

# Knowledge Brief

*Health, Nutrition and Population Global Practice*



## ACHIEVING MDGS 4 & 5: EGYPT'S PROGRESS ON MATERNAL AND CHILD HEALTH

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### KEY MESSAGES:

- Egypt has achieved its targets for MDGs 4 and 5. This is due in large part to the country's strong focus on reproductive, maternal, and child health. The country's long standing programs for family planning, childhood immunizations and control of diseases have been an important component of Egypt's strategy.
- After the 1994 landmark International Conference on Population and Development (ICPD) in Cairo, the country moved towards integrated approaches to maternal and child health. These were critical in further reducing maternal and child mortality, especially through increased focus on the poor and marginalized areas of Upper Egypt. Maternal mortality declined by 52 percent between 1992 and 2000, in part due to the Healthy Mother/ Healthy Child Project.
- While Egypt has done a great deal to improve maternal and child health, challenges remain especially in relation to women's autonomy. Egypt has seen political and social unrest since 2011 which has escalated in the past year with negative consequences for economic growth and social development.

### Introduction

Egypt is a lower-middle-income country with a GNI per capita (PPP) of US\$ 5,654 in 2012. Since the "Arab Spring", Egypt's economic growth has slowed to 0.6 percent in 2012. Half of Egypt's 82.54 million people live in rural areas. Poverty is concentrated in Upper Egypt (the southern region). As of 2009, 43.7 percent of Upper Egypt's rural population was living in poverty.

Egypt has made considerable progress in improving maternal and child health. According to interagency estimates, child mortality declined from 86 to 21 deaths per 1,000 live births between 1990 and 2012 – a 75.4 percent drop, that exceeds Egypt's target for MDG 4. Egypt also successfully reduced neonatal mortality by 65 percent during the same period. Egypt's maternal mortality ratio (MMR) declined from 120 to 45 deaths per 100,000 live births between 1990 and 2013 – a 62 percent decrease, also exceeding its MDG 5 target.

However, recent political events in the country bring into question the long-term sustainability of gains if conditions do not improve.

This note explores the actions Egypt has taken to reduce child and maternal mortality, with a focus on policies and programs.

### MATERNAL AND CHILD HEALTH POLICIES

**Child Health:** Emphasis on immunizations and control of childhood diseases has been a priority in Egypt since the 1960s. Egypt further strengthened this focus by declaring the period 1989-99, the "*Decade of the Egyptian Child*", and then again from 2000 to 2010. Investment in children was promoted as the best investment for the future of Egypt. In 1996, the *Law of the Child* was passed, which aimed to use an integrated approach to address childhood issues including health. Provisions in the law are in line with Islamic principles, the Egyptian

Constitution, and the provisions of the Convention on the Rights of the Child. In 2008, the law was amended to include rights-based approaches.

**Maternal Health:** The first National Population Policy was promulgated in 1973 with the goal of reducing the crude birth rate from 34 to 24 births per 1,000 by 1982. The policy acknowledged socioeconomic development and the provision of family planning services as essential to reducing fertility. After the landmark *International Conference on Population and Development* (ICPD), which was held in 1994 in Cairo, family planning was merged with maternal and child health under the Ministry of Health and Population. The 1998–2002 Five Year Plan also adopted a comprehensive approach, integrating family planning, maternal, and child health into a general women's health program focused on quality of care and encouraging appropriate care-seeking behavior.

## MATERNAL AND CHILD HEALTH PROGRAMS

**Immunizations (1956):** DPT immunization was made compulsory in 1956, followed by other vaccines, including measles in 1977. Initiated as vertical programs, these were later incorporated into the *Expanded Program of Immunization* (EPI). In 1985, Egypt set a national goal for achieving universal coverage by 1987. While it was not achieved, immunizations began to rise, increasing from 35 percent in 1988 to 92 percent in 2008. The World Health Organization declared Egypt free of neonatal tetanus in 2006.

**Control of Diarrheal Disease (1982):** This program addressed one of the leading causes of Egypt's under-5 mortality, by introducing oral rehydration salts (ORS) through both the public and private sectors along with media campaigns to raise awareness and teach mothers how to use ORS. The program helped to reduce diarrheal deaths by 300,000 between 1982 and 1989 - diarrheal mortality decreased 62 percent in children under-5 years of age and 82 percent in infants during this period.

