The Pediatrician among Family, Protocols and Guidelines

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PAEDIATRIC HEALTH CARE
IN EGYPT

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- **Population:**
  74 million (2003)
- **Population Growth Rate:**
  1.9%
- **Number of live births:**
  1,820,050
- **Life Expectancy:**
  70.4 years
- **Crude Birth rate:**
  24.4/1000
- **Crude death rate:**
  5.4/1000
EGYPT
GOVERNORATES

• Egypt is more urbanized than other countries at a comparable stage of development

• 44% of the population live in urban areas compared to 17% in the early 1900’s

The period 1989-1999 was declared a ‘Decade for Egyptian Child’

followed by

‘The Second Decade of the Egyptian Child’
2000-2010
### Current Situation of PHC

**Types and Numbers of PHC Facilities**

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Health Unit</td>
<td>2837</td>
</tr>
<tr>
<td>5000 - 10000</td>
<td></td>
</tr>
<tr>
<td>Rural Health Centers</td>
<td>312</td>
</tr>
<tr>
<td>up to 100000</td>
<td></td>
</tr>
<tr>
<td>Rural Health Hospitals</td>
<td>363</td>
</tr>
<tr>
<td>Urban Health Centers</td>
<td>255</td>
</tr>
<tr>
<td>MCH (children &lt; 5 yrs)</td>
<td>197</td>
</tr>
</tbody>
</table>
Vision of PHC

Apply health reform strategies in providing PHC services package responding to the community needs and assuring quality and efficiency of services with the separation between the financial authorities and the provision of services.
Elements of PHC

- Affordability
- Accessibility
- Universality
- Efficiency
- Sustainability
Packages of PHC Services

1 - Individual Health Package

2 - Public Health Services
I - Individual Health Package

A- Child health care services

- Neonatal care and Neonatal screening for CH.
- Immunization
- Growth and development monitoring
- IMCI (Integrated Management of Child Illness)
- Nutritional support
- Breastfeeding promotion & support
B- Women Health Care Services

- Reproductive health services
- Family planning
- Maternal health services
  - ANC (Ante Natal Care)
  - Natal Care
  - Post natal care

- Nutritional support (folic acid, fe)
- Health education & counseling
C- Adult health services

Prevention and control of chronic diseases

- Hypertension
- T.B.
- Ischaemic Heart Disease
2- Public Health Services

- School health services
- Environmental health services (sanitation, smoking…)
- Preventive Health Services (iodization)
- Communicable disease control
- Health promotion
- Upgrading the quality of undergraduate medical education for physicians and nurses.

- Developing a strong health system having the ability of accrediting, monitoring and evaluating the provided services.
Child’s Health in Egypt: Current Status
The **U5MR** has fallen from 243 deaths per 1,000 births in the 1960s; to 33 per 1,000 live births in 2005.

The **IMR** (under one) has fallen from 76 per 1,000 live births in 1990 to 28 in 2000.

In Egypt, **95 out of every 100** children are reported as ever breastfed, 38 % of those less than six months of age are exclusively breast fed,
The prevalence of iron deficiency anemia in under 5 years old is 40%.

Egypt National Food Fortification Program aims to reduce micronutrient deficiencies, particularly, iron and folic acid by fortifying wheat flour used in baking “baladi bread”
Despite a shining sun all through the year, rickets is still prevalent in Egypt.

A study reported differences in palmar dermatoglyphics between rachitic infants and controls. El Kholy et al (1992) noticed a high incidence of rickets among male infants and that blood group A was significantly associated with rachitic patients. Moreover, a relative resistance to vitamin D was suggested, demonstrating a need for 600,000 IU of vitamin D, repeated three - four times, every 3 weeks to cure rickets.
A study has recently demonstrated associations of clinical and biochemical parameters with vitamin D receptor polymorphisms, suggesting that rickets might be the result of interaction between genetic and environmental influences.

The cause of rickets in Egypt remains an enigma.
Neonatal screening program for congenital hypothyroidism began in Egypt in 2000. Screening is done by TSH assay with a cut-off of 15 μU/ml. The prevalence in 2004 was 1: 2020.
The campaign of salt iodization, has been reinforced lately. Salt iodization data in 2005, revealed that 68% of households consume iodized salt with an iodine content of 15 parts per million or more.

The population has now adequate iodine intake with a median urinary iodine of 18.3 μg/dl.

Iodine nutrition in Egypt is now considered as optimal.
The incidence of diarrhea showed a decline from 15.9% to 7.1% between 1995 and 2000.

Regarding respiratory infections, the incidence decreased from 23.2% in 1995 to 9.5% in 2000.

The prevalence of rheumatic heart disease in 1973 was 10/1000; it dropped to 2.8/1000 in 2003.
The Ministry of Health and Population most recent data, suggest that the total number of registered HIV/AIDS cases does not exceed 1500. The prevalence rate is below 0.1% of the population. The majority of infections occur as a result of sexual transmission in 66% of all cases. It is estimated that 81% of all infections and cases identified to date are male. Mother to child transmission is still very rare.
UNICEF 2007 report, show that coverage levels for BCG, measles, DPT and polio vaccines are 98%. The vaccination coverage for the three doses of hepatitis B vaccine is 98%.

100% of routine vaccines are financed by the government.
Vitamin A supplementation

Egypt has a program of vitamin A supplementation for postpartum mothers and young children. A capsule is administered to new mothers within the first two months after delivery, so that the infant may receive an adequate quantity through breast milk, young children are given one vitamin A capsule (100,000 units) at the age of nine months. Two additional capsules (200,000 units) are given to children at age 18 months with the booster polio dose.
**Diabetes mellitus** is increasing. In 1985, the estimated prevalence rate among 6-18 year-olds was 0.33 per 1000 while in 1990, it was 1.09 per 1000.

**Hepatitis C** infection, the seroprevalence rate is estimated to be 8% among 14 year-olds, 9% among 10 year-olds and 6% among those less than five years.
Schistosomiasis

Egypt had been very successful in almost eradicating schistosomiasis as the prevalence of infection came down from 15.7% in case of S. haematobium and 48.3% in case of S. mansoni in 10 to 15-year-olds to less than 5% for both species and this is due to the mass oral treatment by praziquantel in high risk areas.
Because of the high rate of consanguinity in Egypt (29-50%), the prevalence of autosomal recessive diseases is high. In 2004, β-thalassemia minor was ascertained in 3.2%, intermedia in 4.7/100000 and β-thalassemia major in 3.8/10000.
CONCLUSION
In Egypt good advances have been made in a number of fields through the implementation of vertical national programs such as the National Control for Diarrheal Disease Program, the Expanded Program of Immunization (EPI), the Acute Respiratory Disease Program (ARDP) and most recently the Integrated Management of Childhood Illness (IMCI) Program. The incidence of other diseases as type 1 diabetes and hepatitis C virus is rising.
Hope remains with the prospect of improving the health system through expanding the social health insurance coverage from 47 % (in 2003) of the population to universal coverage based on the “family” as the basic unit.
Thank you