdens of poverty while breaking the cycle of poverty as it passes from one generation to the next by providing the means for parents to invest in their child's health and education. As of late 2007, the programme covered 5 million families across 2,444 municipalities in the country.

According to the results of a 2003 study, published in *The Lancet* in March 2008, the cash transfer element of Oportunidades was associated with better child health, growth and development outcomes for the 2,400 children surveyed (see *Panel, page 29*).

A promising new initiative of the Mexican government is Medical Insurance for a New Generation, introduced in 2007 to provide health coverage to all families with children born after 1 December 2006 who are not already beneficiaries of other social security systems in Mexico.

See References, page 39.

BRAZIL: ON TRACK TO MEET MDGS 4 AND 5, BUT DISPARITIES ARE PREVALENT

Brazil has made a strong commitment to ending poverty and hunger. Towards this end, government spending on social programmes, including health, accounts for about one quarter of the gross domestic product. Under-five mortality rates have been reduced rapidly between 1990 and 2006, and Brazil is well on track to meet MDG 4.

According to the most recent national estimates, the largest burden of deaths is attributable to neonatal causes (66 per cent), followed by pneumonia (5 per cent) and diarrhoeal diseases (4 per cent). The number of children under two years old that suffer from undernutrition has fallen considerably. The proportion of Brazilian children who are underweight for their age dropped from 13 per cent in 2000 to 4 per cent in 2006, which represents a reduction of more than 70 per cent over the period. Despite these gains, challenges in children's nutritional status persist. In addition to the poverty and inequality that are present in Brazil's Northeast region, there are also four times as many undernourished children under two in that region as in the more prosperous Southern region of the country.

As in much of the Latin American and Caribbean region, Brazil must bridge significant gaps in access to health care and related services between rich and poor, urban and rural, and urban and peri-urban populations, as well as across ethnic groups. The North and Northeast regions, and especially the Semi-arid region, include Brazil's most impoverished states and register poorer health outcomes than the national average. The infant

mortality rate for children under one among the Afro-descendent population is 28 deaths per 1,000 live births, 37 per cent higher than for the white population. The gap is even wider among the indigenous population, whose infant mortality rate averages 49 deaths per 1,000 live births, more than double the corresponding indicator for the white population. Health risks for children living in urban slums are often as discouraging as those of children residing in the country's rural margins. Insufficient antenatal, natal and postnatal care in Brazil has also contributed to keeping the maternal mortality rate at a worryingly high level of 53 deaths per 100,000 live births.

Regarding access to facilities directly related to childhood diarrhoeal disease, in 2004, 86 per cent of the total population made use of improved drinking water sources and 75 per cent used improved sanitation facilities. Striking disparities in access persist in rural areas: According to national estimates, children in rural areas are five times more likely to lack improved sanitation facilities, and 11 times more likely to lack improved water sources, than children living in urban areas. These disparities constitute a significant obstacle to Brazil's attainment of the related Millennium Development Goals.

The Brazilian Government's response to HIV and AIDS has been recognized as innovative and comprehensive (*see Panel, page 13*). But there is still much to be done to ensure universal access to prevention, treatment and care for children with AIDS. In 2006, for example, 29 per cent of HIV-infected pregnant women did not receive antiretroviral treatment, including prophylaxis and breast milk substitutes.

As in other countries, domestic violence constitutes a significant threat to the health and safety of mothers and children. Young Brazilian children are vulnerable

to violence in the home and from family members whose duty is to protect them. Reliable data on violent deaths collected through the health system allow for analysis of the scale of violence against children throughout their life cycle. The findings show that incidents of such violence have increased among all age groups, including the youngest cohort (up to six years of age), over the past decade. It is estimated that external causes, including accidents and violence, account for 1 in every 5 deaths of children age five or younger.

Brazil is seeking to address the issue of domestic violence against children, with more than 900 specialized social assistance reference centres in operation to attend to cases of domestic violence, sexual abuse and exploitation of children and adolescents across the country. An analysis of attendance figures shows that parents and relatives were responsible for 96 per cent of the physical violence cases and 62 per cent of the sexual abuse cases against children aged six or younger.

Of the various Government initiatives seeking to address the challenges of unequal health outcomes, undernutrition, education and child protection, the Bolsa Família programme, considered to be one of the most comprehensive and focused cash transfer programmes in the world, has reached more than 11 million families. The programme associates the transfer of a financial stipend with school attendance and access to health care and social assistance.

Brazil has made marked advances in securing the well-being of its children using bold and innovative policy measures. The challenge now lies in extending vital services to specific population groups and in focusing on efforts to protect its youngest citizens against potentially life-threatening violence and abuse.

See References, page 39.

Progress towards the other health-related Millennium Development Goals in the region

MDG 1: Eradicate extreme poverty and hunger

Millennium Development Goal 1 seeks to reduce rates of poverty and hunger by half between 1990 and 2015. Economic recovery in the 1990s and into the 2000s across the region, characterized by higher levels of investment, greater currency and price stability and enhanced trade flows, among other factors, has put the region on track to halve income poverty. Similarly, the region is also on its way to reducing by half the number of children suffering from hunger – as measured by underweight prevalence among children under five. Since 1990, underweight prevalence in the region has fallen at an annual average rate of 3.3 per cent, reaching a low of 7 per cent by 2006.

Despite this rapid progress – only Central and Eastern Europe and the Commonwealth of Independent States has a lower rate of underweight prevalence (at 5 per cent) in the non-industrialized regions – challenges in child nutrition remain. Stunting, or low height for age, remains a serious problem in the region; according to the most recent data, it affects approximately 16 per cent of children under five. Stunting results from long-term insufficient nutrient intake and frequent infections. It generally occurs before age two, and its effects, which include delayed motor development, impaired cognitive function and poor school performance, are largely irreversible.⁴ Across the region, some 9 million children under five are estimated to suffer from stunting, most of them living in the Andean and Central American sub-regions.

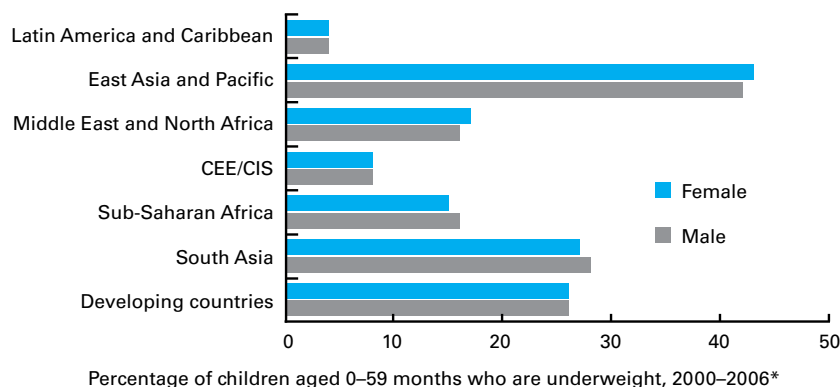
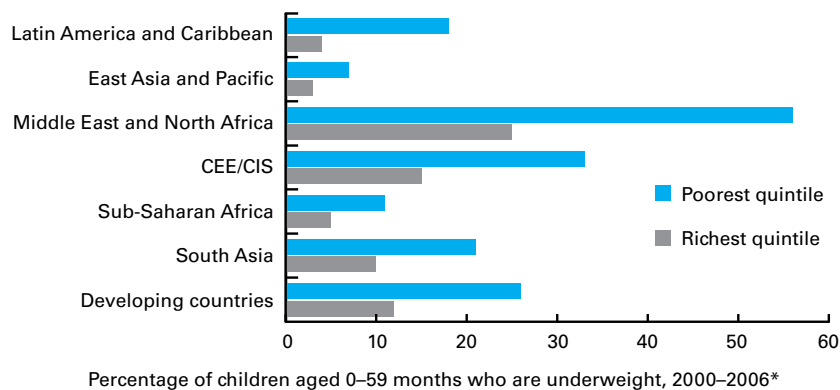
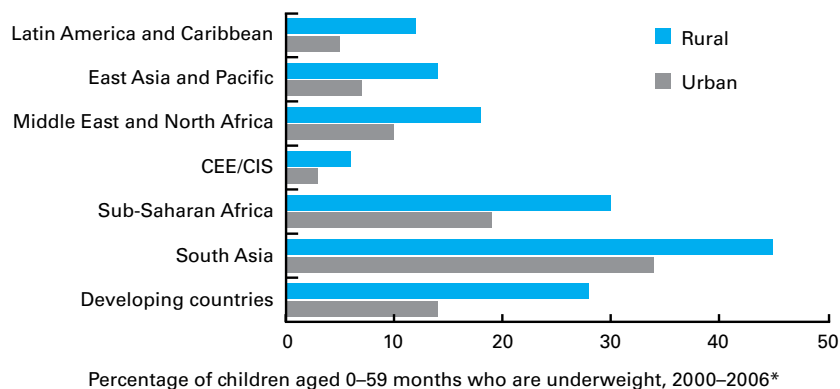
Pockets of poverty and marginalization remain prevalent among the poorest countries and communities. More than 1 in every 5 children under five in

Guatemala and Haiti are underweight, and El Salvador, Guyana, Honduras, Nicaragua and Suriname all have underweight prevalence rates of 10 per cent or greater. Disparities in undernutrition at the subnational level, by geographic location and household

income, are marked. Underweight prevalence among rural children, at 12 per cent, is twice that of urban children, according to the UNICEF database on global undernutrition. The rate of underweight prevalence among children in the poorest quintile of the population

Figure 1.5

Undernutrition is highest among the poorest and in rural communities in Latin America and the Caribbean



* Data refer to the most recent year available in the period specified.

Source: UNICEF global databases, 2007.

is 18 per cent; in contrast, this rate falls to just 4 per cent among the richest quintile. The global database reveals no significant differences in underweight prevalence on the basis of gender.

MDG 5: Improve maternal health

The move towards providing a continuum of care for mothers, newborns and children is a relatively new development; in the past, safe motherhood and child survival programmes have often operated separately, leaving disconnections in care that affected both mothers and newborns. It is now accepted that maternal and child survival and development are intrinsically linked, and without the ability to treat women with obstetric complications, maternal mortality cannot be substantially reduced. Mothers whose nutritional status is compromised, or who have limited or no access to antenatal, partum and post-partum care, are more likely to have babies with a higher risk of dying, low birthweight or other complications, than mothers who have access to adequate nutrition and quality health care.

A holistic approach to reducing maternal mortality would also take into

consideration such issues as enhanced women's empowerment and leadership at the community level, along with factors directly related to the health system, such as increasing the proportion of births attended by skilled personnel, and the effectiveness and quality of health-care and referral services.

According to 2005 estimates, the risk of a woman dying from pregnancy-related causes in Latin America and the Caribbean is 130 deaths per 100,000 live births. Although this is a lower ratio than that of most other non-industrialized regions, Latin America and the Caribbean has a long way to go to reach ratios of Central and Eastern Europe and the Commonwealth of Independent States (46 deaths per 100,000 live births), and of the industrialized countries (8 deaths per 100,000 live births).

Due to the large margins of uncertainty surrounding maternal mortality ratios (MMR), intra-country comparison and country-level trend analysis is problematic. Progress towards MDG 5 is therefore assessed by UNICEF on the basis of the latest available estimates and classified according to the following threshold: *Very high*: MMR of 550 or

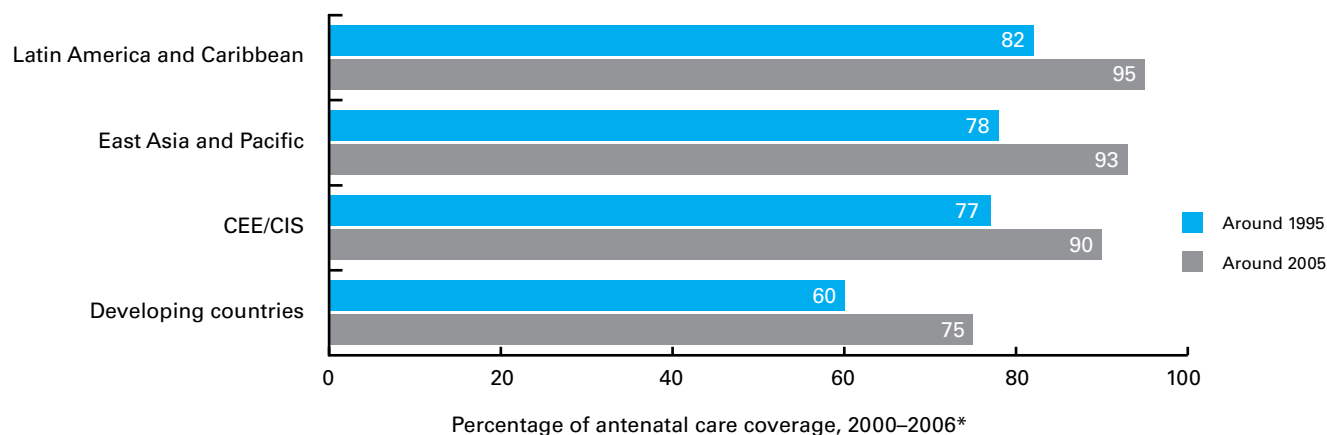
more; *High*: MMR of 300–549; *Moderate*: MMR of 100–299; *Low*: MMR below 100. Based on this definition, the region is moderately placed in its rate of maternal mortality.

