Measuring Child Well-Being in the Mediterranean Countries – Toward a Comprehensive Child Welfare Index

Comments on the paper, prepared for the Conference on the Mediterranean Child, Genoa, Italy, January 7-9, 2004 - Robert A. LeVine, Harvard University

The idea of quantifying social and personal conditions affecting human welfare can be traced to A. J. Quetelet in the 1830s, but serious efforts at creating and using social indicators, particularly those bearing on child welfare, are relatively new. The paper by Professor Jacques Van der Gaag, which you have heard presented in summary form, draws on those recent efforts in order to devise a useful and meaningful child welfare index for the Mediterranean countries. The written paper is a masterful piece of work, remarkable not only for its clarity and comprehensiveness but also for the critical perspective it brings to the task before us at this conference and to the future work of the Mediterranean Institute for Childhood. Rather than simply prescribing a single measuring tool, it evaluates alternative possibilities and makes recommendations for consideration. We need a convenient measure of child welfare on which to compare countries of the Mediterranean region for purposes of policy analysis; we also need to be aware of the limitations of such an index. Professor Van der Gaag has given us both.

The paper raises important questions, as social indicators should: How is it that some countries do better than others at the same economic level in translating resources into conditions that benefit children? To answer such questions is to identify the processes that account for child welfare in contemporary societies. The answers are bound to have policy implications, pointing the way toward changes that might improve the cost-effectiveness of institutions dealing with children.

This example suggests the central point of my comments, that the full value of the child welfare index (and the poverty and gender indices) will be realized only if it is used to launch further research. The new Institute is intended to improve the welfare of Mediterranean children, but the success of its programs requires a deeper understanding of the socioeconomic and cultural conditions of children and adolescents in the region than is provided by the index and other sources of currently available data (some of which are summarized in the conference document, *Charting the Mediterranean Child 2004*). Pediatricians base their practices on a vast body of biomedical research that has already been done, the findings of which are largely applicable to children everywhere. But in the social sciences relating to children we are far behind the biomedical fields in basic research knowledge, and we have learned that knowledge of local contexts is essential not only for **explaining** variations across populations but also for **designing** intervention programs that work outside the context in which they were originally devised. There is an inadequate base of knowledge concerning existing childhood environments and patterns of child development in the Arab world and other parts of the Mediterranean region, for example, and the Institute should design collaborative research programs to expand and deepen that knowledge as a base for action.

Before offering my suggestions for further research, I would like to mention that reading the paper by Professor Van der Gaag stimulated me to add a suggestion to his: a Family Environments Index, comprised of at least two readily available variables, (1) the average (or median) level of educational (school) attainment of married women in each country and (2) the total fertility rate (TFR), i.e. the average number of children born alive to women aged 15-49. The first would be an indirect estimate

of maternal schooling, which has been shown in many countries to predict the use of health and other services for children even when other socioeconomic factors are controlled. The second indirectly estimates the number of children in the household among whom resources have to be distributed. (Maternal schooling would thus be scored positively and TFR negatively.) Children whose mothers have more education and fewer children would be expected to fare better in health, schooling and other indicators of personal success than those whose mothers had less schooling and more children, *ceteris paribus*. This index could be used within as well as between national populations, particularly as a measure of child welfare-promoting factors at the domestic household level as opposed to public (extra-familial) levels, and it might help explain the extent to which a country's relative performance on the CWI is due to processes operating at the household level.

My suggestions: Intensive, in-depth studies in the Mediterranean countries are needed, first to detect **whether** and **to what extent** investments of resources (including parental time and attention) result in desirable protective and developmental outcomes, and second, to discover **how** (through which processes and pathways) those investments work. In addition to Recommendation 3 in the Van der Gaag report, which is focused on the efficacy of public programs and policies, I recommend three other kinds of baseline research, which can (and optimally, should) be combined:

1. **Prospective studies with longitudinal assessments of successive cohorts.** Children and their environments are measured and monitored from birth or before to maturity, in order to obtain convincing evidence concerning causal influences on developmental outcomes.
2. **Ethnographic investigation of child contexts.** The social conventions and individual practices that affect the child's life, health, behavior at every stage are described in detail sufficient to understand how they mediate resources to influence outcomes, short-term and long-term.
3. **Field experiments to assess the efficacy of specific intervention programs.** Experimental and control groups are used to assess the efficacy of particular improvements – in nutrition (as in the INCAP study in Guatemala) and in early childhood care and education (with a parental training component, as in the Turkish Early Enrichment Project and its successor the Mother-Child Education Foundation in Istanbul).

