

# Overview of Child Health in Arab Countries



WORLD HEALTH ORGANIZATION  
Regional Office for the Eastern Mediterranean

## OVERVIEW OF CHILD HEALTH IN ARAB COUNTRIES

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### INTRODUCTION

At the World Summit for Children held in 1990, World Leaders committed themselves to give every child "a better future". To achieve this objective, 23 out of the 27 goals were related to health.

Challenges that can hamper growth and development and affecting the Child Health were admitted by the world leaders, hence their commitment to the 10 points programme (7 out of which are related to child survival, protection and development), to reach the goals of the Summit.

The Arab Region is characterized by its wide diversity in the mortality rates, socio-economic development and health systems.

### MORTALITY TRENDS IN THE ARAB COUNTRIES

The under 5 population of the Arabic World represents about 19.07% of the total population. There was a rapid pace of decline in the under five mortality (U5M) that reached a peak in second half of the 70s, and stayed at that peak through the 1980s, but progress slowed in 1990s. Despite this remarkable reduction, improvements in mortality rates have been unevenly distributed.

The Arab Region can be divided in terms of mortality into three categories:

1. Countries with high levels of socio-economic development and low U5M rate
2. Countries undergoing economic transition with moderate U5M rates
3. Countries with low socio-economic development with high U5M rates

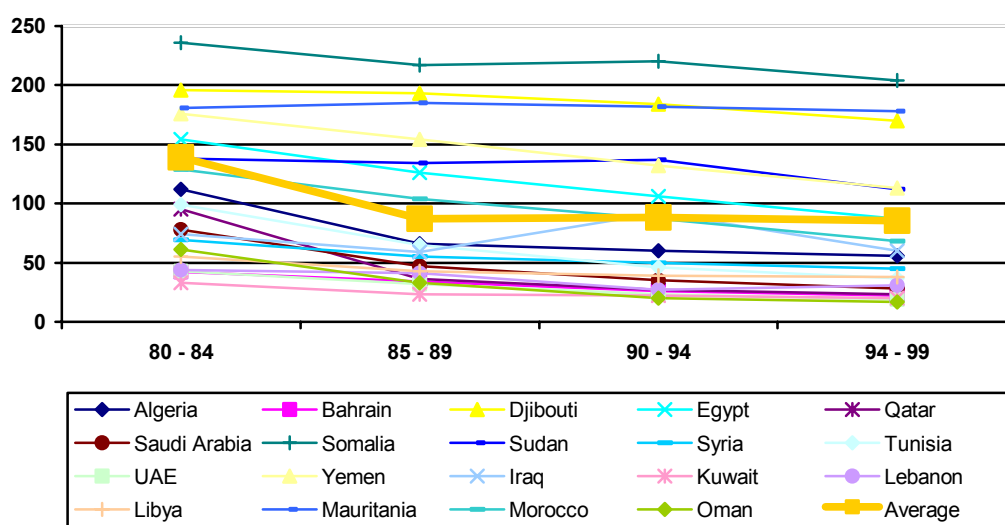


Figure 1. Mortality trends in the Arab Countries I, 1980 - 1999

Reductions in the mortality have been the result of public health programmes including immunization, control of diarrhoeal diseases (CDD) and acute respiratory infections (ARI) and nutrition. Despite significant reduction in deaths from communicable diseases at later ages (age 1 – 5), most deaths occur in children less than one year of age. Moreover, early neonatal mortality (deaths during the first week of life) accounts for up to a quarter of all deaths among children under age 5. Infection, asphyxia, birth trauma and prematurity complications are the 4 major causes of those deaths.