MDG 6: Combat HIV/AIDS, malaria and other diseases

Progress in Latin America and the Caribbean towards MDG 6, which seeks to halt and then reverse the incidence of AIDS, malaria and other diseases, is mixed. As of 2007, the AIDS epidemic in the Latin American countries of the region was relatively stable; Brazil, a country that accounts for about a third of all people living with HIV in Latin America, has taken particularly notable steps to curb transmission of HIV (*see Panel, page 13*). The Caribbean shows the highest HIV prevalence in the region, with an estimated adult HIV prevalence rate of 1 per cent in 2007. Of the estimated 230,000 people living with HIV in the Caribbean in 2007, around three quarters are living in the Dominican Republic or Haiti; the latter has the highest national prevalence rate in the region.⁵ The risk of mother-

Figure 1.6

Latin America and the Caribbean has the highest rate of antenatal care coverage among non-industrialized regions



* Data refer to the most recent year available in the period specified.

Source: UNICEF global databases.

ADOLESCENT PREGNANCY: A CAUSE FOR CONCERN

Rates of adolescent childbearing are high in Latin America and the Caribbean, particularly in Bolivia, Colombia, the Dominican Republic, Haiti, Honduras, Nicaragua and Peru. The dangers of early pregnancy to both mothers and infants are significant, and the continued occurrence of a relatively large number of adolescent pregnancies, despite falling fertility rates in the region, is a significant concern.

Adolescent girls between the ages of 15 and 19 are twice as likely to die during pregnancy or childbirth as women in their 20s, and for girls under 15 the probability is five times greater. Children born to an adolescent mother are more likely to die within their first month of life than children whose mothers are older. These children are also more prone to the effects of poor nutrition, as well as late physical and cognitive development.

The determinants of early pregnancy are mainly socio-economic. Poverty is considered to be one risk factor. Poorer girls with the bleakest opportunities often have the least ability and incentive to avoid unplanned pregnancy in adolescence. Gender norms and power inequalities between girls and their partners, and lack of education

or awareness of sexual health and preventive measures among adolescents are other factors that can lead to early pregnancies.

Investing in adolescent girls' education, health and livelihood to secure their rights and potential would go a long way in addressing this issue. Several national governments in the region have taken concrete steps towards this end. Government-sponsored programmes in Argentina and Cuba, for example, offer adolescents education, counselling and other health services.

Because adolescent pregnancy and motherhood often force girls to

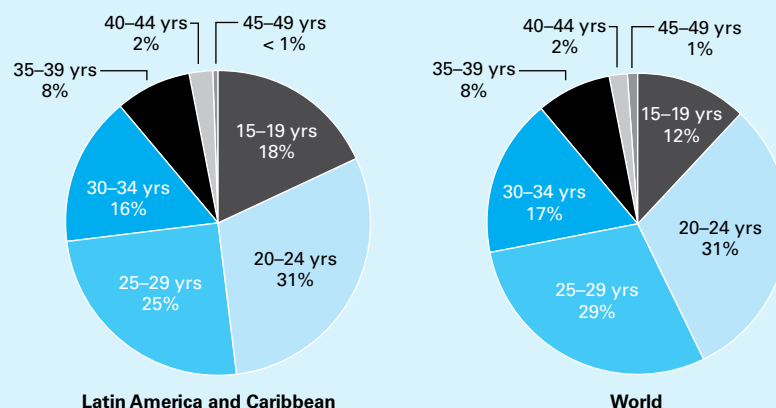
drop out of school, policies and laws dealing with teenage parenthood are increasingly important to ensure that girls' educational opportunities are not restricted. A positive example comes from Chile, where a national law guaranteeing the right of pregnant adolescents and teenage mothers to remain in school was passed in 2000. The law mandates that a pregnant adolescent or teenage mother cannot be forced to change schedules or school location because of her condition, and that schools must facilitate access to health services for girls during pregnancy and after childbirth.

See References, page 39.

Figure 1.7

Latin America and the Caribbean has a higher rate of births to adolescent mothers aged 15–19 than the global average

Births per age group of mother, 2000–2005, cumulative



Source: UNICEF estimates based on United Nations Population Prospects, *World Population Prospects: The 2006 Revision Population Database*, <<http://esa.un.org/unpp/index>>, accessed 31 March 2008.

to-child transmission remains high in Latin America and the Caribbean. Of the estimated 33,000 pregnant women infected with HIV in 2006, only 40 per cent received antiretroviral therapy to reduce transmission.⁶

Progress towards meeting the MDG target to halve and begin to reverse the incidence of malaria by 2015 varies among these countries. In 2006, 20 malaria-endemic countries reported cases of malaria, and malaria also broke out in the Bahamas and Jamaica, two non-endemic countries.⁷

MDG 7: Ensure environmental sustainability

Environmental sustainability and access to water and sanitation services are prerequisites for improving health conditions in general. These factors are particularly important for young children, who are more vulnerable than any other age group to the ill effects of unsafe water, insufficient quantities of water, poor sanitation and lack of hygiene. Precarious and poorly functioning sanitation

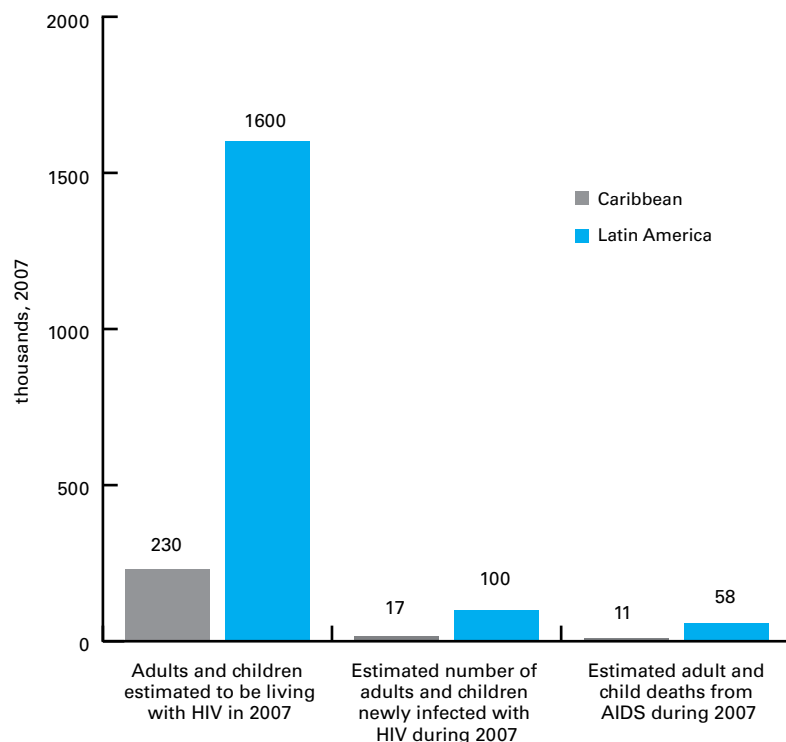
infrastructures therefore create profound problems for public health in the region. According to the Pan American Health Organization, between 2000 and 2005, diarrhoeal diseases accounted for 3.7 per cent of the region's under-five deaths and stood as high as 7.8 per cent in the Andean subregion. As of 2004, the region as a whole was on track to meet both MDG 7 targets of reducing by half between 1990 and 2015 the proportion of people without access to safe drinking water and without access to basic sanitation.⁸

However, again, differences in access between urban and rural populations at the regional level and within countries are marked. Despite a significant improvement since 1990, when 40 per cent of the rural population lacked access to improved water sources, by 2004 more than 1 in 4 rural inhabitants in the region were still missing out. In contrast, 96 per cent of urban dwellers had access to improved water sources. The disparity is even greater in sanitation, with more than half of the rural population lacking access to improve sanitation, compared to 14 per cent of the urban population. Mexico provides an example of the rural-urban divide in access to environmental health facilities. The country is on track to meet the MDG 7 target on sanitation, but while 91 per cent of the urban population had access to improved sanitation facilities in 2004, only 41 per cent of the rural population did.⁹

In several countries, including Belize, Bolivia and Haiti, the lack of coverage of improved sanitation facilities is particularly chronic in rural areas, with only 25 per cent or less of the

Figure 1.8

HIV prevalence and AIDS have largely stabilized in Latin America, but remain a significant cause for concern in the Caribbean



Source: 2007 AIDS Epidemic Update, Joint United Nations Monitoring Programme on HIV/AIDS.

BRAZIL'S PROMISING STRATEGY TO HALT THE AIDS EPIDEMIC

In Brazil, the Government has pursued a proactive and bold agenda to combat HIV and AIDS, with strong civil engagement, including people living with HIV. This agenda includes prevention, treatment and promotion of the human rights of people living with the virus.

Brazil's strategic plan between 2004 and 2007, led by the National Sexually Transmitted Infections and AIDS programme, aimed at reducing the incidence of HIV and other sexually transmitted infections, protecting human rights and expanding the population's access to professional care networks. The plan included:

- Ensuring free and universal access to antiretroviral drugs.

- Increasing availability of access to services for the diagnosis of HIV and other sexually transmitted infections.
- Enhancing access to appropriate diagnostic and treatment services for pregnant women and children.
- Promoting sexual and reproductive health, prevention campaigns and access to condoms.
- Working closely with the Ministry of Education to include HIV prevention in the school curriculum.
- Strengthening alliances with other developing countries through South-South cooperation.

Despite significant achievements, however, substantial challenges remain – especially ensuring universal access to prevention, treatment and care for children and adolescents. Although the national rate of mother-to-child transmission was halved between 1993

and 2005 – from 16 per cent to 8 per cent – there are significant differences among Brazil's states. Mother-to-child transmission rises to 12 per cent in the Northeast and 15 per cent in the North. In addition, the number of AIDS cases among Afro-descendants and women continues to grow at a much higher rate than among whites and men.

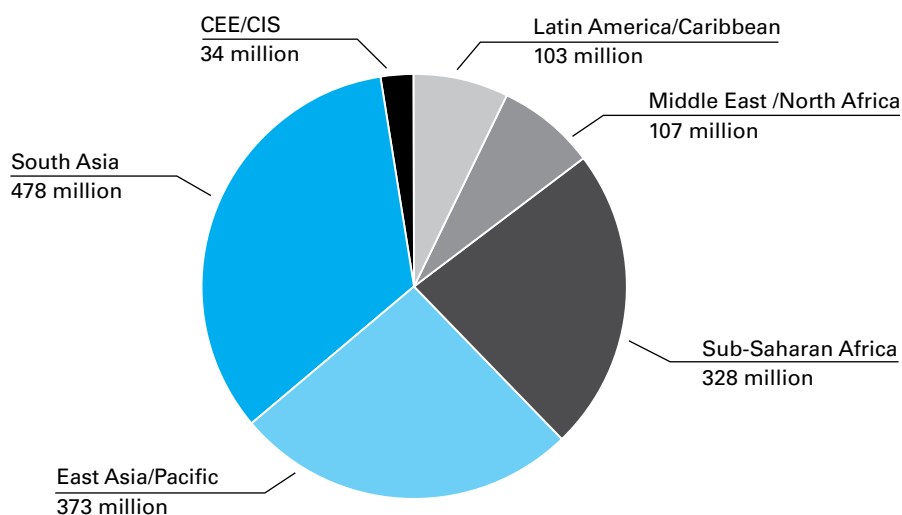
A public-private negotiation between the Government of Brazil and pharmaceutical companies has led to an agreement to provide a 40–60 per cent discount on the price of antiretroviral drugs. This agreement, together with the country's issuance in 2007 of a compulsory license allowing it to procure a generic version, has been decisive in keeping treatment prices relatively low. A key element in these negotiations was Brazil's ability to produce many of the components of the antiretroviral drug nationally.

See References, page 39.

Figure 1.9

Meeting the MDG target for sanitation would allow more than 100 million people in Latin America and the Caribbean to gain access to improved sanitation facilities by 2015

Number of inhabitants who would gain access to improved sanitation facilities if the MDG target for sanitation were met by 2015



Source: UNICEF estimates based on WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation data for 1990–2004.



Peru: A girl sits in the rubble of her home after an earthquake.

rural population having access in 2004.¹⁰ If child mortality is to be reduced in these countries, water and sanitation infrastructure has to be markedly improved and expanded.

Other environmental threats to children's health and quality of life include air pollution, loss of forest cover, degraded coastlines, polluted seas and climate change.¹¹ The road ahead for the region lies in harmonizing economic growth with environmental sustainability, enhanced public health initiatives and social equity.

Accidents, violence and natural disasters

Domestic violence and accidents within the home account for approximately 50 per cent of deaths from external factors among children under five in

the region, according to the most recent data available. Because these deaths are most often a result of inadequacies in care and of child abuse, they are a searing reflection of deficiencies in child protection. Further, especially in the case of younger victims of such deaths, the likelihood that a family member caused the death increases.¹²

Along with troubling rates of domestic violence, natural disasters threaten the lives of children in the region. Many parts of Latin America and the Caribbean are prone to such natural calamities as hurricanes, tropical storms and floods. This vulnerability in turn gives rise to the need for early warning and surveillance systems, especially in island nations, and for efforts to reduce the number of people living in slums and other non-permanent settlements.