**Acute Respiratory Infections Program (1989):** Aimed at addressing another leading cause of child deaths, the acute respiratory infections (ARI) program used standard case management to detect illnesses early and provide treatment. As part of the strategy, health service providers counseled families to improve communication, education and utilization. By 1994, access to standard case management had reached 85 percent.

In 1997, Egypt combined all existing vertical programs under the *Integrated Management of Childhood Illness* (IMCI) program and began expanding the approach to other cost effective interventions. IMCI has improved the quality of primary health care services offered to children with universal coverage at PHC facilities, and it has been associated with doubling the rate of reduction of under-5 mortality in districts implementing IMCI.

**Child Survival Project (1985):** This 10 year project aimed at reducing maternal and child deaths by focusing on four vertical programs: EPI, ARI, child spacing, and nutrition. By 1995, there was a 35 percent decline in infant mortality and a 59 percent decline in under-5 mortality on average. The MMR declined from 220 to 174 maternal deaths per 100,000 live births between 1988 and 1992–93 - a 21 percent reduction, surpassing the project's goal of a 15 percent decline.

**Family Planning Program (1973):** Initiated as part of the National Population Policy, the family planning program focused on information and education campaigns alongside service provision; with choice of contraceptives increasing over the following three decades. The government also invested in developing local leadership and ownership of service provision among health service providers to improve quality of services through the Leadership Development Programme. After ICPD 1994, family planning was integrated into the MCH program.

The World Bank's *Population Project (1996–2005)* further stimulated demand for smaller families and family planning services in high-fertility areas of rural Upper Egypt through socioeconomic improvement (micro credit, literacy eradication activities, and home visits using a network of Social Change Agents). On average, contraceptive prevalence increased from 44 percent to 55 percent between 2000 and 2005 at the village level. Positive changes in male attitudes were also noted, especially because of microcredit.

Overall, the FP program in Egypt is credited for the decline in maternal and infant mortality, with 3.8 million fewer infant deaths and over 7 million fewer child deaths, and for preventing 18,000 maternal deaths from 1980 to 2008.

**The Healthy Mother/Healthy Child Project (1998):** Aimed at reducing regional disparities, the project focused on Upper Egypt and enhanced the infrastructure of maternal and neonatal wards in hospitals; improved services via extensive training of physicians, nurses, and obstetricians/gynaecologists; developed standardized national guidelines; trained nurses as midwives; improved the referral network from the primary to the tertiary level; and developed an integrated maternal mortality surveillance system. Urban births attended by a trained health provider increased by nearly 45 percent between 1998 and 2003. In 2003, 77 percent of urban births and 50 percent of rural births were attended by a trained health provider, and the proportion of rural births delivered in a health facility doubled. Overall, maternal mortality declined 52 percent from 1992/93 to 2000, with the magnitude of change significantly greater in Upper Egypt (59 percent) compared to Lower Egypt (30 percent).

Figure 1 shows the timeline of MDG 4 and 5 interventions in Egypt. Caution should be taken in inferring any causality since multiple factors contribute to maternal and child mortality.