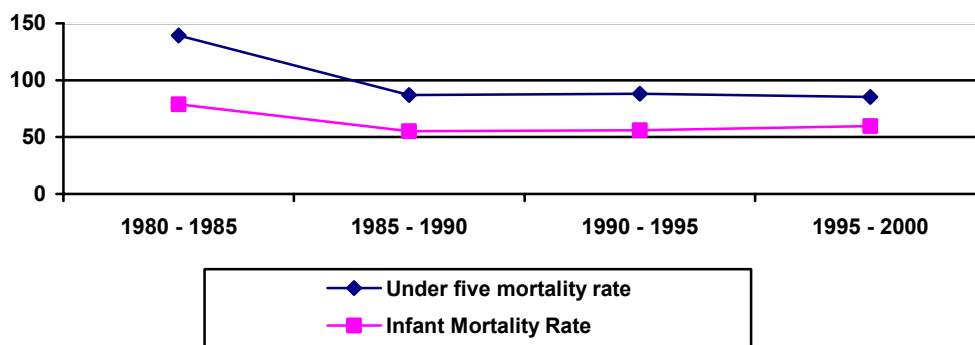


Figure 2. Average under five and infant mortality rates in the Arab Countries in the 80s and 90s.

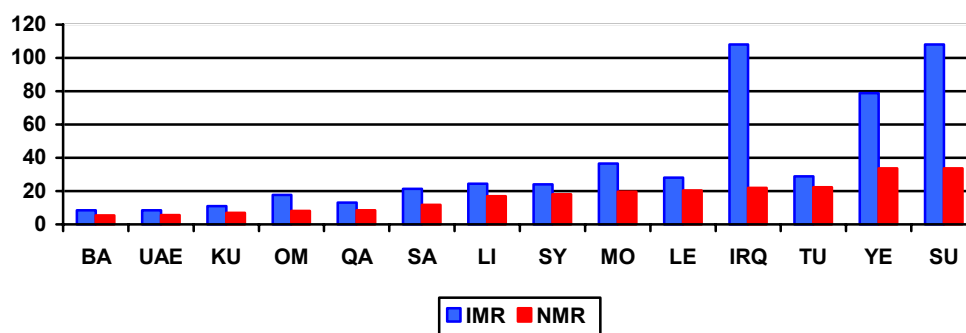


Fig. 3 showing infant mortality and neonatal mortality rates in some of the Arab Countries.  
Note: Infant mortality includes neonatal mortality which, in turn, includes early neonatal mortality.

Other factors have offset the benefits of these effective interventions, including poverty and inequity in several countries. Moreover, new emerging threats contributed also heavily to the slowing down the decline of U5M rate such as economic sanctions and armed conflict and in some countries HIV/AIDS. There are lessons to be learned in renewing efforts to increase child survival from the successful interventions.

### 1. Immunization

Among Arab Countries, successful implementation of the expanded programme of immunization (EPI) has remarkably contributed to the improvement of child survival by reducing mortality related to the communicable diseases.

#### a. Diphtheria

Diphtheria immunization coverage has increased greatly from 4% in 1980 up to 80% in 1990. This led to a corresponding reduction of diphtheria incidence from 12.7 in 1980 to 0.857 in the year 1999 (see fig. 4).

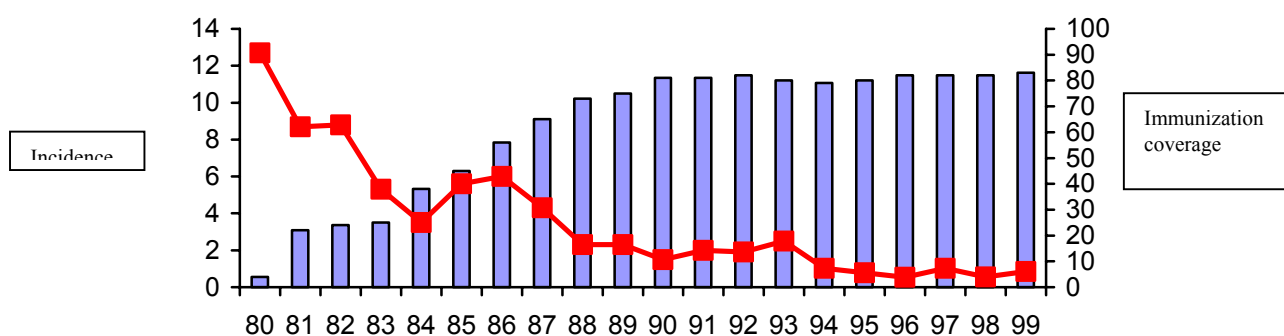


Fig. 4 shows reported incidence (red line) of diphtheria and the immunization coverage (Blue columns) 1980 to 1999