I call this baseline research because, if carried out during a period of social and policy change, the initial assessments would provide a baseline from which improvement could be charted. Studies of this sort can only be done with limited samples of national populations, but if the samples were drawn in rural as well as urban locations, in rich as well as poor countries, and among Arabs, Turks and Europeans, the research would contribute not only uniquely rich quantitative evidence for comparison but a higher level of mutual understanding among the educated segments of countries in the Mediterranean region. At this higher level, it might be possible to see the poorer peoples in the region not only in terms of what they lack (money, health, schooling) but also in terms of what strengths they might have in the social and cultural resources they contribute to child care and development. In the long run, the development of a truly international community in the Mediterranean will require this kind of mutual understanding.

Finally, I want to add the hope that the Mediterranean Institute for Childhood will make a place in its programs for consideration of problems beyond the alleviation of death, disease and poverty and the promotion of child welfare in the region – problems such as what can be learned from the Mediterranean countries about cultural diversity in cultural beliefs and practices related to childhood.

Children's Well-Being in the Mediterranean – Toward a Child Welfare Index

Jacques van der Gaag
Erika Dunkelberg

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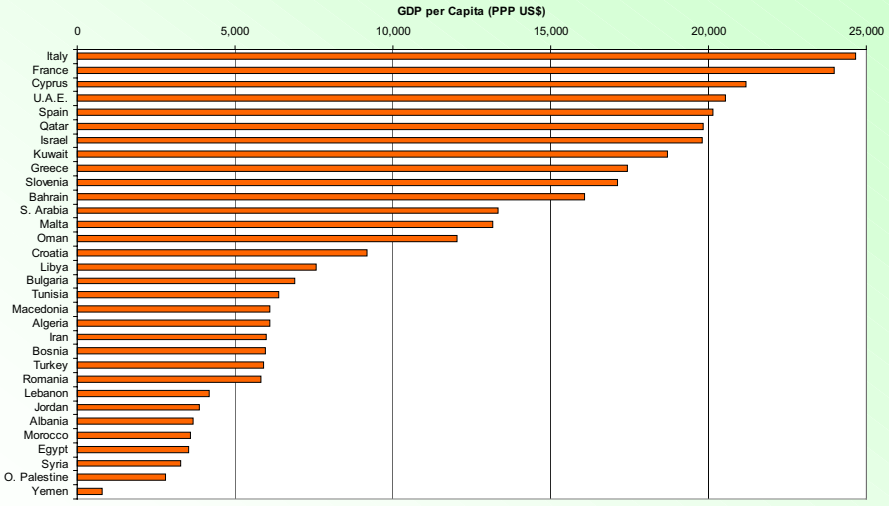
1. Measures of Well-Being

- GDP per capita:
  - Most widely used indicator of the average level of wellbeing of a population in a country but, does it represent the average level of well-being of a population in a country?

AIID

Mediterranean Countries and GDP per capita



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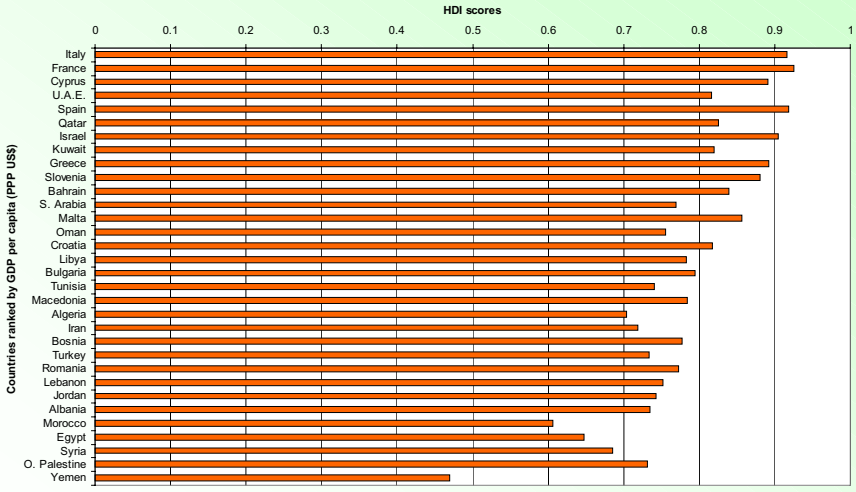
The Physical Quality of Life
(*Morris, 1979)*

