Egypt: A simple way to save young lives

EGYPT is one African country that has made remarkable progress in reducing the number of children dying before age five. In 1970, the country had an under-five mortality rate of 235 per 1,000 live births, meaning that almost 1 in every 4 children did not reach their fifth birthday. By 1990, however, that rate had been reduced to 91 per 1,000 live births, and in subsequent years, Egypt reduced child mortality by more than two thirds, to 35 per 1,000 live births. Now, the country is on track to cut this number to 30 per 1,000 live births and meet the Millennium Development Goal target by 2015.

One reason for Egypt's outstanding success in increasing child survival is its pioneering adoption of oral rehydration therapy (ORT) to treat infant diarrhoeal diseases. In the late 1970s, diarrhoea was responsible for at least half of infant deaths in the country and accounted for more than 30 per cent of children's hospital admissions. In 1977, the Egyptian Ministry of Health introduced a simple solution of salt, sugar and clean water, known as oral rehydration salts (ORS), in public clinics and commenced local production of ORS packets. At first, usage of the treatment was slow to pick up. By 1982, only 10–20 per cent of diarrhoea cases were treated with ORS, and most of the salts lay untouched in warehouses and clinics. Instead, the most widespread treatments were ineffective antidiarrhoeal medicines, and physicians commonly recommended that mothers withhold fluids and food and suspend breastfeeding.

Building on the success of community trials the previous year, in 1981 Egypt established the National Control of Diarrhoeal Diseases Project with financial support from external donors and consultants. The project involved the Ministry of Health and other branches of government, the private sector, professional societies and international organizations, including WHO and UNICEF. In 1984, the programme became fully operational. It began with a pilot study to test various approaches and gather baseline information relevant to all the interventions; it was then scaled up based on this information.

The main components of the project were strengthening local production, establishing an extensive distribution network, training health-care providers, developing product design and branding, and carrying out promotion and marketing. Television was chosen as the key mass-education medium after research showed that 90 per cent of households owned a television set. Public-service advertisements brought awareness of ORT to rural communities with high illiteracy rates. Rehydration training centres were established at all levels, from local health centres to universities and central hospitals. Extensive training was provided to doctors and nurses, and oral rehydration therapy was included in basic nursing and medical training.

Good results came quickly. By 1986, nearly 99 per cent of Egyptian mothers were aware of ORS, use of the solution was widespread, and most women could correctly mix the solution. The number of children brought into clinics for treatment of diarrhoea rose from 630,000 in 1983 to 1.4 million in 1985. Infant mortality was reduced by 36 per cent and under-five mortality by 43 per cent between 1982 and 1987. Diarrhoea-related mortality during this same period fell 82 per cent among infants and 62 per cent among children under five. It was estimated that the ORT campaign prevented the deaths of 300,000 children between 1982 and 1989.

The intervention was cost-effective, too. The average cost per child treated with oral rehydration therapy was estimated at less than US$6, and the cost per death averted was US$100–$200. Today, most Egyptian children enjoy their most basic right to survival. Still, 1 out of 28 children in Egypt does not survive to age five, and child-mortality rates in Upper Egypt – the poorer, mostly rural part of the country south of the fertile and urbanized Nile Delta – remain glaringly inconsistent with those in the rest of the country and in North Africa as a whole.

Even in countries where ORT has been promoted, there are obstacles to increasing coverage to prevent deaths resulting from diarrhoeal disease. Most private clinics still do not prescribe ORS and instead use intravenous therapy. Doctors and other health-care providers in the private sector must be encouraged to use ORT. The underlying causes of diarrhoea, including poor access to education, limited empowerment of mothers, and the lack of safe water and improved means of sanitation, also need to be addressed.

Egypt boasts rates of more than 98 per cent in use of clean water sources and 70 per cent in use of improved sanitation; its rates for immunization against six main childhood diseases are above 98 per cent overall. It lags, however, in the prevalence of exclusive breastfeeding, as does the North Africa subregion as a whole. According to most recent estimates, 14 per cent of Egyptian newborns are underweight at birth, and only 38 per cent are exclusively breastfed in the crucial first six months of life. This figure is the exact average for developing countries as a whole but stands out in a subregion where most other child-health indicators are much better than the global norm.

Despite the remarkable success of ORT in Egypt, the programme's sustainability could be threatened by inadequate financing. Experience shows that when funding for oral rehydration programmes is cut, rates of ORT usage fall sharply. Such rapid declines indicate that behaviour change is still far from widespread, even among health professionals, and that further education and training are still needed.

See References, page 52.