*b. Measles:*

Similarly, through measles immunization coverage has increased over the last 20 years from 4% in 1980 up to 83% in 1999. More important, the incidence of measles has decreased from 346.5 in 1980 to 41.46 in 1999 (see fig. 5)

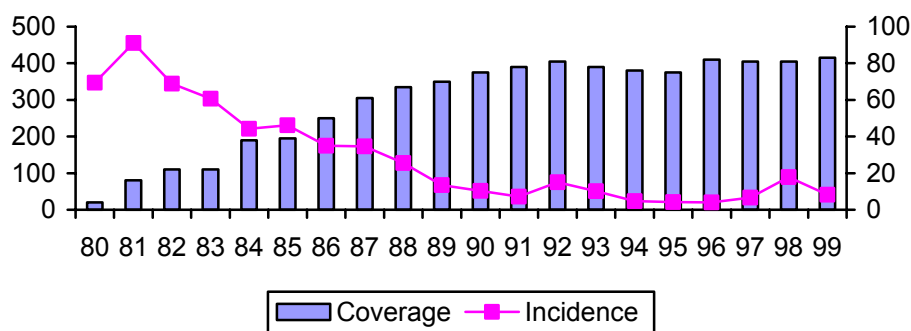


Fig. 5. Reported incidence of measles and immunization coverage from 1980 - 1999

*c. Tetanus*

The situation for maternal and neonatal tetanus is not straight forward as is the case for other communicable diseases. Nevertheless, neonatal tetanus incidence has declined as coverage of maternal TT2 has increased (see fig. 6).

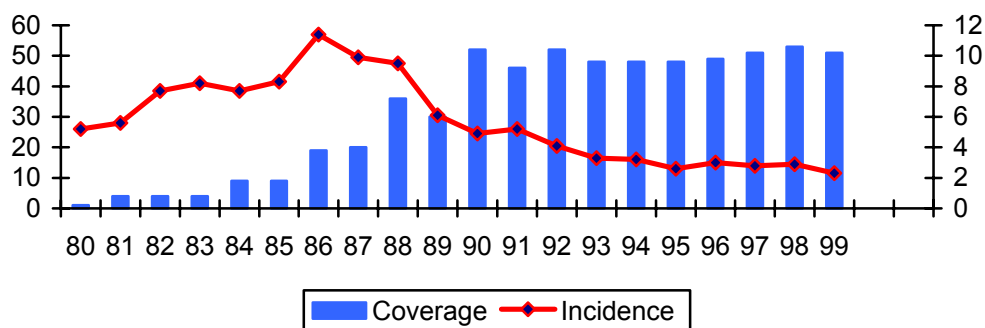


Fig. 6. Reported incidence of neonatal tetanus and TT2 immunization coverage of pregnant women.

Despite these efforts and successes and the fact that immunization is the most cost effective intervention against poliomyelitis, measles, diphtheria, tetanus, pertussis and tuberculosis, yet immunization programmes are faced with some concerns:

- Problems of accessibility to vaccines due to low coverage by health facilities, sub-optimal delivery strategies and unavailability of services in conflict areas and for mobile and displaced populations;
- Low coverage rates in some areas due to lack of public awareness of the importance and value of immunization as well as unavailability of vaccines;
- Low coverage due to misinformation about the contraindications of vaccines, adverse events and multiple injections;
- Poor Quality of immunization services, including: missed opportunities of immunization, lack of defaulters tracing and follow up, overcrowded immunization sessions and improper health staff behaviour;
- High costs of new vaccines, lack of resources for coverage acceleration and lack of resources for renewal and replacement of cold chain equipment;
- Vaccine shortages, lack of necessary supplies and breakdown in logistics.