- 3 Dimensions:
  - (i) infant mortality
  - (ii) life expectancy at age 1
  - (iii) basic literacy
- Arbitrariness of composite indices:
  - Boundaries for scales
  - Equal weights for the three dimensions

Human Development Index
(UNDP, 1990)

"*while growth in national production (GDP) is absolutely necessary to meet all essential human objectives, what is important is to study how this growth translates, or fails to translate into human development in various strategies*"

Mediterranean Countries and Human Development Index



Derivates of the HDI

- Human Poverty Index
- The Gender-Related Development Index

Uneven Distribution of Well-Being

(i) Combine indicators of average with distributional information

Country	Stunting					
	Poor	2	3	4	Rich	Average
Egypt	0.20	0.17	0.14	0.18	0.16	0.17
Morocco	0.39	0.36	0.31	0.20	0.15	0.28
Romania	0.25	0.28	0.23	0.24	0.20	0.24

Source: Wagstaff & Watanabe (2000)

Uneven Distribution of Well-Being

(ii) or categorized countries by ethnic affiliation, health condition, geographic location and occupation

Uneven Distribution of Well-Being

(iii) or measure a countries performance in a subsector of the economy rather than their overall performance

- Goodness, fairness
- Stewardship, creating resources, financing, delivering services

Source: World Health Report (2000)

Child Poverty

Wealth of reports and studies on the extent and effects of child poverty in OECD and rich countries,

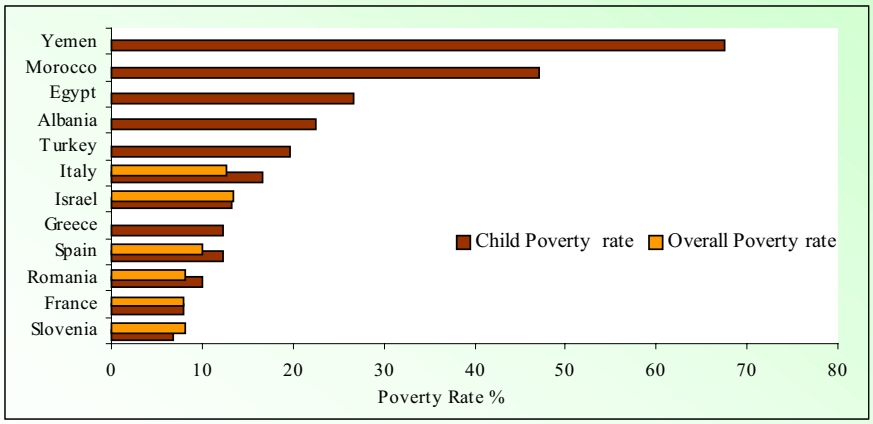
for e.g. UNICEF Innocenti Research Paper

What do these studies tell us that can inform further studies on child poverty in the developing world?

Child Poverty

- Poverty severly reduces child life chances
- Children are more likely to be poorer and experience persistent poverty than adults and elderly
- Children's chances for experiencing poverty increases if child lives in large family
- Several factors associated to child poverty such as loneparenthood, parental employment, wage inequalities

Child Poverty in the MR



Recommendations on Child Poverty for the Mediterranean Countries

- Regularly conduct household survey studies such as World Bank LSMS, LIS
- Develop child specific measures of poverty

2. Assessing Children's Well-Being

- Child Dimensions
  - No single but multiple dimensions
  - Traditional framework: education, health, economic well-being
  - New framework: moved from child survival to child well-being; including social exclusion, subjective dimension
- Child Indicators
  - Child oriented indicators
  - Developmentally sensitive indicators
  - Enabling factors v.s. outcomes
  - Positive indicators
  - Culturally distinct notions of what is valuable in each culture

Monitoring Children's Well-Being

- Purpose: To place children at the forefront of the national agenda
- How do countries monitor? Through periodical official national or international/ sectoral or comprehensive reports on children