Addressing 'the ailments behind the diseases'

Underlying and long-standing structural deficiencies and social inequities undermine health-service delivery in Latin America and the Caribbean. In many countries of the region, the people excluded, whether by income, geography or ethnicity, to name but three factors, are left with partial or no access to primary health services. Moreover, the efficient functioning of health systems is marred by fragmentation and segmentation in service delivery, lack of coordination within sectors and a shortage of skilled health personnel. The subsequent chapters of *The State of Latin American and Caribbean Children 2008* will address these 'ailments behind the diseases' and provide examples of successful initiatives that address these issues.

CHILD HEALTH AND SURVIVAL IN THE DENSELY POPULATED URBAN MARGINS

Latin America and the Caribbean has the highest urbanization level in the world, as many millions have migrated from the countryside to the urban zones. More than 3 out of 4 people live in cities, and 20 of the region's largest cities are home to nearly 20 per cent of the total population.

Latin America and the Caribbean's cities have spread beyond their capacity, creating areas in their margins known as the 'peri-urban' zones. Poverty, unsanitary living conditions, violence, insecurity, pollution and inadequate access to social services are pervasive in these areas. In such circumstances, health issues are not often addressed, and children in poor health frequently go without appropriate and timely care.

The number of people living in slums in the region is estimated to be 134 million. Slum prevalence rates are alarming in several countries. In Haiti and Nicaragua, more than 80 per cent of the urban population lives in slums; in Bolivia, Guatemala and Peru, the proportion is two thirds. The encouraging news is that urbanization rates are stabilizing and the growth rate of slums is declining.

Defining a slum

A slum household may be defined as a group of individuals living under the same roof in an urban area who lack one or more of the following:

- Durable, permanent housing that protects them against extreme climate conditions.
- Sufficient living space, so that not more than three people share the same room.

- Easy access to safe drinking water in sufficient amounts at an affordable price.
- Access to adequate sanitation in the form of a private or public toilet shared by the limited number of people that allows healthful hygiene practices.
- Security of tenure that prevents forced evictions.

An 'urban penalty' for peri-urban populations

In *The State of the World's Cities Report 2006/2007*, UN-HABITAT presents for the first time disaggregated data comparing slums to other city neighbourhoods. The report finds that urban areas present much better health indicators overall than their rural counterparts. Significant disparities, however, appear in health, education, child undernutrition and mortality outcomes between slum and non-slum urban populations.

Along with the more apparent shortages in access to improved water and sanitation facilities, 'hidden homelessness' persists in peri-urban areas, with overcrowding in small living spaces exacerbating infrastructural constraints. Slum populations are also more vulnerable to natural disasters due to the lack of durable housing. The impact of such living conditions on children is considerable. The under-five mortality rate in Rio de Janeiro's slums, for example, was found to be three times higher than the rate in non-slum areas of the city. Undernutrition among children in slums was significantly greater, by 14 per cent, than in non-slum residential areas in three cities of Brazil.

'Pro-poor' reforms for slum improvement

In the Latin America and Caribbean region, countries that demonstrated

robust community participation and decentralization in the arena of urban planning – including Brazil, Colombia and Mexico – have made concrete gains in stabilizing the growth rate of slums since 1990. However, in many cases where success has been achieved, local governance has been backed by strong commitment and support by the central government.

Several countries in the region have adopted 'pro-poor' policies and reforms towards slum improvement. The Profavela federal land law in Brazil is an instance of pro-poor legislation to help low-income communities in their bid for security of tenure. In the city of Belo Horizonte, which encompasses 177 slums and 63 public housing projects, the implementation of Profavela is facilitating negotiations between slum dwellers, public authorities and service providers to upgrade and legalize peri-urban settlements. The city of Rio de Janeiro invested more than \$600 million during recent years in its Programa Favela-Bairro to improve access to health, education and basic infrastructure for half a million of its poorest citizens.

In Colombian cities such as Bogotá and Medellín, the implementation of the Law on Spatial Planning, included in the 1991 constitution, has brought forward inventive strategies for the integration of low-income settlements, as well as more efficient roads and transportation. And the government of Chile has reformed its housing policies to address the needs of the poorest fifth of its population through subsidies.

See References, page 39.



Haiti: A young child carries her supper outside her home.

2 Equity in health-care provision to mothers, newborns and children

Health inequities in Latin America and the Caribbean

As a region, Latin America and the Caribbean is marked by broad disparities in social and economic indicators across population groups. These disparities are also manifest in child survival and health. Health inequity refers to differences in access to health care that are systematic, socially generated – and largely remediable. Among the youngest and most vulnerable populations of this region, inequitable access to health care and disparities in health outcomes reflect broader social determinants of access to

quality essential services – education, ethnicity, income, gender and geography, among others – both between and within countries. Addressing severe disparities in access to health care is central to the challenge of upholding child rights and advancing human progress in Latin America and the Caribbean. While national averages indicate most of the countries in the region are on track to meet Millennium Development Goal 4 and the other health-related MDGs, it is clear that many mothers and children risk missing out on essential services, and hence the benefits of economic and social progress, unless considerations of health equity become a more prominent element in public policy.

Poverty as a determinant of child health

Income distribution in Latin America and the Caribbean is highly unequal. Data from the period 1999–2004 reveal that the 20 per cent of households with the highest income controlled 56 per cent of the region's household income, compared to 40 per cent in industrialized countries. In contrast, the poorest 40 per cent of households controlled just 12 per cent of the region's household income, compared to 21 per cent in industrialized countries.

Poverty in Latin America and the Caribbean is most prevalent in rural areas and peri-urban zones. According

to figures from the UN Economic Commission for Latin America and the Caribbean, in 2005, around 34 per cent of Latin America's urban dwellers were estimated to be poor; in rural areas, that figure stood at 59 per cent.

Impoverished populations face increased exposure to disease and myriad other factors that weaken their ability to resist illness. In a vicious synergy that contributes to the wide inequities in child health and survival between the poor and the rich, poverty increases the risk of disease through exposure to undernutrition, unsafe and crowded living quarters, inadequate water and sanitation facilities and indoor air pollution.¹ Children's resistance to infectious disease is likely to be weakened by undernourishment and micronutrient deficiencies. In addition, the often inadequate nutritional status of mothers and their frequent illnesses during pregnancy increase the likelihood of low birthweight – a known cause of neonatal morbidity and mortality, and a risk factor for ill health in childhood.

Coverage of basic preventive interventions, including vaccination, vitamin A supplementation and insecticide-treated mosquito nets in

malaria-endemic areas, and treatment for such life-threatening conditions as diarrhoea and pneumonia among newborns and infants are lowest among the poorest and most marginalized households and communities.

In an attempt to address these disparities, a number of governments have implemented conditional cash transfer schemes that provide poor families with the resources to sustain better nutrition for their families or send their children to school. Effective cash transfer initiatives include Oportunidades (formerly PROGRESA) in Mexico; Bolsa Família (Brazil); Red de Protección Social (Nicaragua); Programa de Asignación Familiar (Honduras); Familias en Acción (Colombia); Subsidio Unico Familiar (Chile); and the Program of Advancement through Health and Education (Jamaica).²

Besides economic status, other key determinants of health inequalities among children and mothers in Latin America and the Caribbean include ethnicity, geographical location, level of mother's education and gender. Each of these issues will be examined briefly in the sections below.

Child health inequities among ethnic groups

Disaggregated data on infant mortality rates in four Latin American countries show that children of indigenous or African-descendent communities have far lower chances of surviving past their first birthday than other children. Data for Brazil from the year 2004 show that an indigenous child is almost twice as likely to die before age one as a child of non-indigenous descent. Such inequities in health outcomes by ethnic groups are prevalent in Colombia, Guatemala, Mexico and other countries across the region.

Health inequities among indigenous populations

Latin America and the Caribbean has a diverse and vibrant indigenous population that encompasses more than 400 unique ethnic groups. Recent estimates suggest that between 45 million and 48 million people – around 10 per cent of the region's total population and 40 per cent of its rural population are identified as indigenous. The distribution of indigenous peoples varies widely within countries. The vast majority (89 per cent) live in just five countries: Bolivia, Ecuador, Guatemala, Mexico and Peru. Mexico has the largest indigenous population, more than 13 million.³

Indigenous populations in the region are those inhabitants who predated European conquerors and settlers. Language is a conventional means of defining indigenous status in most national censuses. Although indigenous groups within countries and across the region are widely diverse, they often share similar cultural, political, spiritual and ecological features. Unfortunately, a common characteristic of indigenous peoples' socio-economic situation is poverty. Human rights and social, political and economic status of indigenous peoples are often imperiled. As a result, pervasive inequities exist in the living conditions, health status and health-service coverage of indigenous peoples and their children compared to the rest of the region's population.

Figure 2.1 Infant mortality rates in indigenous and Afro-descendent populations are far higher than national averages

Infant mortality rates, per 1,000 live births, in Brazil, Colombia, Guatemala and Mexico, by ethnic origin and census year⁸

COUNTRY	YEAR	INDIGENOUS POPULATIONS	AFRICAN-DESCENDENT POPULATIONS	NATIONAL AVERAGE
Brazil	1990	61.1	63.9	39.4
	2004	48.5	27.9	26.6
Colombia	2005	39.5	31.7	23.9
Guatemala	1994	61.7	...	49.7
	2002	51.1	...	41.0
Mexico	1990	63.8	...	36.7
	2000	42.7	...	26.4

Sources: United Nations Economic Commission for Latin America and the Caribbean, Latin American and Caribbean Demographic Centre, specially processed census microdata.

Because many indigenous peoples in Latin America live in remote areas, geographic barriers often prevent these communities from gaining access to health care. This has negative repercussions for maternal health, because there is a clear, positive correlation between the risk of maternal death and the availability of skilled assistance for mothers before, during and after birth. In Guatemala, where a sizeable majority of the population is indigenous, the lifetime risk of maternal death, at 1 in every 71, is among the highest in Latin America and well above the regional average of 1 in every 280. Moreover, the maternal mortality rate among indigenous women in Guatemala is about three times that of non-indigenous women.⁴

Better linkages between public health services offered by governments and indigenous health systems and practices would begin to reduce these disparities. Cultural barriers present a formidable challenge; knowledge of healthy practices and attitudes towards care-seeking need to be conveyed in ways appropriately adapted to indigenous communities. Mainstream medicine and health procedures may seem inappropriate or even offensive to traditional health practitioners, and finding health personnel who speak and understand indigenous languages can also be problematic.⁵

Despite these barriers, several innovative and culturally appropriate community-level partnerships for promoting indigenous child and maternal health have seen considerable success in countries with high concentrations of indigenous populations. Bolivia's *wawa wasi*, which means 'children's house' in Quechua, is one example of a successful initiative (see Panel, page 19).

Child health and social exclusion among Afro-descendent communities

Poverty aggravates the social exclusion that Afro-descendent peoples have endured for centuries. Afro-descendent communities live in high-risk conditions similar to those of indigenous communities in the region.



Venezuela (Bolivarian Republic of): A newborn receives a birth certificate.

EXCLUDED AT BIRTH: THE CHALLENGE OF BIRTH REGISTRATION FOR INDIGENOUS PEOPLES

The right to a name and a nationality is well established by the Convention on the Rights of the Child, which explicitly calls in article 7 for the registration of a child immediately after birth. Birth registration is therefore an essential acknowledgement of a child's citizenship or his or her very existence in the eyes of the state and a means for him or her to be able to access public services, including health services. Although Latin America and the Caribbean has among the highest rates of birth registration among developing regions—at 89 per cent between 1999 and 2006—in several countries, indigenous children are less likely to be registered at birth. Rates of birth registration are also lower across rural populations and among Afro-descendants. According to a 2002 UNICEF report, only 21 per cent of children under age five had a birth certificate in the Amazonian region of Ecuador, compared with the national average, which ranged between 70 per cent and 89

per cent. The lack of this critical documentation for indigenous peoples in the region often implies exclusion from public services, including health.

Although a birth certificate alone is not a guarantee of health or well-being, registration helps identify and legally protect marginalized and vulnerable children. Countries of the region have already taken steps towards ensuring universal birth registration. For instance, in 2003, Bolivia passed a legislative reform ensuring free registration of birth certificates. In August 2007, the First Regional Conference on the Right to an Identity, a landmark meeting in Asunción, Paraguay, was another important step forward. This meeting gathered Latin American governments, civil society, international organizations and representatives of indigenous and Afro-descendent communities, all of whom agreed to work together to achieve free, universal and appropriate birth registration for all girls and boys in the region by 2015. A similar conference is planned for the Caribbean in the near future.

See References, page 40.

BOLIVIA: WAWA WASI EARLY CHILDHOOD CENTRES

Five kilometres from the village of Uncia, on the road to Potosí – one-time silver capital of the Andes – the vibrant and active wawa wasi ('children's house') of the Vinto village is helping enrich the community in a new way. Speaking of the impact of the wawa wasi, Juan Toledo, a local villager, says: "I bring my children here because they are among children their own age. Each month we can meet with the child-minders and they explain to us the activities that they are implementing. Because it belongs to the community, parents know each other. In the centre, we talk about how the care that is provided to the smallest ones can be improved in order for them to be better prepared when they start school."