#### d. Poliomyelitis

Remarkable progress has been made in reducing poliomyelitis in the Arab Region: the powerful combination of high political commitment, simple quantifiable indicators and the great increase in the poliomyelitis vaccination coverage have led to a significant reduction of polo incidence in Arab Countries as shown in fig. 7.

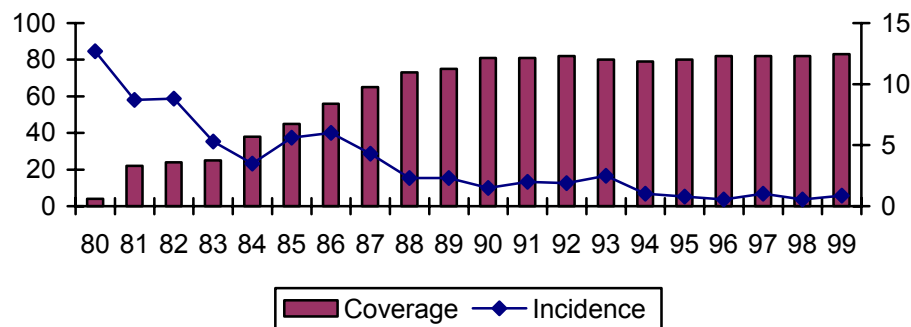


Fig. 7. Reported poliomyelitis immunization coverage and incidence from 1980 to 1999

EMRO is contributing greatly to the global Polio Eradication Initiative since its launching in 1988. EMRO plays an important role in monitoring and applying international certification standards, indicators and strengthening disease surveillance. EMRO is also collecting, analysing and disseminating data and assuring the quality of vaccine supply from both international and local sources.

About 15 Arab countries reported zero polio cases, yet none is declared polio free as the regional office target is to certify the whole region polio free. Further efforts will be needed to secure access to all children, maintain political commitment and interagency coordination in countries, train human resources, strengthen management and administration and further improve social mobilization.

## ***2. Diarrhoeal Diseases***

In 1980, diarrhoeal diseases were among the major killers of under-five children. Due to the great achievements of the Control of Diarrhoeal Diseases programmes, a remarkable decline of deaths from diarrhoea has been achieved. This success can be attributed to consistent promotion of the standard case management in health facilities, local production and wide use of ORS and increased awareness among families of how to correctly manage cases at home, with special emphasis on continuing feeding of children during illness. Social marketing of ORS and through community-based interventions has been an important tool of reducing mortality due to diarrhoea.

EMRO contributed to WHO leading role at the global level in the development and practical implementation of programmes for the control of diarrhoeal diseases (CDD) in the Arab Countries. During the 1980's and 1990's, almost all the Arab Countries established programmes to control diarrhoeal disease. In most cases, WHO/EMRO and UNICEF/MENARO, in collaboration with WHO/HQ, directly supported planning, training, implementation and evaluation of the CDD programmes. Pre-service training in diarrhoea case management was introduced in medical and nursing schools in almost all the Arab Countries. Working with UNICEF/MENARO, EMRO supported countries in producing oral rehydration salts (ORS) locally. By studying family and community practices with regard to diarrhoea, education strategies and tools were developed and introduced.

In addition, EMRO conducted many activities aiming at promoting and supporting breastfeeding, to help improve child growth and development and prevent childhood illness, in particular diarrhoea. During the last decade, in close collaboration with UNICEF and other partners, EMRO has played a major role in various breastfeeding related activities, including development and promotion of the International Code of Marketing of Breast Milk Substitutes, the Baby Friendly Hospital Initiative and the development and implementation of breastfeeding counselling.

## ***3. Acute Respiratory Infections***

Acute respiratory infections remain the most common cause of child death in many countries (about 18% of under five mortality).