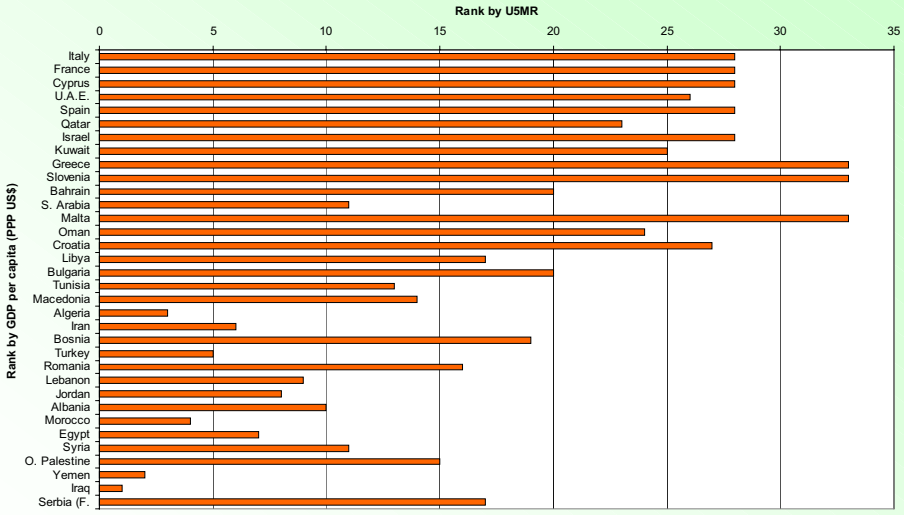
Monitoring Children's Well-Being In The United States

- America's Children report (1994)
- Trends in the Well-Being (1996)
- Kids Count Data Book (1990)
- North Carolina Well-Being Index (2003) state level

Monitoring Children's Well-Being In Canada

- The National Longitudinal Survey on Children and Youth : primary database on children and youth and served as source for series of studies and in-depth studies on child specific stages for e.g. Understanding the Early Years

In the Developing World - The State of the World's Children (UNICEF)



Other International Efforts

- MICS Survey (UNICEF) – Collect data to fill data gaps on children
- MONEE Project (UNICEF) – Pulls together data on children from Eastern and Central Europe
- MDG's (international community) – first four goals directly related to children

Illustrations of Aggregate Child Indices

- Kids Count
- Child Well-Being Index
- NPG
- International Child Welfare Index
- Child Quality of Life
- Children's Index

Dimensions of Well-Being

- Most common dimensions of well-being include:

Dimension
Economic
Health
Nutrition
Social
Education
Social Exclusion

Sample of Indicators used

- For. e.g. the health dimension focuses on the following indicators:

Dimension	Common Indicator	Less Common Indicator
Health	Á Low birthweight Á Infant mortality rate Á Child mortality rate Á Prenatal and antenatal care Á Access to health care Á Incidence of disease Á Life expectancy Á HIV/AIDS incidence Á Crude birthrate and death rate	Á Overweight Á Disability Á Chronic condition Á Eating disorders Á Sexually transmitted diseases in adolescents Á Age-specific mortality Á Cause-specific mortality Á Child examined by doctor in past year

Conclusions

1. Overall abundance of child welfare indicators
2. Evolution in the type of indicators/dimensions used
3. Few examples of composite measures of child welfare
4. Different purposes of composite measures

3. Alternative Child Welfare Indices

- The Child Welfare Index
- The Child Gender Index
- The Child Deprivation Index
- The Child Developmental Welfare Index

Alternative Child Welfare Indices

General Characteristics:

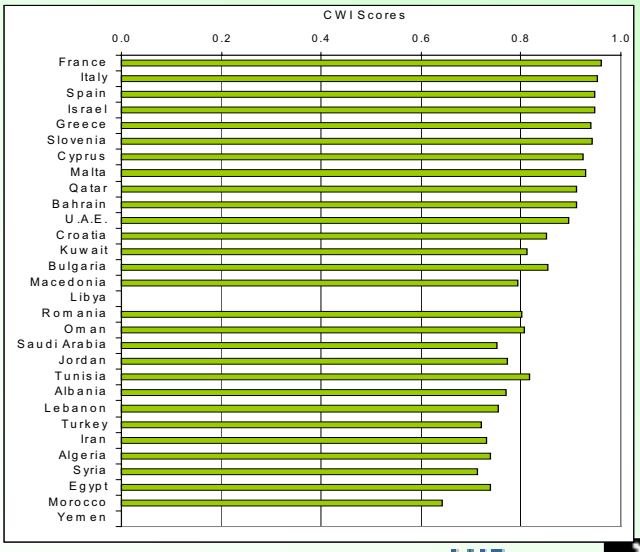
- Measure countries performance in promoting child welfare
- Cover the age period 0 to 14 yrs old
- Constructed using the 3 basic dimensions of human well-being in the HDI
- Each dimension represented by one or more indicators
- Dataset World Bank internal database