UNICEF has been supporting Integrated Early Childhood Development (IECD) centres or children's houses – wawa wasi in Quechua and wawa uta in Aymara – in the Andean region since the late 1980s. These centres became part of a large-scale National Programme of Comprehensive Services for Children Under Six in 1997, with support from the Inter-American Development Bank and the World Bank up to 2005. Since then, a partnership comprising the Bolivian Government, departmental prefectures and municipal governments has administered the programme, while the World Food Programme provides food and UNICEF provides technical assistance and supports training activities and the production of educational materials.

Programme interventions

Between 2003 and 2007, IECD activities in the Andean region benefited 24,000 children a year, which is roughly 25 per cent of the under-six population in the

28 municipalities of intervention. Around 9,000 of their children attended wawa wasis, and another 15,000 were reached through a community-based approach. Further, in the country's Amazon region, the programme benefited 6,000 children a year. From 2008 onward, initiatives will be expanded to three additional Amazon municipalities and five Chaco municipalities. The programme includes such health and nutrition initiatives as immunization; referral to health services for Integrated Care of Childhood Illnesses; access to the Universal Mother and Child Health Insurance programme; improved access to water and sanitation; growth monitoring; vitamin A and iron supplementation; referral of severely malnourished children to a health centre; and education and child protection programmes, such as reporting abuse to the Municipal Child Defender's Office and promoting birth registration.

To encourage cultural and linguistic diversity, services are provided in the children's native languages (including Aymara, Guarani and Quechua) complemented by a gradual introduction to Spanish. The programme promotes traditional practices favourable to

child development, as well as the cultural expression of each people.

The nutritional status and physical and psychosocial development of children who attend IECD programmes have been found to improve throughout a year of participation. Children who attended IECD programmes do better in the first grade of primary school than those who did not participate.

The IECD approach has been most successful at the local level, where municipal governments have financed an increasing portion of the activities. Development of IECD public policies at the national level will secure a strong base of support to IECD interventions during the coming years. The 'Zero Malnutrition by 2010' (for children under five) initiative led by the Ministry of Health and the multisectoral approach of the Government that took office in 2006, as well as an education policy that puts more emphasis on non-formal, family- and community-based education, can provide the scope for developing IECD public policies during the 2008–2012 national programme cycle.

See References, page 40.



Bolivia: A mother feeds her one-year-old a nutritional supplement at a wawa wasi early childhood centre.

This ethnic group makes up a little more than 45 per cent of the population in the English-speaking Caribbean, Brazil, the Dominican Republic and Haiti. Brazil has the largest Afro-descendent population in the region, but despite its size, this group has fared poorly on most social indicators. For example, 62 per cent of Afro-Brazilian children live in poor families, compared to 37 per cent of non-indigenous, non-Afro-descendent children. Infant mortality rates for Afro-descendants in Brazil, as for indigenous communities, are far higher than for other ethnic groups. Only a few countries, among these Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, and Trinidad and Tobago, have designated descendants of African ancestors as an ethnic category in statistical data.⁶

In the Caribbean subregion, particularly in most of the English-speaking countries, Afro-descendent populations are the majority in many of the islands and may not share the same experience of exclusion. This is partly due to equality of access to education in these countries. In other Caribbean countries, such as Belize, Dominica, Guyana, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago, other ethnic groups – such as those of Asian descent – account for a significant proportion of the population.

The need for vital, disaggregated statistics

Governments and development partners are increasingly adopting results-based approaches as an essential component of their efforts to achieve the Millennium Development Goals and other goals related to human, economic and social progress. Such approaches underscore the demand for improved quality, coverage and use of data and statistics. Reviewing data requirements for health systems management, disease control and responses, strategic decision-making and policy development, it becomes evident that there is a lack of vital statistics disaggregated by ethnic group, gender

and age. Furthermore, representative and disaggregated data at various subnational levels – provincial, district and municipal, for example – are also often lacking. Collection tools designed to provide aggregated national data sets, including typical household surveys, often do not have sufficient scope to facilitate broad data disaggregation.

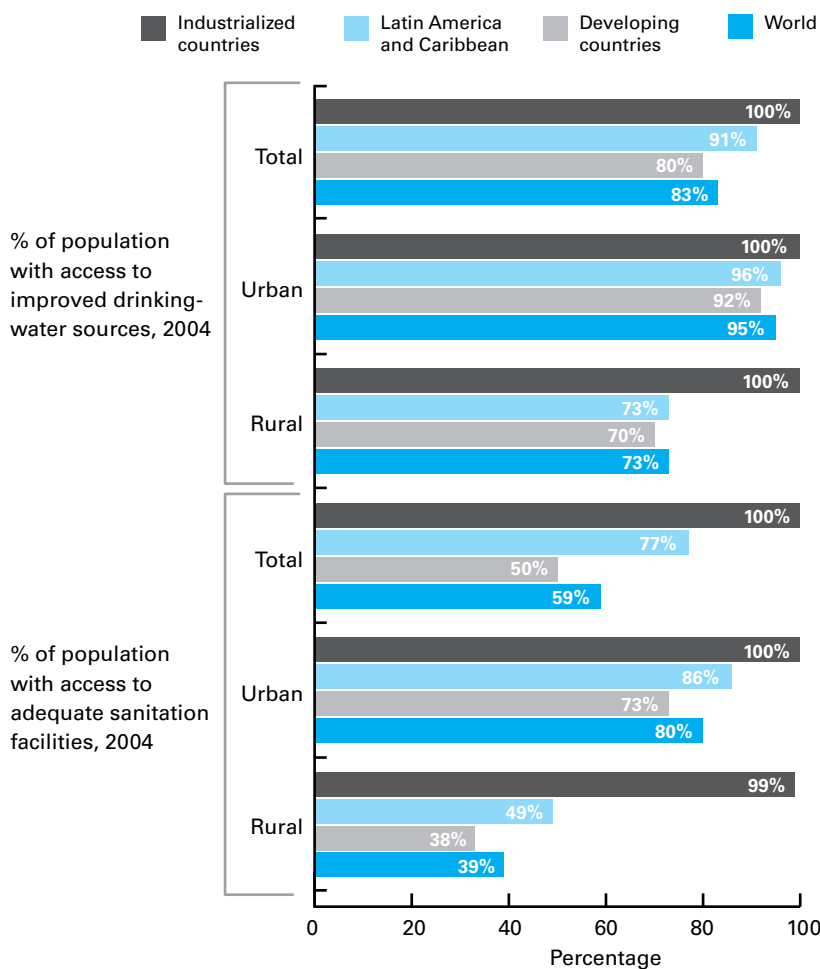
Strengthening health information systems in Latin America and the Caribbean requires a keen focus on several criteria, including specification of data by type and associated levels of disaggregation required for policy purposes and

implementation, and identifying the requisite tools that could fill gaps in data efficiently. Disaggregated information on indigenous and Afro-descendent communities, as well as by gender, age, geographical location, and other factors, would facilitate accurate, assessment of children’s health in these communities. It would also enable policymakers and other stakeholders to monitor the extent to which policies improve the quality of life for these marginalized groups.

Data collection in the region is improving; an analysis presented by the UN Economic Commission for

Figure 2.2

Rural areas are far behind urban zones in access to water and sanitation facilities



Source: UNICEF, *The State of the World's Children 2008*, p.125.

Latin America and the Caribbean (ECLAC) indicates that 13 out of the 24 countries with indigenous populations undertook population censuses in recent years with questions to identify the indigenous. But major challenges remain, and innovative approaches are needed to make representative and disaggregated data available for those who need them most. Several countries are also conducting relevant studies on indigenous populations and Afro-descendent groups, and national policies and international agreements are serving as guides in creating programmes and allocating funding for social services for these marginalized groups. However, a lack of coordination, community participation and communication, as well as the fragmentation or duplication of efforts, threatens to hamper the impact of these initiatives. At the same time, financial and human resources gaps in health information systems urgently need to be addressed in Latin America and the Caribbean through

targeted capacity development – with training and educational schemes to promote improvements in the type and quality of data reported and advocacy efforts to facilitate understanding by all key decision-makers and stakeholders involved in health-care and preventive services delivery.

Geographical and educational disparities in child health

Extreme poverty and child survival in the rural margins

Geographic differentials in rates of infant and child mortality are common to many countries in Latin America and the Caribbean. Along with large income gaps between rural and urban households, rural zones also suffer from a lack of adequate environmental

health facilities that are central to child and maternal health and well-being. For instance, 83 per cent of the rural population in Guatemala lack appropriate waste disposal systems.⁷ Across Latin America and the Caribbean, only 49 per cent of the rural population had access to improved sanitation facilities in 2004, compared to 86 per cent of the urban population. While coverage of improved drinking-water facilities in urban zones is almost universal (96 per cent), one quarter of rural inhabitants in the region remained without access to this vital service in 2004.

The urban-rural divide in under-five mortality is also noteworthy. In some countries, among them Bolivia, gaps in infant mortality between rural and urban areas diminished only very slightly in the period 1994–2004. In Haiti, the rural-urban ratio in infant mortality rose from 1.1 in 1995–1996 to 1.4 in 2005–2006, owing to infant mortality falling at a faster rate in urban areas than in rural ones.⁸

Further, while urban centres generally offer marked advantages over rural peripheries in access to primary health care and other basic services, geographical disparities prevail within cities as well. Many of the mega-cities of the region have grown beyond their capacity to provide vital services adequately – as evidenced in the peri-urban settlements.

Mothers' education and child health

In recent decades, studies across the developing world have underscored the vital impact of mothers' education on child survival outcomes. Better educated mothers tend to have children who are less vulnerable to early mortality, and they are more likely to seek formal health-care services. A 2005 study by ECLAC undertaken in seven countries – Bolivia, Brazil, Colombia, the Dominican Republic, Guatemala,

Figure 2.3

Survey data indicate marked inequities in child survival by geography, income and mothers' education

Selected countries with data from 2000 onward

UNDER-FIVE MORTALITY RATE				
	Year of survey	Geographic divide	Income gap	Disparity in mothers' education
		Ratio of rural under-five mortality to urban under-five mortality	Ratio of under-five mortality among poorest 20% of households compared to the richest 20%	Ratio of under-five mortality for children of mothers with lowest education attainment compared to mothers with highest educational attainment
Bolivia	2003	1.5	3.3	3.0
Colombia	2005	1.4	2.4	3.2
Dominican Republic	2002	1.1	–	2.8
Haiti	2000	1.3	1.5	2.0
Nicaragua	2001	1.6	3.3	2.9
Peru	2000	2.2	5.3	3.0

Note: The figures were computed by the World Health Organization to ensure comparability, and may not be strictly comparable to estimates based on the work of the Inter-Agency Group for Child Mortality Estimation published by UNICEF in *The State of the World's Children 2008* or to national estimates.

Source: World Health Organization, *World Health Statistics 2007*, pp. 74–76.

Haiti and Peru – confirms a strong correlation between child mortality and mother's educational attainment.

In El Salvador, a recent study shows that infants of mothers who have no education face a 1 in 10 chance of dying during the first year of life.⁹ The risk of mortality for infants born to mothers who have secondary-level education was around

one quarter of that for infants whose mothers have no education. Even though public education systems exist in most countries in Latin America, the disparities of attainment are marked. In Mexico, the average person in the poorest quintile of the population has 3.5 years of schooling, compared to 11.6 years for the average person in the richest quintile. Moreover, these numbers do not reflect the wide

disparities in the quality of education affordable at different levels of income.¹⁰

Education of parents, especially mothers, has been shown to reduce fertility, mortality and morbidity rates and reduce the risk of contracting HIV. Intersectoral collaboration between the health and education sectors is therefore pivotal to reducing child mortality and improving

POVERTY AND UNDERNUTRITION IN BRAZIL'S SEMI-ARID REGION

Brazil's Semi-arid region comprises 86 per cent of the nine north-eastern states, together with the northern zones of Minas Gerais and Espírito Santo. It has some of the highest rates of child mortality in the country. Adverse geographical and climatic conditions, including sparse and irregular rainfall, recurrent drought and infertile soils, in addition to unequal socio-economic status, have exposed populations in the Semi-arid region of north-eastern Brazil to the highest risk of food insecurity and nutritional deficiencies in the country. In the Semi-arid region, more than 8 million children and adolescents live in households whose per capita monthly incomes amount to no more than US\$68. More than 4 million of these children live in houses that are not connected to safe water supplies or sewage systems.

Data from the Brazilian Ministry of Health's Primary Healthcare Information System (SIAB) show that in 484 of 1,444 municipalities in the Semi-arid region, more than 10 per cent of children under two years of age had low body weight to age ratios, a situation classified as 'high vulnerability'. A mapping exercise carried out by UNICEF in 2005 revealed that in only 15 per cent of the municipalities of the Semi-arid region are low body weight to age

ratios below 4 per cent, the level considered to be 'satisfactory'.

A pact for the children of the Semi-arid region

The need for interventions to improve the health and nutrition of children in the Semi-arid region led to the signing in 2004 of the 'National Pact for A World Fit for Children and Adolescents in the Semi-arid Region', coordinated by UNICEF. Under the pact, the Federal Government, the governments of the 11 states within the Semi-arid region and various civil-society organizations have made a commitment to carry out actions targeted towards improving the lives of the region's children. One such initiative, launched in August 2005 by the Ministry for Social Development and Combating Hunger in partnership with the Ministry of Health and 15 universities, is a nutritional survey ('Chamada Nutricional') of children under five. The survey aimed to determine the scope of child undernutrition in the Semi-arid region and orient public policies towards addressing the problem.