During the mid – 1980's, WHO/EMRO together with UNICEF/ MENARO introduced the programme for the control of acute of respiratory infections (ARI), drawing on an active programme of research and development and focussed on scientifically sound case management guidelines. It aimed to improve the recognition of ARI by families, to allow them to seek appropriate care promptly, to improve the quality of care for ARI in health facilities and to ensure the availability of affordable antibiotics. By mid 1985, almost all Arab Countries had introduced the ARI programme and, in about half of them, ARI activities were introduced through combined CDD/ARI programmes.

#### **4. Integrated Management of Childhood Illness**

The experience of implementing CDD and ARI programmes highlights two important lessons:

1. More lives can be saved by broadening the approach from just two conditions;
2. The technical approach to managing diarrhoea and acute respiratory infections provides a starting point for considering the needs of the child by linking clinical care, growth and development, disease prevention and promotion.

These lessons led WHO and UNICEF to develop the Integrated Management of Childhood Illness (IMCI) Strategy, intended to improve the equity and efficiency of services and save more children from preventable death. In addition to case management of acute illness, the strategy emphasises malnutrition's importance as an underlying cause of child mortality and morbidity. It also encompasses disease prevention and health promotion, specifically breastfeeding and nutritional counselling.

IMCI was first introduced in the EMR in 1996 and is currently being implemented in 12 Arab countries in the region. IMCI's flexibility has meant that it is adaptable to different health policies and systems in those countries. Despite this local adaptation, IMCI rests on three pillars: improving health system functioning, improving health providers' performance and improving family and community practices. Furthermore, IMCI has been shown to be among the most cost-effective interventions in the health system.

Countries in the region have committed to capacity building to support IMCI implementation and child health more generally with particular attention to planning, monitoring and supervision. EMRO has contributed to national capacity through its leading role in supporting medical and nursing schools to incorporate IMCI pre-service training in their programs.

The overall experience from the region demonstrates improved quality of health care services delivered to children, reduced costs of care due in part to rational use of medications and increased use of services as families and communities perceive the increased quality of the care.

Important issues for meeting the goal of implementing IMCI in all Arab countries by 2010 include:

- More emphasis needed on child development ;
- Community participation must be accelerated;
- Prevention components must be strengthened;
- Adequate data for evaluation must be collected regularly and used to adjust implementation;
- Maintaining strong political commitment and multi-sectoral collaboration.

## 5. Malaria

In 5 Arab countries, malaria is considered the first major child killer. EMRO is contributing to the global efforts of the Roll Back Malaria initiative (RBM) launched by WHO, UNICEF, the World Bank and UNDP in 1998, focussing on progressively increasing control activities in countries. In EMRO close collaboration between RBM and IMCI creates opportunities to benefit from the existing interventions of both: improving quality of case management of malaria, improving health system support and enabling affected communities to decrease their burden of malaria by ensuring their active participation in rolling back the disease.

## 6. Sexual and reproductive health/ Maternal Mortality

During the last decade, the concept of reproductive health has reshaped WHO's approach towards safe motherhood as horizontal and holistic rather than a vertical programme. To enhance the implementation of Safe Motherhood Initiative through the programmatic framework of reproductive health in countries, WHO developed the Mother-Baby Package that describes the minimum interventions of the four pillars of Safe Motherhood.

Maternal and neonatal mortality achievements have lagged behind infant and child mortality. Despite many success stories are achieved in the Arab countries, still there is a long way ahead to reach safe motherhood.

With respect to goal achievement of maternal mortality reductions, Arab countries can be divided into 3 categories:

1. Countries which have made significant improvements in maternal mortality but still must further strengthen the quality of safe motherhood with particular focus on neonatal health care;
2. Countries which have made some impact, but still need to bring about further mortality reductions
3. Countries which have made little or no impact on maternal mortality and still need extensive support to implement effective safe motherhood measures.