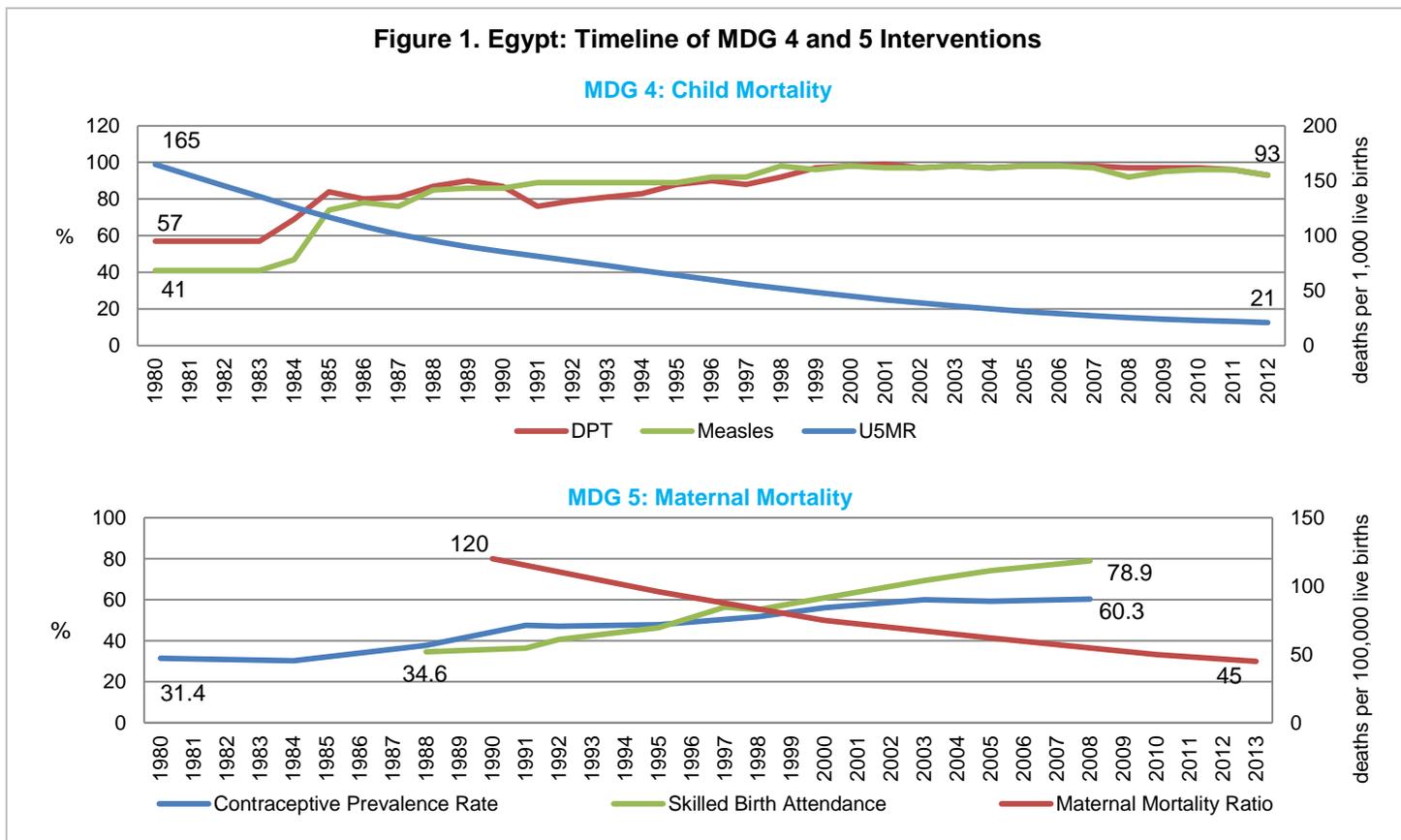
**HEALTH SYSTEM**

Egypt's health care system is characterized by widespread geographic coverage of both public and private providers. The public health care infrastructure in Egypt is quite

strong, with approximately 5,000 public primary care facilities and 1,100 public hospitals located across the country. High population density around the river Nile and well-developed infrastructure of roads and facilities means that most people live within close reach of health services. In most cases, both rural and urban residents live within 5 kilometers of a health care facility making access easy.

**Health Insurance:** Half of Egypt's population is covered by health insurance under the *Health Insurance*

**Figure 1. Egypt: Timeline of MDG 4 and 5 Interventions**



**Pre-1980**

- 1937:** Official Fatwa (declaration) supports use of family planning under specific conditions
- 1945:** Provision of family planning services by civil society
- 1956:** DPT vaccination made compulsory
- 1962:** Egypt's National Charter establishes support for family planning
- 1968:** Compulsory Poliomyelitis vaccination
- 1973:** Compulsory BCG vaccination
- 1973:** First National Population Policy followed by first public Family Planning Program
- 1977:** Compulsory Measles vaccination.

**1980-1995**

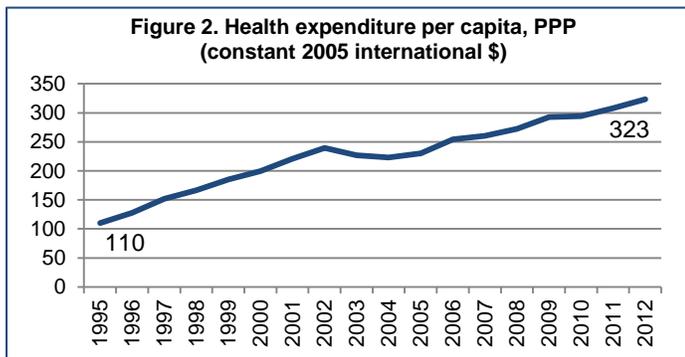
- 1982:** Control of Diarrheal Disease (CDD) Program
- 1985:** Child Survival Project initiated, and National Population Council (NPC) established
- 1987:** Acute respiratory infections (ARI) program
- 1991:** Social Fund for Development established. In subsequent years it supports activities aimed at improving family planning and maternal health
- 1992-93:** Maternal Mortality Study
- 1993:** Student health insurance introduced targeting public school populations. Extended to children aged 0 to 1 years by 1997.