The Child Welfare Indicex

- We developed a Child Welfare Index

Index	A Long and Healthy Life	Knowledge	Decent Standard of Living
HDI	Life expectancy at birth	Adult illiteracy rate Gross enrolment rate	GDP per capita (PPP US$)
CWI	Under-five mortality rate	Gross primary and secondary enrolment rate	GDP per capita (PPP US$)

The Child Welfare Index - results

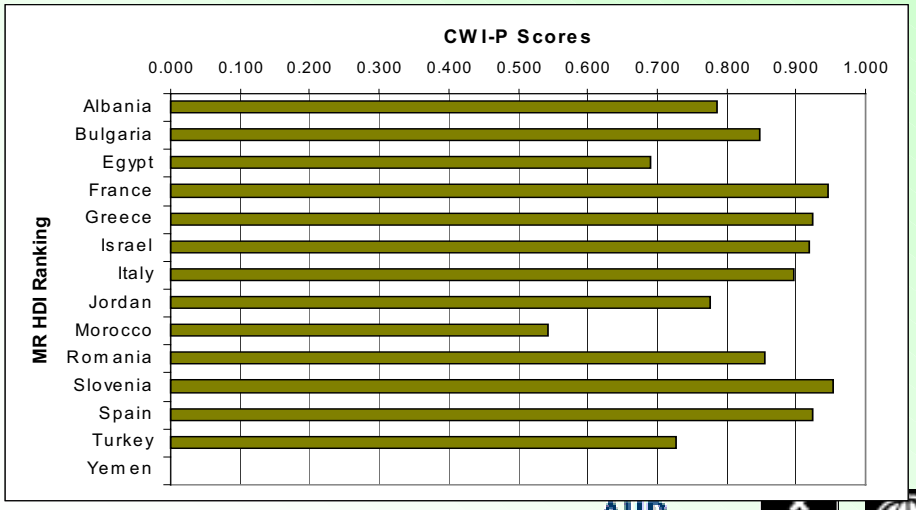


CWI with child poverty as an indicator

- We replaced GDP per capita by Child Poverty

Index	A Long and Healthy Life	Knowledge	Decent Standard of Living
HDI	Life expectancy at birth	Adult illiteracy rate Gross enrolment rate	GDP per capita (PPP US$)
CWI	Under-five mortality rate	Gross primary and secondary enrolment rate	GDP per capita (PPP US$)
CWI	Under-five mortality rate	Gross primary/secondary enrolment	Child Poverty Rate

CWI with child poverty as an indicator

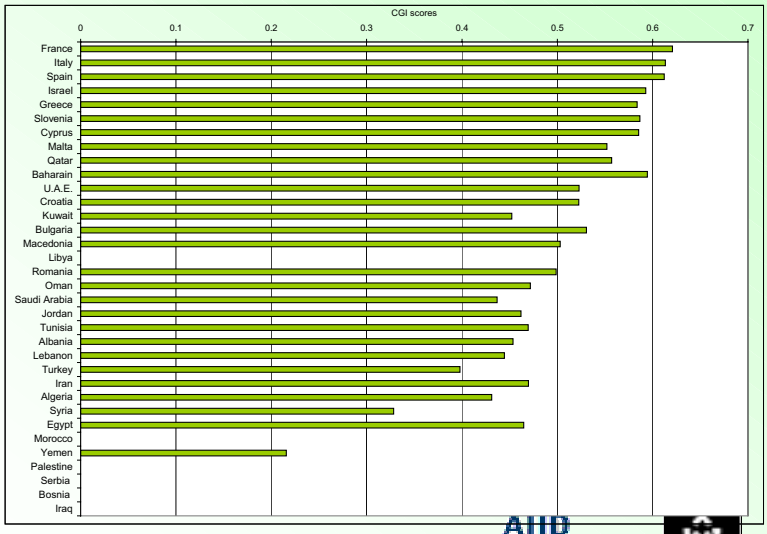


The Child Gender Related Index

- We developed a CGI as follows:

Index	A Long and Healthy Life	Knowledge	Decent Standard of Living
HDI	Life expectancy at birth	Adult illiteracy rate Gross enrolment rate	GDP per capita (PPP US$)
CWI	Under-five mortality rate	Gross primary and secondary enrolment rate	GDP per capita (PPP US$)
CWI	Under-five mortality rate	Gross primary/secondary enrolment	Child Poverty Rate
CGI	Under-five mortality rate, girls and boys	Gross primary/secondary enrolment, boys and girls	GDP per capita (PPP US$)

The Child Gender-Related Index

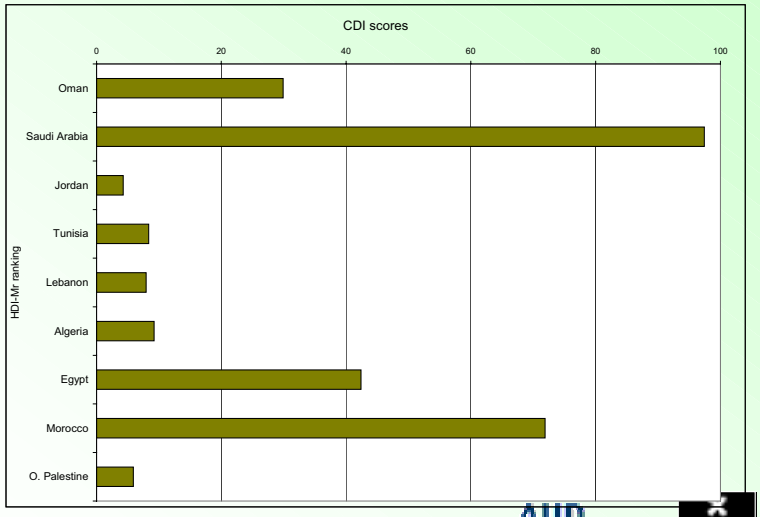


The Child Deprivation Index

- We developed the CDI as follows:

Index	A Long and Healthy Life	Knowledge	Decent Standard of Living
HDI	Life expectancy at birth	Adult illiteracy rate Gross enrolment rate	GDP per capita (PPP US$)
CWI	Under-five mortality rate	Gross primary and secondary enrolment rate	GDP per capita (PPP US$)
CWI	Under-five mortality rate	Gross primary/secondary enrolment	Child Poverty Rate
CGI	Under-five mortality rate, girls and boys	Gross primary/secondary enrolment, boys and girls	GDP per capita (PPP US$)
CDI	Under-five mortality rate	Out-of-school children	Population without access to water Percent of underweight children Child Poverty

The Child Deprivation Index



The Child Developmental Welfare Index

- Two sub-indices:
  - (1) The Early Child Welfare Index
  - (2) The School-aged Child Welfare Index

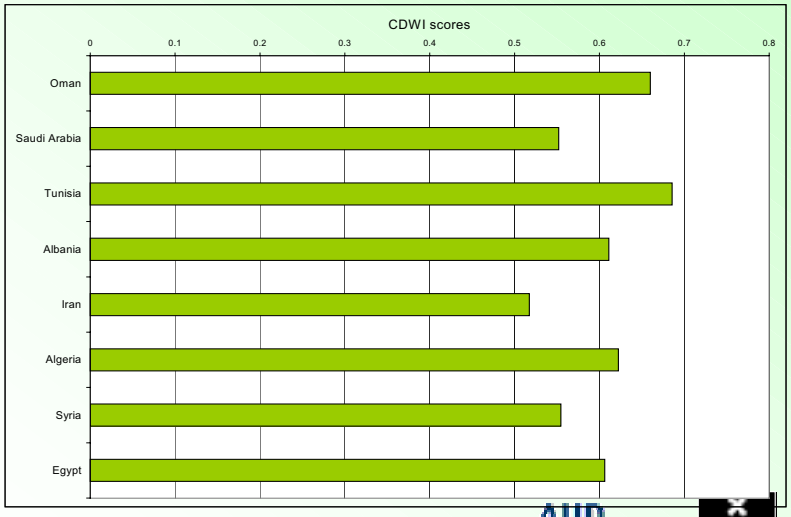
(1) The Early Child Welfare Index

- The Early Child Welfare Index
  - Three dimensions
    - Decent standard of living
    - Long and healthy life
    - Knowledge
  - Five indicators
    - Adequate nutrition and malnutrition
    - Survival by age 5
    - Enrollment in ECD
    - GDP per capita

(2) The School-Aged Child Welfare Index

- The School-aged Child Welfare Index
  - Three dimensions
    - Decent standard of living
    - Long and healthy life
    - Knowledge
  - Three indicators
    - Survival by age 14
    - Enrollment in secondary education
    - GDP per capita

The Child Developmental Welfare Index



4. Conclusions

- Country-wide child welfare indices can be developed and are useful *but*,
- As a snapshot, the index does not incorporate any dynamic aspects of a country's well-being
- This snapshot includes only a limited number of dimensions of well-being.