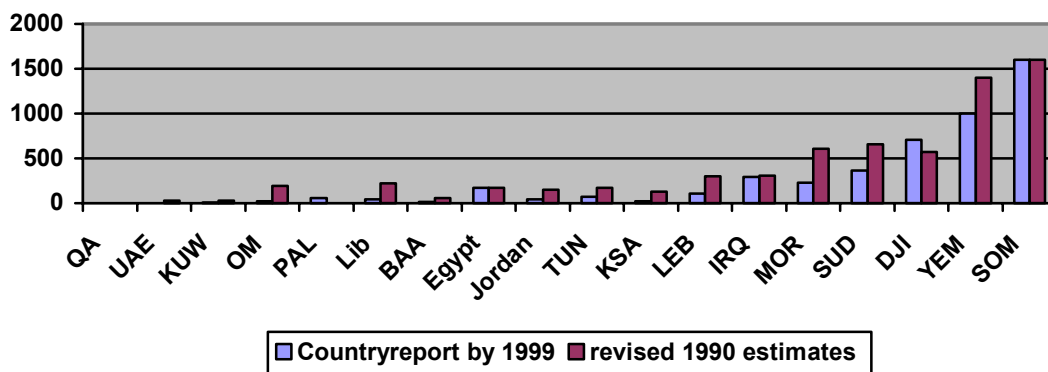


Fig. 8. Maternal Mortality rates in some Arab Countries in 1990 compared to 1999.

Measuring progress in reducing maternal mortality is difficult due to a combination of factors. First, many countries lack health information systems capable of providing accurate estimates of maternal mortality. Second, country to country variation in the elements of Safe Motherhood initiatives suggest disagreements or uncertainty regarding best practices. Furthermore, lack of resources and poor quality of care have made expansion of successful efforts difficult.

### **7. HIV/AIDS**

The HIV epidemic is still in its early stages in most of the Arab countries with the exception of Djibouti, Somalia and Sudan where the HIV spread has reached much more advanced situation. Nevertheless, the number of new infections is increasing steadily every year in all these countries and a few, specific population groups seem to be at particular risk of the infection, including injecting drug users and migrants.

Although currently relatively few in number, children infected with HIV do exist in countries of the region. Initially, most infections occurred via infected blood products. Recently, increasing numbers of children are infected during delivery or breastfeeding.

### **8. Adolescent Health**

Given the young population of the Arab countries, adolescents are critical as the foundation of the future. Adolescence is a period of rapid change when intellectual abilities are stimulated while cognitive and affective faculties are nurtured. During these formative years, adolescents are influenced by parents, teachers, peer groups, health care providers, the media and the religious and cultural norms in their communities. The health behaviours of adolescents, such as eating habits, use of tobacco and other substances, are crucial to the health and disease patterns that will be observed when this population reaches the adulthood.

The Arabic countries have predominantly younger structure.

EMRO is emphasising the importance of caring for this critical group through developing an education package for parents of adolescents, teachers and adolescents themselves. This important tool is considered as a very valuable one in raising the community awareness about the main issues and concerns for adolescent health.

### **9. Tuberculosis**

Tuberculosis is an important public health problem in the 19 Arab countries of EMR. Tuberculosis affects 240 000 people and kills 53 000 people every year in these countries. Although 85% of these cases and deaths occur among adults, tuberculosis has substantial impact on children.

First, those affected with tuberculosis are usually young adult males, often breadwinners in the family. Second, tuberculosis also affects adult females, namely mothers in the family. Since tuberculosis is the leading infectious cause of death in adults, tuberculosis is one of the leading causes of the death of parents creating orphans.

Moreover, tuberculosis still affects 17 000 children and kills 4 000 children every year in the 19 Arab countries.

Combating tuberculosis is one of the important challenges facing WHO increasingly. DOTS use, providing guidelines, building surveillance system, monitoring, increasing the immunization coverage, improving socio-economic status and raising public awareness are all part of WHO's agenda.

### ***10. Nutrition***

In Arab countries, 17.3 million (24.9%) children are underweight, 23.9 million (34.3%) are stunted and 5.2 million (7.5%) are wasted. In addition, severe, acute protein energy malnutrition is a problem in countries with complex emergencies (e.g.: Somalia, Sudan) or those under economic and political sanctions (e.g.: Iraq).