In 2005, the pact sponsored expansion of the 'UNICEF Approved Municipality Seal' initiative to encompass the entire Semi-arid region. UNICEF launched this initiative with the aim of stimulating the adoption of municipal-level policies designed to reach children. As candidates for the award, municipalities assume a commitment to strive to improve the quality of life for children and adolescents and to achieve such

concrete targets as reducing infant mortality, providing quality antenatal care for all expectant mothers and promoting adequate nutrition for all children under two. Under this initiative, municipalities are monitored and assessed for compliance with three criteria: social impact, public policy management and social participation. In 2006, the second year of the initiative, 1,176 municipalities pledged to implement UNICEF's proposals.

Guarantee of quality

So far, the 'UNICEF Approved Municipality Seal' appears to be contributing significantly towards reducing infant mortality. Evaluation indicates the programme has helped increase the number of children who are vaccinated and regularly attend day-care centres and preschools. Through the programme, achievements in improving social indicators for children and adolescents are announced simply, so that the entire community is able to participate in the achievements of the municipality, demand improvements and collaborate in attaining the goals. In the state of Ceará, for example, between 1999 and 2004, this initiative helped to reduce infant mortality rates from 39 to 20 per 1,000 live births, and to increase the proportion of children vaccinated from 63 per cent to 95 per cent. Since the project was launched, in 1999, 306 municipalities have been awarded the UNICEF Seal.

See References, page 40.

maternal and child health. Towards this end, it is noteworthy that education services are, geographically speaking, more widespread than health services. By providing the infrastructure for immunization campaigns and, at times, serving as centres for delivery of primary health care, schools in Latin America and the Caribbean have been key players in promoting health.¹¹

Gender inequality and its impact on health outcomes for women and children

Although disaggregated data on health outcomes by gender remain limited in many countries, the available evidence suggests that gender-based inequities stymie women's access to health care are prevalent in Latin America and the Caribbean. High rates of maternal death, poor nourishment of mothers and low rates of antenatal care are associated with limited access to services for expectant mothers that often results in ill-health of children. Gender equity in access to health care is directly related to gender empowerment.

An increase in a woman's relative decision-making power within the household is associated with better antenatal and birthing care, improved frequency of child feeding and higher rates of child immunization and is therefore pivotal not only to her own health and well-being but also those of her children. Greater gender equality at the community level also has a positive influence on these vital health needs. However, Demographic and Health Surveys conducted between 2000 and 2004 in the region indicated that husbands were making critical decisions on women's health. Over 21 per cent of women in Haiti reported that their husbands made all health decisions for them; this number was nearly 16 per cent in Peru, 11 per cent in Nicaragua and 8.5 per cent in Colombia.¹²

The Pan American Health Organization also notes that gender inequity in access to health care is linked to how health care is financed, with out-of-pocket spending on health for women being higher than for men in recent years in a number of countries.¹³

When speaking of gender inequity, the negative effects of overlapping of the various forms of inequality in the case of poor, indigenous and Afro-descendent women and girls is also a matter of concern.¹⁴ The adoption of policies that would take gender into consideration along with racial and ethnic issues could therefore be beneficial to achieving equity in health service delivery in the region.

Finally, gender-based violence, too, has profound and harmful effects on the health of women and children. Preventing intimate partner violence against women is crucial to ensuring women's empowerment both within the household and in other arenas of social life.¹⁵ Data from recent Demographic and Health Surveys indicate that an alarming number of women aged 15–49 had been victims of physical, sexual or emotional violence by a partner. For instance, 52 per cent of respondents in this age group of women in Bolivia reported physical violence in 2003. In Colombia this rate was 39 per cent in 2005, in Peru it stood at 41 per cent in 2004, and in the Dominican Republic the rate was 22 per cent in 2002.¹⁶ Even where children themselves are not victims of abuse, bearing witness to such treatment of their mothers leaves a deep impact. Such children may live in fear and become reclusive and untrusting, or they may get physically hurt when they intervene. Because children may internalize the aggressive behaviour they observe or experience at home and come to consider violence a legitimate element of domestic relationships, the consequences of such violence can span generations. Research indicates, for example, that girls who witness their mothers being abused are more likely to accept violence as the norm in a marriage than those who come from non-violent homes.¹⁷

Most Latin American and Caribbean countries have introduced legislation addressing violence in the family. One factor that provided momentum to enact such legislation is the Inter-American Convention on the Prevention, Punishment and Eradication of Violence against Women (Convention of Belem do Para). The convention, which came into force in 1994, has been ratified by nearly all countries in the region. But despite laws prohibiting domestic violence, the problem remains rife. Indeed, the scale of domestic violence may be underestimated because it is still considered by many to be a private matter and often goes unreported. Campaigns such as the *16 Days of Activism Against Gender Violence* held each year between 25 November and 10 December seek to increase the visibility of violence against women. In Latin America and the Caribbean, this multifaceted campaign, supported by the United Nations Development Fund for Women (UNIFEM) and other UN agencies, involves governments, women activists, the media and numerous non-governmental organizations. The movement demands support services for survivors of violence, and presses for legal and judicial reform to address violence – which it views as a human rights violation, a public health crisis and a threat to peace and security.¹⁸

Given the deeply entrenched inequities in access to quality health care for the region's mothers and children, governments must make it a priority to strengthen their health systems not only to achieve results but also for equity, to be capable of reaching those most in need of vital health services. Chapter 3 outlines how emerging paradigms in global public health for maternal, newborn and child health, such as the value of effective community partnerships and a continuum of care, may move the region towards this goal.



Guatemala: Women in a remote village of the San Marcos Department share food.

3 Community partnerships, a continuum of care and health-systems development

As 2015 draws closer, there is an urgent need for countries in Latin America and the Caribbean to strengthen their health systems not only to achieve the national aggregate targets for the Millennium Development Goals, but also to generate gains in health that are equitably distributed across population groups.

Lessons learned from decades of evidence and experience in diverse approaches to primary health care for mothers and children in the region indicate that these objectives are best achieved through an integrated approach to health-service delivery. Adopting strategies that facilitate a continuum of care for maternal, newborn and child health across time

and location can have a profound impact on child survival and health outcomes. This continuum integrates community partnerships in health with adequate outreach referral services and facility-based care.

At the level of policy-making, health systems in the region can be developed to promote equitable primary health care through several means, including:

- Promoting community partnerships for maternal, newborn and child health.
- Providing a continuum of care for maternal, newborn and child health.
- Health-systems development for outcomes and equity, through

expanding resources for health care, removing bottlenecks to health service delivery, and targeting excluded groups to achieve universal coverage of key interventions.

- Addressing the need for more skilled health personnel.

Each of these aspects will be briefly addressed in the remainder of the chapter.

Community partnerships for maternal, newborn and child health

Families, especially parents and other primary caregivers, form the first line of care when a newborn, infant or young

child falls sick. They make the initial diagnosis of illness, assess its severity, select treatment and care options, procure and administer drugs and other remedies and decide whether or not to seek formal health care. Many of the preventive measures that can preserve the health and save the lives of young children and pregnant women require changes in behaviours and practices that begin in the household and are reinforced in the community.

Empowering communities, as well as households, to participate in the health care and nutrition of mothers, newborns and children is therefore a logical way to

enhance service provision, especially in countries and communities lacking basic primary health care and environmental health facilities. Community partnerships in maternal, newborn and child health recognize the need for community members to be actively engaged in their own health care and well-being. These partnerships, rich in diversity and accumulated experience in Latin America and the Caribbean, demonstrate that even the poorest communities facing the most difficult circumstances can take proactive steps to boost maternal, newborn and child health. While the key actors and stakeholders in such partnerships are the communities themselves, ministries

of health, local governments and civil society organizations have a pivotal role in facilitating scaling up of key interventions and health practices at the local level.

Success factors for community partnerships in health

Evidence and experience have shown that successful community-based approaches embody some common features. These factors are explored in Chapter 3 of *The State of the World's Children 2008* and are summarized here:

BRAZIL'S COMMUNITY HEALTH WORKER PROGRAMME

Context and challenge: Although Brazil has made strong and steady progress in reducing mortality rates for children under five, there are clear geographical and ethnic disparities in death rates for infants. According to 2006 national estimates, the aggregate infant mortality rate for the Northeast region is twice as high as rates in the South, Southeast and Central-west provinces. In Alagoas, the worst performing state in the Northeast region, the infant mortality rate in 2006 was 68 per 1,000 live births, compared to a national average of around 30 per 1,000 live births that year, according to national estimates.

Racial and ethnic disparities in child mortality risks are also evident, and children whose mothers are of indigenous or African descent are threatened by a much higher risk of mortality than children of white mothers. The challenge facing Brazil, therefore, is to maintain the downward trend in overall child mortality while simultaneously adopting a strong regional and ethnic focus in health-care provision.

Approach and interventions: In 1991, after the success of pilot projects in Brazilian cities during the early

1980s, a community health worker network was created with UNICEF support. The Community Health Worker is a person chosen and selected from those who have lived in the community for at least two years, who must know how to read and write, and must be officially trained to carry out health worker functions. Each community health worker is responsible for visiting families in the community, providing up-to-date information on health, hygiene and childcare, and monitoring and evaluating the growth and health of children less than six years of age and of pregnant women.

Following several initiatives in Brazil involving the work of medical professionals and nurses in communities, in 1994 Brazil decided to create and institutionalize the Family Health Programme, now called the Family Health Strategy. This initiative reorientates the health-care model that had previously been based around hospitals, and is now concentrating on promoting health in the community. The family health teams are comprised of at least one family doctor, a nurse, an assistant nurses and five community health workers. When expanded, teams also include a dentist, a dental assistant and a dental hygienist that serve groups of up to 1,000 families.

More than 222,000 community health workers cover nearly 110 million people across Brazil, making

this network one of the largest in the world. The network is integrated within the national system (federal, state and municipal governments), which is fully responsible for funding and administering the programme throughout Brazil. Political commitment to the network has ensured its viability. Roles for community health workers are well defined, including their designation as part of the family health teams. Lines of referral and supervision are clear. The unit supports the health workers, and they, in turn, perform outreach for the health system in the communities. The family health team becomes a central part of their local communities, and the integration of the network within national, state and municipal governments helps ensure the programme's sustainability and its extension to the national health system.

Results: The introduction of the community health worker programme has contributed to a reduction in infant deaths across the country since 1990. Moreover, the Government of Brazil has focused on the Northeast region and on marginalized ethnic groups during recent years. It has also adopted a strong regional focus to child and maternal health care, and almost half of the participants who receive cash benefits from the Family Health Strategy live in the Northeast.

See References, page 40.

- **Cohesive and inclusive community organization and participation:** Programmes that build on established structures within a community, that are socially inclusive and that involve community members in planning, evaluation and implementation are among the most successful in developing countries.
- **Support and incentives for community health workers:** Community health workers, the main agents of community-based treatment, education and counseling, require incentives and support to prevent attrition, sustain motivation and help workers meet their obligations.
- **Adequate programme supervision and support:** Supervision helps sustain community members' interest and motivation and reduces the risk of attrition. Other important types of support include logistics, supplies and equipment.
- **Effective referral systems to facility-based care:** Hospitals and clinics are essential complements to successful

community partnerships because they provide services that cannot be safely replicated elsewhere, such as emergency obstetric care. District health systems also serve as focal points for coordinating public health programmes.

- **Cooperation and coordination with other programmes and sectors:** An integrated approach to maternal, newborn and child health benefits from collaboration between programmes and sectors addressing health, nutrition, hygiene, major diseases, food security, education, lack of transportation infrastructure and access to water and sanitation facilities.
- **Secure financing:** To be successful over the long term, community partnerships need stable financing for sustainability and equity, and to address issues such as removing or reducing user fees, cost sharing and financial incentives for community health workers.
- **Integration with district and national programmes and policies:** Active support from provincial and central governments for community-based

initiatives and their integration into government policies, plans and budgets are essential to their long-term sustainability. Consulting with representatives from community, district and national leaders and donors could develop target strategies and ensure that maternal and child survival feature prominently in national and decentralized plans and budgets, with clear goals and concrete benchmarks.¹

Providing a continuum of care for mothers, newborns and children

Providing a continuum of care is critical for achieving an effective integrated approach to health and well-being for mothers, infants and young children. More than half of all maternal and newborn deaths occur during childbirth and the first few days of a baby's life; this is also the period when health coverage is least available. An effective continuum of care connects essential maternal, newborn and child health



Jamaica: A health worker helps a woman weigh her infant.

packages through pregnancy, childbirth, the postnatal and newborn periods, and into childhood and adolescence. The advantage of such a continuum is that each stage builds on the success of the previous stage. For example, providing integrated services to adolescent girls means fewer unintended or poorly timed pregnancies – a pressing concern in the region where adolescent pregnancies are on the rise. Visits to a health-care practitioner can prevent problems during pregnancy and make it more likely that mothers will get appropriate care at birth. Skilled care before, during and immediately after birth reduces the risk of death or disability for both the mother and the baby. Continued care for children supports their right to health.