**1996-2012**

- 1996:** Law of the child enacted
- 1997:** IMCI introduced
- 1997:** Health Sector Reforms
- 1998-2005:** Healthy Mother/Healthy Child Project helps reduce regional disparities
- 1998:** Maternal mortality surveillance system established
- 2000:** National Council for Women established; seminal maternal mortality study
- 2008:** Law of the Child amended with a rights-based focus; female circumcision criminalized
- 2012:** New Constitution guarantees free MCH and healthcare for the poor.

**Organization (HIO).** Additionally, all Egyptians can receive free basic care through the public health system; however, certain services, such as laboratory services, must be paid for out-of-pocket. Out-of-pocket expenditures (as percentage of total health expenditures) increased from 48 percent (2001) to 60 percent (2012). In 1993, the government introduced the Student Health Insurance program, which increased the total beneficiary population from 5 million in 1992 to 20 million in 1995. In 1997, coverage was extended to children under age one, which by 2002 increased the eligible beneficiary population to 30 million.

**Health Care Reform:** Egypt took a step toward universal health coverage with the *Health Sector Reform Program (HSRP)*, which ran from 1997–2005. The program extended health services to poor populations by restructuring the primary health care services based on the Family Health Model (FHM). Under the FHM, uninsured families rather than individuals are registered with specific doctors and facilities in their home neighborhood. This was aimed at improving access to services for women, children, and other disadvantaged populations. An impact evaluation of the pilot found that HSRP improved maternal nutrition and use of family planning but had no impact on prenatal and natal care. Child vaccination rate and access to medical treatment also improved. Figure 2 presents the recent trends in the per capita health expenditure which has tripled since 1995.



**Monitoring Outcomes:** Egypt’s health information system integrates vertical surveillance systems for different programs, including family planning, EPI, and ARI. Data is collected at the local, regional, district, and governorate levels. The first Maternal Mortality Study (1992/93) was pivotal in directing focus on Upper Egypt where the burden of poor maternal and child health was higher. It also prompted standardized protocols and guidelines for obstetrics/gynecological care. In 1998, Egypt established a maternal mortality surveillance system based on death notification data at the district level.

## CREATING AN ENABLING ENVIRONMENT

**Women’s Empowerment:** The Family Tribunal Law, the Nationality Law, and the Family Court Law have built stronger legal rights for women and children. In 2000, the National Council for Women was established to enhance the status and participation of women. The *Egyptian Social Fund for Development (SFD, 1991)* was important in addressing equity and empowerment by increasing employment opportunities through community development, public works, microcredit and small enterprises. It also included population and family planning into outreach programs. An estimated 32 percent of low income Egyptians benefited from the SFD between 2001 and 2008.

**Education:** Increasing enrollment of girls in schools has been important in Egypt through initiatives such as the Community Schools Initiative (1992), the One Classroom project (1993), and the Girls’ Education Initiative (2000).

**Employment Rights:** Women’s rights in the labor force are protected under the 2003 Labor Law, which guarantees that all provisions of the labor code apply to women, mandates a 90-day paid maternity leave, and prohibits gender-based wage discrimination and dismissal of women while on maternity leave.

**Leadership:** Senior Egyptian policy makers have been instrumental in moving the country forward on MCH by maintaining policy and programmatic focus on MCH.

## Future Challenges

Egypt has made great gains in reducing maternal and child mortality. However, some challenges persist, while new ones are emerging. Chronic diseases have become the leading cause of adult mortality in Egypt. Pregnancies are increasingly at risk due to overweight/obese mothers, hypertension, and diabetes. Neonatal and post-neonatal complications are responsible for 30 percent of infant deaths in Egypt whereas congenital anomalies account for another 21 percent. In addition, differences due to income, education, and residence have an impact on access to care. Women’s autonomy over their own health care is another persistent challenge. Continued political and programmatic commitments are needed to maintain gains made and close the remaining gaps.

*This HNP Knowledge Brief highlights the key findings from a study by the World Bank on “Maternal and Child Survival: Findings from Five Countries’ Experience in Addressing Maternal and Child Health Challenges” by Rafael Cortez, Seemeen Saadat, Sadia Chowdhury, and Intissar Sarker (forthcoming)*

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