Growth retardation is largely linked to unsatisfactory infant and young child feeding practices. Recognizing the critical importance of those practices, WHO now recommends exclusive breastfeeding until the age of 6 months and complementary feeding and breastfeeding until age of 2 years.

#### *Vitamin A Deficiency*

Vitamin A deficiency is currently a major concern because it causes immunocompromise, respiratory infection and blindness. Only 4 countries in the Region still report clinical vitamin A deficiency, but 13 countries, including Oman, Egypt, Morocco and Jordan, have found that sub-clinical Vitamin A deficiency is present. For controlling and eliminating vitamin A deficiency, improvement in dietary intake of vitamin A and its precursors through fortification of edible oils and distribution of high doses of vitamin A supplements as part of the national immunisation days, will be necessary.

#### *Anaemia*

Control and treatment of anaemia, particularly iron deficiency, among children is essential. Between 25% to 40% of children under age five years are anaemic, primarily due to iron deficiency. EMRO is promoting fortification of flour with iron and folate, as a cost effective solution for mass prevention against iron deficiency.

#### *Obesity*

The increase in the prevalence of obesity among adolescents has been reported from several countries, with rates reaching as high as 40% in some countries. The resultant consequences of diabetes, hypertension and cardiac problems are also encountered in larger numbers from these countries. Rapid changes in life styles and food consumption patterns, because of economic prosperity, urbanization and globalisation, have contributed to rising levels of obesity.

Great efforts are still needed to treat & prevent severe & moderate protein-energy malnutrition in children below five years of age. These include:

1. Continue promotion of exclusive breastfeeding for 6 months and appropriate complementary feeding practices for infants and young children with continued breastfeeding till the age of 2 years;

2. Control and prevent obesity & diet-related non-communicable diseases, through appropriate food based dietary guidelines and environments that promote physical activity and healthy living styles;

3. Control and prevent micronutrient deficiencies, through fortification of food with micronutrients like iron, folic acid, vitamin A and D; ensure universal salt iodization; provide supplementation to the vulnerable populations like children under five and women in the child bearing age group at all possible opportunities

### ***11. Child Labour***

Child labour has been recognized as a serious problem in some of the Arab countries over the last decade. Various exploitative forms and harmful aspects of child labour still exist in the Arab countries. These types of work may have dangerous consequences on the physical, cognitive, emotional, social and moral development of the working children and may also expose them to fatal injuries and accidents.

These include: full-time work at too early age in hazardous environments, which expose children to dangerous chemicals, and physical stresses such as high levels of noise, heat and radiation; work that exerts undue physical, social or psychological stress; work and life on the streets and work that undermines children's dignity and self-esteem, such as slavery or bonded labour and sexual exploitation. Together with LAS, EMRO was working to develop Arab Plan of Action.

Many health professionals are not aware of the impact of hazardous factors at the workplace on children and the health outcomes that may result from these exposures. Most occupational health standards and regulations are established to mainly fit adults. Available data on these types of work are very rare, and if exist, not accessible

The causes of child labour are complex and include poverty, economic exploitation, social values and cultural circumstances. To be comprehensive, solutions must involve the widest possible range of partners in each society. EMRO's agenda previews the following actions for the future:

- Detailed situation analysis of the main health problems emerged from child labour should be conducted as soon as possible to prioritise the activities needed to control this phenomena;
- Research, directed to shed more light on the various aspects of child labour should be encouraged;
- Networking among organizations, institutions, individuals and researchers, interested in child labour should also be established.
- Upgrading PHC to respond effectively to the growing health risk related to this growing problem.

## **12. Protection of children's environmental health**

EMRO's strategy for Child Health integrates three themes:

1. Controlling disease due to poverty;
2. Improving environmental conditions; and
3. Mobilising social capital.

Specific interventions include: control of environmental hazards (especially lead), water fluoridation, traffic accident prevention, safe use of household chemicals and improvement of schools, playgrounds and sport facilities.