There are two dimensions to the continuum of care framework:

- **Time:** The need to ensure essential services for mothers and children during pregnancy, childbirth, the postpartum period, infancy and early childhood. The focus on this element was engendered by the recognition that the birth period – before, during and after – is the time when mortality and morbidity risks are highest for both mother and child.
- **Location:** Linking the delivery of essential services in a dynamic primary-health-care system that integrates home, community, outreach and facility-based care. The impetus for this focus is the recognition that gaps in care are often most prevalent at the locations – the household and community – where care is most required.

The continuum of care framework has emerged in recognition of the fact that maternal, newborn and child deaths share a number of similar and interrelated structural causes with undernutrition. These causes include such factors as: food insecurity; female illiteracy; early pregnancy and poor birth outcomes,

ZANMI-LASANTE'S COMMUNITY-BASED PROGRAMMES IN HAITI

Partners In Health is an international health and social justice organization created in 1987 and focused on delivering quality health care to poor communities. At present, the organization has projects around the world including in Haiti, Lesotho, Malawi, Peru, the Russian Federation, Rwanda and the United States and has supported projects in Guatemala and Mexico. Zanmi Lasante ('Partners In Health' in Haitian Creole) is the organization's flagship project and also the one that has been most widely replicated in other sites.

In Haiti, Zanmi Lasante, in collaboration with local communities and other partners including UNICEF employs a five-point approach to community-based child survival. These steps include:

- Working with public health authorities to roll out packages of essential interventions.
- Promoting integrated maternal and child health.
- Initiating and strengthening paediatric AIDS prevention and control programmes.
- Launching operational research and training programmes to improve the quality of care to rural children.
- Advancing efforts in tandem with those designed to promote the basic rights, in particular, the social and economic rights, of the child.

In 1998, Zanmi Lasante began providing antiretroviral treatment for prevention of mother-to-child transmission of HIV (PMTCT) and counselling services to

HIV-positive pregnant women in parts of rural Haiti. Today, the organization's PMTCT programme strongly relies on community partnerships for its success. In Haiti, which has the highest burden of HIV in the Caribbean, care for those affected and curbing the spread of the epidemic are urgent issues.

Zanmi Lasante's PMTCT programmes are integrated into comprehensive care for both mother and child. After giving birth, mothers living with HIV receive counselling and a small monthly stipend to cover basic nutritional needs and monthly travel costs to the clinic. They are also paired with an *accompagnateur*, or community health worker, who will deliver and administer antiretroviral therapy twice daily.

Over the past two decades, the project has expanded to include nine health centres in Haiti that are partially funded by UNICEF and provide health services for pregnant women living with HIV. The underlying importance of community partnerships in health is emphasized by the co-founders of Partners In Health, Drs. Paul Farmer and Jim Yong Kim, in the concluding paragraph of the guest panel they contributed to *The State of the World's Children 2008*: "We now know that without a community-based, comprehensive strategy, efforts to treat children – and subsequently mothers, fathers and siblings – fail to provide the desired outcomes... From experience in Haiti and now around the world, we know that community-based services to improve health and reduce poverty, linked, when necessary, to excellent clinical resources, offer the highest standard of care in the world today and the key to improving child survival."

See References, page 40.



Brazil: A pregnant adolescent mother sits near her sleeping infant son.

including low birthweight; inadequate feeding practices; lack of hygiene and access to safe water or adequate sanitation; exclusion from access to health and nutrition services as a result of poverty, geographic or political marginalization; and poorly resourced, unresponsive and culturally inappropriate health and nutrition services.

Much of the continuum of care framework has been developed in response to challenges in Africa and South Asia, which taken together account for more than 80 per cent of global child deaths. The framework's emphasis on integration in health service delivery, however, is also entirely appropriate for Latin America and the Caribbean, particularly for those population and social groups currently missing out on essential services. Evidence from the region, notably from Mexico, has shown that linking interventions in packages can increase their efficiency and effectiveness, encouraging uptake and providing opportunities to enhance coverage.

Health systems development for outcomes and equity

In recent years, there has been a move toward greater emphasis on results as a driver of public-health investment and development. The focus on outcomes is intended to create a synergy between results and inputs. Health-systems development in Latin America and the Caribbean and elsewhere is increasingly considered part of the process of achieving key national and international objectives, including the Millennium Development Goals.

As previous chapters have explained, while the region as whole, and most countries within, are on track to meet the health-related MDGs, many population and social groups remain excluded from primary health-care services. A core challenge in Latin America and the Caribbean, therefore, is to frame goals to achieve equity in health service provision. Brazil, in particular, has made great strides in this area, placing a strong

regional focus on social welfare and health-care programmes. Along with the Bolsa Família cash transfer programme for the poor, Brazil also utilizes the Family Health Strategy, which provides health-care services in communities mainly in the poorest regions. In addition, in 2004 the federal government, Ministry of Health, state and municipal secretariats of health in the country's 27 states, non-governmental organizations and UNICEF endorsed a National Pact to Reduce Maternal and Neonatal Mortality. The pact promotes a series of measures, including capacity building for health professionals and managers, support for initiatives targeted at high-risk mothers and newborns, and the establishment of committees for the investigation of maternal and child deaths throughout the country.²

Addressing equity issues in maternal and child health will require strengthening health systems at the district level. Latin America and the Caribbean is advancing in this area, transferring responsibilities and competencies from the federal government to intermediate and municipal levels, and implementing changes in health policies and regulations with additional resources for their implementation.

But decentralization is not without risk: It may have unintended consequences, such as deepening existing inequalities in communities, based on factors such as poverty, gender, language and ethnicity. Work and research are required to ensure that the reorientation of national health systems creates the conditions in which district health and nutrition systems can provide a thriving continuum of care. Systematic analysis and case studies from countries and provinces that have adopted this approach can yield insights into ways that current policy processes function and might be improved. Some significant problems, such as difficulties in building institutional capacity and obtaining strategic intelligence for steering and monitoring resource flows and health-system performance, are already well recognized by practitioners.

THE MEXICAN MODEL OF HEALTH REFORM: A DIAGONAL APPROACH

According to one of its leading proponents, Jaime Sepulveda of Mexico's National Institute of Health, the diagonal approach is a "proactive, supply-driven provision of a set of highly cost-effective interventions on a large scale bridging health clinics and homes." It integrates and coordinates vertical interventions, community-based initiatives and health facilities or extension services, addressing key issues by applying specific interventions, including drug supply, facility planning, financing, human resources development, quality assurance and rational prescription.

In the 25 years from 1980 to 2005, Mexico implemented a number of successful vertical programmes that were subsequently scaled up. These programmes targeted diarrhoeal diseases (the distribution of oral rehydration salts and the Clean Water Programme); vaccine-preventable diseases (national vaccination days, measles vaccination campaigns, the Universal Vaccination Programme, national health weeks); vitamin A supplementation; and anthelmintic therapy (national health weeks).

Oportunidades (formerly PROGRESA), a conditional cash transfer programme designed to reach the country's poorest families, provides financial incentives for improved health and nutrition practices and for keeping children in school. Benefits are contingent on regular attendance at health clinics that supply essential health and nutrition services. Food supplements are distributed to all children aged 6–23 months and underweight children aged 2–4 years in targeted households. The programme has a strong positive impact on children's nutritional status.

A more comprehensive package covering the continuum of maternal, neonatal and child health was introduced in 2001, when the Ministry of Health launched *Arranque Parejo en la Vida* (Equal Start in Life). This initiative promotes social and community participation, strengthens and expands antenatal and neonatal care, and provides folic acid supplements for women, among other factors. It has reached a high level of coverage. Through the *Seguro Popular*, a public health insurance initiative, maternal and child health became entitlements.

In part, the diagonal approach stems from research into Mexico's health system and its development during the past 25 years. Unlike other approaches, it emerged in response to the growing complexity of disease profiles

and the pressure Mexico faced to develop health interventions and systems that provide, quality services affordable to the poorest and most marginalized populations. Its implementation has led to Mexico being on track to reach the Millennium Development Goals. The diagonal approach is now formalized and championed by Mexico's former Minister of Health, Julio Frenk, who thinks it should be integrated into a broader health policy. It aims to bridge the dichotomies between horizontal and vertical approaches, intersectoral and sectoral policies, and national and international efforts by offering a 'third way' through which effective interventions become the drivers for health-system development.

See References, page 40.



Mexico: An indigenous toddler is carried in a sling pouch on his mother's back in the state of Chiapas.

Expanding resources for health care

Public expenditure on health can be a key determinant of health system capacity. Countries with low rates of public health spending per capita are often associated with poor health outcomes, shortages of personnel and equipment and inadequate and insufficient facilities. Low public spending implies, inevitably, greater-out-of-pocket expenditure for the poorer segment of the population. Estimates released by the Pan American Health Organization, dating from 2004, show that the average expenditure on public health as a percentage of GDP was 3.3 per cent in the Latin America and Caribbean region.³ This proportion lies below the world average, estimated at 5.1 per cent for that same year. Higher-income countries spent an approximate 6.7 per cent of their GDP on public health; in the lower- and middle-income group, the countries of East Asia and the Pacific spent on average 1.9 per cent of their GDP on public health while countries of Eastern Europe and Central Asia allocated 4.5 per cent of their GDP for the same.

The ratio of public to private spending in national health expenditure for Latin America and the Caribbean was on average 48:52 in 2004.⁴ Private household expenditure on health, either directly through out-of-pocket spending or indirectly through private health insurance schemes and pre-paid medical plans financed by employers and households, is significant. Cuba and some English-speaking Caribbean countries had the largest share of expenditure on public health, at 6 per cent or more of gross domestic product; and Chile, Costa Rica and Panama among others had public health insurance schemes providing coverage to about two thirds of the population.

While more recent data at the regional level is not yet available, indications are that public spending on health has been stepped up in such countries as Bolivia, Brazil and the Bolivarian Republic of Venezuela, among others, in recent years.

In order to directly address the issue of health equity, several governments in the region have adopted innovative financing and other strategies as outlined in Figure 3.2, page 31.

The experiences of Bolivia and Ecuador also point to the importance of institutional legislation for health financing. Universal, publicly financed mother and child insurance schemes have been put in place in Bolivia (Universal Mother and Child Insurance, SUMI) in 2003 and Ecuador since 2000 (based on the Free Maternity and Child Care law of 1994).⁵

Removing health system bottlenecks

Bottlenecks are factors that hinder the efficiency and effectiveness of health-service delivery. Obstacles can arise at all levels of health service delivery. Typical bottlenecks include low levels of demand from communities and household, possibly due to lack of information on service availability or financing constraints; long distances between health-care facilities and communities; logistical and cost impediments to expanding or extending outreach services; shortages of drugs and other essential equipment in health-care facilities; and budgetary constraints and lack of administrative capacity in district or national health departments.

Figure 3.1

Health spending in Latin America and the Caribbean is moderate compared to levels of high-income countries

Data from 2004, measured at purchasing power parity in 2000 US dollars

Region	Per capita income, US\$ PPP (2000)*	National expenditure on health as a percentage of GDP	National expenditure on health per capita, US\$ PPP (2000)*	Public/private ratio	Expenditure on public health as a percentage of GDP
<i>Latin America and Caribbean</i>	7,419	6.8	501	48/52	3.3
High-income countries	28,683	11.2	3,226	60/40	6.7
European Union	25,953	9.6	2,488	74/26	7.1
Canada	28,732	10.3	2,875	71/29	7.3
USA	36,465	13.1	4,791	45/55	7.2
Other high-income countries	24,490	8.2	1,997	64/36	5.2
Low- and middle-income countries**	4,474	5.5	248	48/52	2.6
Eastern Europe and Central Asia	7,896	6.5	514	68/32	4.5
Middle East and North Africa	5,453	5.6	308	48/52	2.7
South Asia	2,679	4.4	119	26/74	1.1
East Asia and the Pacific	4,920	5.0	247	38/62	1.9
Sub-Saharan Africa	1,820	6.1	111	40/60	2.4
All regions and countries	8,284	8.7	742	58/42	5.1

* Measured in 2000 US\$ at Purchasing Power Parity.

** Includes Latin America and the Caribbean.

Source: Prepared by the Health Policies and Systems Development Unit, Health Systems Strengthening Area, Pan American Health Organization.

A tool jointly developed by UNICEF, the World Bank and the World Health Organization entitled ‘Marginal Budgeting for Bottlenecks’, is being successfully used to promote results-based planning and budgeting to reduce bottlenecks at the country level. The tool utilizes knowledge about the impact of interventions, identifies implementation obstacles and estimates the marginal costs of overcoming these constraints. It assists in setting targets for proven, highly effective interventions; estimates their expected impact, costs per lives saved and additional funding requirements; and projects the required fiscal allocations to finance these additional costs.

For example, a bottleneck analysis of water, sanitation and hygiene services in Honduras revealed that despite ample access to improved drinking water, fewer than half of households consumed improved water. Strategies selected to address this bottleneck included scaling up water treatment and promoting exclusive use of safe drinking water through information, education and communication initiatives.⁶

Targeting excluded groups

The policy debate on how best to ensure equity in health service provision to children and women also calls on countries to decide whether targeting underserved populations for the provision of key interventions could be the way forward. Such a decision would entail taking into consideration health system characteristics and epidemiological profiles. Among other criteria, targeting has been found to be most successful where affected groups in need are easy to identify; the disease, condition or syndrome to be addressed is not prevalent across the population but restricted to certain population pockets or confined to risky behaviours; spontaneous demand for the intervention is low; and the administrative system is capable of undertaking such an endeavour.⁷

Community partnerships in primary health care can be effective in strengthening

Figure 3.2

Selected current approaches to improving equity in child health in Latin America and the Caribbean

APPROACH	EXAMPLES
<i>Improve knowledge and change behaviour in poor mothers.</i>	Nutrition counseling (Brazil); social marketing for soap (Central America).
<i>Improve access to water and sanitation for poor people.</i>	Expansion in water supply favouring poor communities, by regulated privatization (Argentina) and by social investment funds (Bolivia).
<i>Make conditional cash transfers to poor families to improve children’s health and nutrition.</i>	Cash transfers to poor families linked to use of preventive services (Honduras, Mexico, Nicaragua); subsidized health care for the poorest populations (Costa Rica).
<i>Make health facilities more accessible to poor households.</i>	Deployment of health teams in poor municipalities (Brazil); partnership with, and some subsidizing by, non-governmental organizations in underserved areas (Bolivia).
<i>Enhance human and other resources in facilities serving poor people.</i>	Use of national cadre of community health workers (Brazil).
<i>Improve the user-friendliness of providers and facilities serving the poor.</i>	Using providers who speak the language of poor indigenous groups and understand their culture and customs (across the region).
<i>Make budget allocations more relevant to the diseases suffered by the poor.</i>	Making simple interventions a priority against major causes of child mortality (Brazil).
<i>Set up social funds for poor communities to take the lead in small-scale investment projects to improve child and maternal health.</i>	Poverty-targeted investments in health clinics and water and sanitation systems to increase poor communities usage of these services (Honduras, Nicaragua, Peru).
<i>Increase health insurance coverage of poor families.</i>	Equity funds to increase health insurance coverage and lower financial barriers to health (Colombia); health insurance for poor families (Mexico).

Source: Adapted from *Applying an Equity Lens to Child Health and Mortality: more of the same is not enough*, by Cesar G. Victora et al., *The Lancet*, vol. 362, no. 9379, 19 July 2003, p. 234, where “the poor” are identified by the use of household possessions; and Pan American Health Organization, *Health in the Americas 2007*, vol. 1: Regional, PAHO, Washington D.C., 2007, p. 24.



Colombia: Children play in the streets in this country’s poorest region.

MOBILE MEDICAL BRIGADES IN NICARAGUA: TAKING HEALTH CARE TO REMOTE COMMUNITIES

Geographical distance from health-care services is an example of a bottleneck that Nicaragua has managed to overcome with its mobile medical brigades. Providing health care to the many widely dispersed communities in the vast tracts of the Southern Atlantic Autonomous Region on Nicaragua's Caribbean coast is a challenge, because most areas lack highways and main access routes are via rivers and the sea.

To fill this gap, since 1994, mobile medical brigades – jointly funded by the Nicaraguan Ministry of Health, the Pan American Health Organization, the Swedish International Development Agency and UNICEF – have been offering vital health services to remote zones of the country. The mobile brigades consist of a doctor, nurses

and more than 200 midwives from inland health facilities, plus some 300 volunteers. These brigades serve more than 250 rural settlements in seven municipalities in the southern Caribbean region. They visit isolated communities four or five times a year, supplying a basic health-care package of immunization, infant weight control and postnatal care.

During the 1990s, in the aftermath of Nicaragua's civil war, the brigades faced an unstable political climate. Since the return to peace, they confront mainly climatic and natural perils, such as rough seas and swollen rivers. On each of their outreach visits to the southern Caribbean coast, the brigades visit an average of 30 communities, covering 800 to 1,200 people. Community participation is essential, not only to provide health volunteers, but also to organize transport, room and board, medical storage facilities and temporary health centres where the medical personnel perform their duties.

Despite many obstacles, the positive impact of the brigades is

unquestionable. Dr. Donald Jarquín, Director of the Local Comprehensive Health Care System in the municipality of Bluefields, Southern Atlantic Autonomous Region, notes, "Ten years ago there wasn't even any information about the health problems affecting the communities of the southern Caribbean. But now we've achieved coverage of between 85 per cent and 90 per cent, strengthened health promotion and monitored the initiatives that have emerged from social participation in health."

The Ministry of Health plans to further improve health service provision in the most remote zones of Nicaragua. For now, the mobile brigades remain the principal option for medical care in these areas. Their work would not be possible without the continuing support of the government, international health agencies and, perhaps most importantly, the communities themselves.

See References, page 40.

health systems and in scaling up services in remote areas and in poor and marginalized communities. Mexico's Oportunidades initiative and Brazil's Family Health Strategy are examples of how packaged interventions can be delivered effectively at the community level for mothers, newborns and children. Community mobilization in the region is often the responsibility of ministries of health, but local governments and ministries for social welfare and women's rights have a pivotal role, along with women's organizations and domestic civil society leaders. Moreover, empowering individuals to assume a measure of responsibility for their own health – and that of their families – can have a profound and lasting impact on development.

Addressing the need for more skilled health personnel

It is well accepted that as the availability of health workers increases, the rates of child and maternal mortality decrease. Nonetheless, few countries in the region have in place adequate policy measures for human resource development, and there is a shortage of health personnel in several countries.⁸

Of particular concern is the mass migration of health professionals from poor countries to rich countries (the 'brain drain.'). More than 70 per cent of countries have experienced a loss in health personnel due to migration.⁹ Doctors and nurses seem to leave

the health sector altogether for the same reasons in Latin America and the Caribbean as they do in places as diverse as the Pacific Islands and the European Union. These include low remuneration, inflexible hours with many extra duties, lack of continuing education opportunities, difficult working conditions, demanding patients and shortages of supplies and equipment. While an increase in health professionals per capita usually brings with it improved health outcomes, a loss of health professionals is also a loss of economic investment in their training. Apart from international migration, health workers are also moving from rural zones to urban zones, from the public sector to the more lucrative private sector and also from the health sector to other sectors.¹⁰

SUSTAINABLE HUMAN DEVELOPMENT IN RIO SANTIAGO: A TARGETED APPROACH TO PROVIDING SERVICES TO INDIGENOUS GROUPS ALONG THE PERU-ECUADOR BORDER

The 'Sustainable Human Development in Rio Santiago' project reaches out to indigenous communities on either side of the Peru-Ecuador border in the Rio Santiago district, province of Condorcanqui, in the Amazon region. The project began in 2002, with financial aid from the Finnish Government and technical support from UNICEF, as part of the Binational Plan for strengthening peace between Peru and Ecuador.

The Awajum and the Wampis indigenous communities of Peru live in a poorly connected part of the rainforest in the Rio Santiago district. Poverty and lack of access to social services including health services had created poor health outcomes for the mothers and children of these communities, in some instances falling drastically below the national average.

Dramatic disparities

A baseline study conducted in 2002 revealed that 58 per cent of pregnant women were anaemic, maternal mortality rates compared highly unfavorably with the national average and only 6 per cent of the births in Rio Santiago took place at health clinics. The average for the department of Amazonas was 27 per cent in that same year and 58 per cent nationwide. The main reasons for not seeking attention at health-care facilities were economic constraints, inadequate supply of medicines and distance from the facility.

Close to half of the children under three years of age in the

community showed signs of chronic undernutrition. Registration of vital statistics, too, was low in the community, with only 51 per cent of all interviewees having a birth certificate. Further, illiteracy rates were higher here than in other parts of the country, and access to quality education was a problem.

A targeted, intersectoral intervention strategy

In the face of these worrisome health and social statistics, the Ministries of Health, Education and Women's Issues, the regional government of Amazonas, the National Identification Registry and Vital Statistics Office, the municipal government of the Rio Santiago and UNICEF, with financial aid from the Finnish government, initiated an intersectoral effort stressing health, nutrition, protection, education and identity. The project was carried out in two phases with particular attention to cultural appropriateness. In this regard, the school became the place for community members to meet and exchange key health messages, while community teachers were trained in participative learning methods and provided with education materials suited to the Awajum and Wampis cultures.

Key interventions included:

- Training community members to provide essential health services, including antenatal care, and training registrars for the timely registration of newborns.
- Giving mothers crucial information on how to prevent, manage and treat common childhood illnesses such as diarrhoea and respiratory infections.
- Vaccinating all children under age one against common childhood diseases.
- Promoting healthy nutrition and hygiene practices and growth and early development of children through local and community resources.

- Advancing the protection of women's and children's rights.
- Setting up community legal aid offices for women and children as a mechanism for settling disputes.
- Integrating women in different aspects of communal life.
- Promoting intercultural and bilingual education.

Promising results

In the past five years or so, the project has achieved a significant improvement in primary health care in the community. While in 2002, only about 45 per cent of the community sought attention in health facilities, by 2006, this proportion had risen to 62 per cent. Further, the number of regional health facilities has grown in the region such that distance is less of a barrier to health care than before. Antenatal care coverage grew from only 57 per cent in 2002 to 81 per cent in 2006, resulting in significantly more women being able to recognize the danger signs of pregnancy. Universal vaccination coverage of children against tuberculosis, diphtheria, tetanus and hepatitis B was achieved. Similar promising results were seen in education levels, though girls and adolescent females continue to be in a disadvantaged position: school attendance is less than 89 per cent (the attendance rate for males is 94 per cent). This is largely due to teenage pregnancies and economic problems. Finally, encouraging women to participate in community activities has empowered them to become spokespersons for intervention strategies. Many women have become leaders in their community, participating in municipal maternal and child health programmes and also helping to monitor the growth and development of their children and provide antenatal care services.

See References, page 40.



Brazil: A proud mother poses with four of her ten children.

4 The way forward

As a region, Latin America and the Caribbean has undeniably made great strides in child survival, not only since 1990 but consistently over the past five decades – despite civil strife, natural disasters and frequent bouts of political and economic turbulence during those years. This sustained improvement is testament to the region's social welfare programmes and spending on health care, and to the priority afforded to child and maternal health. The region remains on track to meet the health-related Millennium Development Goals, including MDG 4.

However, further challenges lie ahead. Chief among them is reducing the

inequities in health care and outcomes that are pervasive throughout the region. In many countries, to be poor automatically means to be neglected and marginalized by the health system. Other groups and communities are at risk of exclusion from essential services and practices because of gender, race or ethnic origin. Ensuring that health systems and maternal and child survival programmes are rights-based and seek to address these inequities is imperative. It is also central to establishing effective policies and strategies for advancing child and maternal health care across the region. Moreover, to reach those currently missing out, health programmes must be integrated into strategies that address

the root causes, as well as the effects, of marginalization and social exclusion. These root causes include such factors as gender inequality and machismo, teenage pregnancies and child marriage, high levels of street and domestic violence, and migratory and demographic shifts.

As the countries of Latin America and the Caribbean chart their progress in health during the coming years, crucial questions arise. Can these countries muster the political will to reach the excluded, given the extent of inequality in income and other social and economic indicators in the region? Can frameworks, strategies, actions and resources be galvanized into a unified drive to generate

further improvement in health outcomes and greater equity? The short answer is 'yes' – but only if governments, donors, civil society and other stakeholders unite in their actions in a concerted push to further reduce child and maternal mortality in the run-up to 2015 and beyond. This will require political commitment, sound strategies and adequate financing in a consistent and clear fashion to keep on track with the MDGs, and to go beyond them.

The State of Latin American and Caribbean Children 2008 concludes by briefly outlining five key areas in which unified efforts are required. These are:

- Political commitment at all levels of government, and the participation of civil society, including clearly defined goals and operational targets, and greater harmonization of partnerships.
- Greater collection and dissemination of disaggregated data and analysis to accurately assess gaps and disparities.
- Technical innovation in health care and communications technology.
- Investing in, and safeguarding, primary health care.
- Creating a supportive environment for maternal and child health and gender equality.

Political commitment to child survival and equity in health

Time and again, it has been shown that when governments take the lead and are committed to expanding successful pilot and small-scale projects, these initiatives can rapidly attain nationwide coverage. Those public health programmes that have shown great success in the region commonly have clearly defined goals and concrete operational targets. Brazil's Family Health Strategy and the Bolsa Familia initiative, and Mexico's health, nutrition and education programme, *Oportunidades* and the country's Seguro

Popular de Salud health insurance scheme are but two examples of countries that show the potential for providing essential primary health-care services to poor and marginalized communities and households, when governments are willing to commit even scarce funding to health and social welfare programmes.¹

Given the level of resources required to ensure access to quality primary health-care services and financial protection, scaling up is as much a political challenge as a technical one. Sustained improvements in maternal, newborn and child health will necessitate long-term commitments that go well beyond the political lifespan of many decision-makers. But even in some of the countries in Latin America and the Caribbean with moderate rates of per capita real incomes, where economic crises, institutional deficiencies and wide socio-economic disparities continue to hinder advances, there has been marked progress towards generalized access to quality health care. In Bolivia, for example, annual GDP per capita at purchasing power parity was under \$3,000 in 2005, compared to a regional aggregate of \$8,417. Moreover, the latest estimates indicate that 23 per cent of the population live on less than \$1 a day. Despite economic constraints, the country is on track to meet MDGs 1 and 4, has moderate rates of maternal mortality, and has improved access to safe water. The country still faces strong challenges in sanitation, as less than half of its inhabitants had access to adequate sanitation facilities in 2004.