Major environmental concerns related to children's health include:

- a) Lack of adequate and safe water supply and sanitation in the least developed countries;
- b) Outdoor and, especially, indoor air pollution;
- c) Food safety and hygiene;
- d) Inadequate solid waste management in some countries;
- e) Exposure to lead, pesticides, and other pollutants;
- f) Exposure to vectors of disease;
- g) Tobacco use.

EMRO's vision for future work in this area is grounded on the idea that preventing exposure is the most effective means of protecting children from environmental threats. It includes:

- Promotion and advocacy for Child Environmental Health;
- Information collection for evidence based burden of disease;
- Applied pollution control and environmental measures (e.g. lead free fuel);
- Expansion of school – based health programmes.

## **13. Mental Health and Substance Abuse:**

The medium age of the population in many of the Arab countries of this region is less than twenty years. Psychosocial problems and mental health related morbidity is one of the results of such a demographic picture.

Major studies regarding psychiatric morbidity in the Arab countries of the region are scant and no systematic region-wide study has been done. Judging from the recent work in Bahrain, Egypt, Morocco, Saudi Arabia and Tunisia, the prevalence of major psychiatric disorders among children and adolescents of this region is similar to other parts of the world.

However, mental retardation and epilepsy are more common in Arab countries of the region with less access to resources and who must still deal with the high prevalence of infectious diseases of childhood, complications of pregnancy and child birth and nutritional diseases.

Another area of concern for children and adolescents of the region is the breakdown of the accustomed traditional extended families, due to urbanisation. New nuclear families suffer from a number of shortcomings, including:

1. Family's emotional support for children may be also compromised by the demands of living in the city.
2. Poverty, in the absence of community safety nets, can make psychosocial distress worse.

One of the major challenges we face in the area of child and adolescent health is the increasing danger of substance abuse. Apart from tobacco, which is the most frequent substance abused in this region, there is an increasing danger of the abuse of other substances like hashish and bango, prescription drugs and even opium and heroin. Whenever high level of unemployment of the youth exists, the involvement of them in the trade aspects of illicit drugs also would increase.

## **CONCLUSIONS AND VISION FOR THE FUTURE**

- Baseline and regularly updated information is needed for monitoring and explicit efforts must be made to gather such information;
- Integrated approaches are more sustainable and successful than vertical programmes despite several notable successes;
- Health systems are essential to achieve health goals;
- Continuous focussing on the home care and the active role of families to care for children is seen as instrumental in improving equity of access;
- Due care to be given to the new emerging problems, including: effects of sanctions and armed conflicts, child labour, drug abuse and HIV/AIDS in addition to poverty and inequitable access to health services;
- Strengthening partnership with other UN agencies, bilateral organisations and so on should be looked at as an important step towards successful child health activities implementation;
- Nutrition interventions should be strengthened in the Arab countries, being the major contributor to child mortality and morbidity.
- The United Nations Convention on the Rights of the Child (CRC) is the major instrument for monitoring and ensuring the rights of children and adolescents to health and health care and for mobilizing national and international support in this area. WHO's role related to the CRC should not be limited to providing data to the UN committee on the CRC. Over the last ten years, WHO'S activities have been particularly relevant to four CRC specific areas, namely child survival, improving quality of child health care, the active participation of communities in caring for children through a range of activities especially IMCI, and strengthening the psychosocial development of the children. The CRC has been used by WHO as a framework for programming for adolescent health since the early 1990s
- EMRO should be taking steps towards using the CRC as a framework for planning and monitoring child health related activities. A first step would be holding the orientation course developed by the Child and Adolescent Health and Development (CAH) Department to train the regional staff using the CRC as a tool for planning and monitoring child and adolescent health activities in

countries. A second step would be conducting this course at a country level to strengthen the process of reporting on CRC and planning child and adolescent health activities through this framework.

- Future planning of child health in EMRO should consider taking the life cycle approach through integration of all relevant concerned departments and partners.