Country ownership and public leadership can vastly increase the prospects for successful scaling up. Political openness and commitment to the desired changes, and national and local leadership are necessary. Setting a clearly defined goal with proper operational targets is an essential element of the most successful public health initiatives at the global, regional and country levels. Continued advocacy to obtain long-term financial support that ensures procurement of adequate supplies and commodities and

hiring, training and retention of skilled health professionals continues to be an essential factor.

Governments must further be committed to supporting health programmes at each level of health-system administration – federal, provincial and district. Enshrining national commitments in a legal framework can provide the necessary continuity to support scaling up of the continuum of care beyond the political lifespan of its initial champions. A functioning health system also requires accountability mechanisms, and checks and balances. Finally, sustained investment in both time and resources is required over many years to steadily scale up programmes.

At the regional level, political commitment to attaining health-related MDGs has expressed itself in a series of summits bringing together Heads of State and other representatives of government and regional and international multilateral organizations. At the recent Summit of the Americas, held in Mar del Plata, Argentina, November 2005, the theme was Creating Jobs to Fight Poverty and Strengthen Democratic Governance. The Summit declaration also included a pledge to “strengthen cooperation and exchanges of information in the struggle against chronic diseases as well as emerging and re-emerging diseases and conditions such as AIDS, SARS [severe acute respiratory syndrome], malaria, tuberculosis, avian flu, and other health risks.”² The declaration of the 2004 Special Summit of the Americas, held in Monterrey, Mexico, January 2004, recognized social protection for health as “one of the pillars of human development and national progress.” The declaration further stated that participants would “continue to broaden prevention, care, and promotion strategies as well as investment in this field in an effort to provide quality health care for all and to improve, to the extent possible, social protection for all people, with a particular focus on the most vulnerable segments of society.”³

Strengthening partnerships at all levels

To translate political commitment into resource mobilization and budgetary measures is a longer-term agenda that requires partnerships between government, civil society organizations and development agencies to maintain momentum, overcome resistance and mobilize resources. The overall aid architecture in health has become more complex during recent years with the emergence of large global health partnerships. It is estimated that there are more than 100 global health partnerships, with functions ranging from advocacy to implementation, differing objectives, scale and scope. Global health partnerships, such as the GAVI Alliance and the Global Fund to Fight AIDS, Tuberculosis and Malaria, have a major impact on health financing. They have mobilized important new resources for combating major health threats and brought much-needed political and technical focus to priority diseases and interventions.

In Latin America and the Caribbean, such partnerships have been instrumental to the development of new health technologies and products and expanding access to pharmaceuticals, including new vaccines and related health interventions. For instance, the Program for Appropriate Technology in Health (PATH), an international, non-profit organization, and UNICEF have partnered on an Enhanced Diarrhoeal Disease Control initiative for Latin America and the Caribbean. Through this initiative, an integrated set of key interventions for the prevention and control of diarrhoeal diseases has been implemented. Such interventions include the introduction of the rotavirus vaccine, scaling up distribution of oral rehydration salts, nationwide introduction of zinc supplementation and hygiene measures. Nicaragua, which successfully introduced the rotavirus vaccine in 2006, has already reported promising results from the implementation of the initiative.



Uruguay: A mother and child share a special moment.

Disaggregating statistics to reflect gaps

Understanding a problem is often half the solution. While the broad outlines of the situation of children in Latin America and the Caribbean are clearly defined, the specifics are sometimes vague. A lack of disaggregated statistics in several countries in the region complicates the efforts of policymakers to establish priorities, measure the effectiveness of programmes or monitor progress. In some countries, even vital registration systems – which record key life events, including birth and death – leave out geographically isolated communities. Birth registration, in particular, is essential to protecting children's rights

and to generating accurate information about a country's population. This is an area where Latin America and the Caribbean has some way to go, with the latest estimates for 1996–2006 indicating that 11 per cent of children under age five in the region are still not registered.

Accurate information and situation analysis on the state of health, nutrition, water, sanitation and hygiene, and AIDS among the region's children, especially those who are being excluded from primary health-care services, are pivotal to formulating strategies to bridge health gaps. Across the region, efforts towards disaggregating national census data to reflect health and other social trends among specific groups of people, such

as indigenous and African-descendant communities, must be strengthened.

Technical innovation in health care and communications

Although current programmes for child survival emphasize low-tech solutions, cutting-edge technologies could provide an unexpected boon in reaching the poorest and most marginalized households and communities. For example, simple diagnostic tools for malaria, HIV and water quality have been developed. With basic training, such tests can be administered at even the most rudimentary clinics. Biotechnology is producing safer recombinant vaccines, and research is ongoing to provide vaccines that do not require refrigeration and may be delivered by skin patches, nasal spray or other techniques, rather than by injection. All of these potential breakthroughs could have enormous repercussions for expanding immunization services to the poorest and most marginalized communities in Latin America and the Caribbean.

Although its application to this area is still in the early stages, information and communications technology (ICT), too, has a role in child survival and health in developing countries. The rapid growth of cellular phone use in the region during recent years has resulted in about 44 per cent of the region's population becoming subscribers by 2005. Internet usage, which has risen from virtually zero in 1990 to around 16 per cent of the population in 2005, is still in its infancy but is set for faster growth during the coming years.⁴ The rising use of ICT means that eHealth and telemedicine can already reach people in remote areas and could have much broader applications. In addition, health-care workers can more easily connect to primary care facilities and, if needed, to departments and referral centres in hospitals.⁵

Investing in, and safeguarding, primary health care

At the midpoint between the time when the MDGs were set (2000), and the deadline for their completion (2015), Latin America and the Caribbean must further invest in quality primary health-care for mothers and children, and upgrade and expand secondary and tertiary care. In particular, the region faces the challenges of increasing public expenditure on health care to levels closer to those in industrialized countries, and targeting spending to reach the poor and the marginalized. With commodity prices approaching record highs in 2007–2008, and economic growth having remained steady in recent years, the region has an opportunity to employ its resources more judiciously and ensure that any future economic shocks do not derail public health expenditure allocations, as they have done in the past. Chief among these challenges is to guarantee that spending on child and maternal primary health care is a priority for policymakers and is ring-fenced from other spending adjustments during bouts of economic or political turbulence.

At the sectoral level, there are several key challenges for the governments of Latin America and the Caribbean during the coming years: promoting access to institutional health care and training medical personnel; introducing and scaling up innovative technical interventions, such as rotavirus and pneumococcal vaccines; increasing responsiveness of health institutions in referral and outreach services; and enhancing the supply of and demand for comprehensive primary health care. A renewed emphasis on training and retention of skilled health workers is required in several countries and many communities to offset migratory trends that are causing shortages of doctors, midwives, nurses and other types of health professionals.

Creating a supportive environment for maternal and child health and gender equality

Providing quality health care to women and children demands an environment in which they can survive and thrive. Creating a supportive environment for child survival and health is therefore pivotal to improving outcomes and reducing inequities. As important as external peace and security is a child's sense of inner security, which can be disrupted by sexual or physical abuse, high levels of violence and crime within communities or living in an embattled country. Strict implementation of legal measures would go a long way in protecting children from such injustice and trauma.

Sustained improvements in the health of women and children will also demand greater gender equality and the empowerment of women. No matter how or which health services are provided, many children will miss out unless women have wider decision-making powers within the household. Numerous studies have confirmed the powerful and positive effects of education and economic opportunities on women's well-being, which translate into better care and improved survival prospects for their children.

Indicators for women's development in the region show promising trends that bode well for greater gender equality. Female literacy rates are almost equal to those of men, with Latin America and the Caribbean leading the world's regions outside the industrialized countries. A similar parity is evident in primary school enrolment and attendance, although there are more boys than girls enrolled in secondary school. However, despite a high rate of antenatal care coverage (94 per cent) and the highest rate of urbanization in the world (78 per cent),

14 per cent of pregnant women in the region still do not give birth in an institutional facility.

Making equality in maternal and child health a regional priority

The tremendous progress made by Latin America and the Caribbean in reducing national average mortality rates for infants and children has much to teach the world. Innovations in reducing inequities, such as comprehensive social insurance and conditional cash transfer schemes, are rapidly being replicated not only in other developing countries but

also in industrialized ones. Since 2007, New York City has been undertaking a pilot anti-poverty programme – Opportunity NYC – based along the same lines as Mexico’s conditional cash transfer programme.

And yet, many thousands of children and women in Latin America and the Caribbean are still excluded from essential primary and environmental health care services. It is time for the region’s political leaders to seize the initiative and put aside the broken promises of the past. What needs to be done for these mothers and children is clear from decades of progress and experience. When it needs to be done

and who needs to be involved are also clear. The need for all stakeholders to be united – in both word and deed – across the region to ensure the right of mothers, newborns and children to primary health care is clearest of all.

The challenge, therefore, is to shake off any cynicism and lethargy and work to reduce health inequities in the region with renewed energy and sharper vision for those who have thus far been excluded, and to position equality in health at the heart of the regional development agenda – both as a matter of social justice and to honour the sanctity of life in Latin America and the Caribbean.



Brazil: Girls play on the streets of Rio de Janeiro.

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CHAPTER 4

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CHAPTER 2 PANELS

Excluded at birth: The challenge of birth registration for indigenous peoples

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STATISTICS

INDICATOR	REGION	WORLD
DEMOGRAPHIC INDICATORS		
Total population (2006)	559,525,000	6,577,236,000
Population under 18 (2006)	197,134,000	2,212,024,000
Population under 5 (2006)	55,715,000	625,781,000
SURVIVAL		
Life expectancy at birth (2006)	73	68
Neonatal mortality rate (under 28 days), per 1,000 live births (2000)	15	30
Infant mortality rate (under 1), per 1,000 live births (2006)	22	49
Under-5 mortality rate, per 1,000 live births (2006)	27	72
Under-5 mortality rate, average annual rate of reduction (1990–2006)	4.4	1.6
Maternal mortality ratio, per 100,000 live births (2005, adjusted)	130	400
HEALTH AND NUTRITION		
Percentage of infants with low birthweight (1999–2006*)	9	15
Percentage of under-5s who are moderately or severely underweight (2000–2006*)	7	25
Percentage of population using improved drinking-water sources (2004)	91	83
Urban	96	95
Rural	73	73
Percentage of population using adequate sanitation facilities (2004)	77	59
Percentage of 1-year-old children immunized (2006) against:		
Tuberculosis (BCG)	96	87
Diphtheria/pertussis/tetanus, 1 dose (DPT1)	96	89
Diphtheria/pertussis/tetanus, 3 doses (DPT3)	92	79
Polio (polio3)	92	80
Measles	93	80
Hepatitis B (hepB3)	89	60
<i>Haemophilus influenzae</i> type b (Hib3)	90	22
EDUCATION		
Percentage of primary school entrants reaching grade 5 (administrative data; 2000–2006*)	85	78**
Net primary school attendance ratio (2000–2006*)		
Male	90	80
Female	91	78
Net secondary school attendance ratio (2000–2006*)		
Male	-	50**
Female	-	47**
Adult literacy rate (2000–2005*)	90	78

STATISTICS

INDICATOR	REGION	WORLD
ECONOMIC INDICATORS		
GNI per capita (US\$, 2006)	4,847	7,406
Percentage of population living on less than \$1 a day (1995–2005*)	9	19
Percentage share of central government expenditure (1995–2005*) allocated to:		
Health	7	14
Education	15	5
Defence	4	11
Percentage share of household income (1995–2004*):		
Lowest 40 per cent	12	20
Highest 20 per cent	56	42
HIV and AIDS		
Adult prevalence rate (15–29 years, end-2007) [†]		
Latin America	0.5	0.8
Caribbean	0.1	
Estimated number of people (all ages) living with HIV (2007) [†]		
Latin America	1,600,000	33,200,000
Caribbean	230,000	
Estimated number of children (0–14 years) living with HIV (2007)	54,000 [‡]	2,100,000
Estimated number of children (0–17 years) orphaned by AIDS (2005)	-	15,200,000 [‡]
CHILD PROTECTION		
Birth registration [§] (1999–2006*)		
Urban	89	-
Rural	93	-
Rural	83	-
Child marriage (1987–2006*)		
Urban	26	-
Rural	24	-
Rural	31	-
Child labour (5–14 years, 1999–2006*)		
Male	11	-
Female	12	-
Female	10	-
WOMEN		
Adult literacy parity rate (females as a percentage of males, 2000–2006*)	99	86
Antenatal care coverage (percentage, 2000–2006*)	94	75
Skilled attendant at delivery (percentage, 2000–2006*)	-	63
Lifetime risk of maternal death (2005)	1 in: 280	1 in: 92

NOTES:

* Data refer to the most recent year available during the period specified.

** Excludes China.

- Data not available.

§ The global and regional estimates for birth registration included in this table are based on the subset of countries for which data are available for the period 1999–2006. Global and regional estimates for a wider set of countries are available for the period 1997–2006 and can be found at www.childinfo.org/areas/birthregistration.

[†] Data on HIV and AIDS is derived from the *2007 AIDS Epidemic Update*, released in November 2007 by the Joint United Nations Programme on HIV/AIDS. Those indicators which are reported here but do not have a corresponding figure in the *2007 AIDS Epidemic Update* refer to the year 2005, and correspond to figures published in UNICEF's *The State of the World's Children 2008*, p. 129.

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