5. Recommendations

Three recommendations:

1. Construct a child well-being index using UNDP's approach for constructing the HDI
2. Adopt one or more (or a combination of) the child well-being indices discussed
3. Conduct in-depth sector-specific studies focused on how well current policies and programs serve the needs of children in Mediterranean countries. Combine this information gradually into a Child Sector Performance Index similar to WHO's Health Sector Performance Index

Measurement of Success in Child Health

Michael Rigby, Reader in Health, Planning and Management
Centre for Health Planning and Management, Keele University, UK
Paper / Abstract for the Children and the Mediterranean Conference

The conference topic, and the new Mediterranean Institute for Childhood, raise exciting opportunities which by definition are matched by conceptual challenges. Any organisation must set itself policy objectives whose success is reviewed by achievements against Performance Criteria. In this case, objective is common between the new Institute, and the local policy-makers it seeks to support. Furthermore, these criteria will be largely congruent with the important need to measure the health of the child population.

Whilst being appropriately based upon the unifying concept of the Mediterranean Region, the new organisation and the Mediterranean concept cuts across most of the major hidden boundaries of global civilisation and thus 'globalisation'. These are:-

- Trans-continental geography
- Religions groupings
- Major ethnic groups
- Political structures
- Service delivery philosophies
- Economic development

In order to assess organisational success, and to identify the comparative successes and problems of different child health populations, it is necessary to define and establish indicative measures based on:-

- Appropriateness across different cultures and economic situations
- Availability of reliable data
- Equivalence of meaning
- Appropriateness in different health, educational and welfare systems.

The experience of the recently completed Child Health Indicators of Life and Development (CHILD) Project, funded by the European Commission within the EU Community Health Monitoring Programme, provides a useful case study, linked also to interest in the issue of Child Health Indicators in other settings including Australia, Canada, and United States of America. In this project a structured objective approach was taken to seek a suite of indicators which covered all aspects of child health from early infancy to adulthood, and spanning from upstream environmental and preventive dimensions to treatment, morbidity, and mortality. The project had to ensure availability and appropriateness in a geographical region spanning from Iceland to the Mediterranean, and from the Atlantic coast to the Aegian, with the variety of cultures and health systems encompassed. Since publication of the framework, this study has attracted interest in the European Environmental Agency for its approach; in the WHO European Regional Office for its potential applicability to the full geographical continent of Europe including countries in transition and reconstruction; and in the US Agency for Health Quality & Research.

A paper presented to the January 2004 event in Genoa would open up these issues in the context of these challenges and requirements for the Mediterranean Region; indicate the potential global learning and benefits which could be achieved through successfully tackling the cultural and inter-continental challenges; and the benefits for the Mediterranean Institute for Childhood of identifying an indicators-base framework related to local policy setting.

The situation of children in Yemen. Review and Future Prospects

Dr. A. Ishak, Consultant Pediatrician

Aim: Review of situation of children of Yemen

Methods: Presentation of demographic data. Presentation of policies of Ministry of Health and the Council of Motherhood and Childhood (HCMC)

Yemen republic is a newly united nation. The population is struggling to achieve progress (decrease in morbidity and mortality, and availability health service) in spite of the great turmoil in the region (previous east west cold war inflamed the war in the sixties, and seventies and eighties, the Gulf war in the ninetee's and the post 11th September later on, produced sever, political, social, and economic problems over a period of almost 40 years. Children below the age of 15 together with women at the reproduction age represent the majority of the population (>50% of about 19 million). Health, social, and political problems, affect this sector of the population to a great extent, High fertility rate (7.6) (annual growth is 2.6%) which is aggravated by migration from rural to urban and peri-urban areas. Maternal (350/100,000) infant (79/1000) and under five (107/1000) mortality are still very high compared with MENA region. Morbidity due to malnutrition (46-55%), diseases such as diarrhea (20-30% of OPD cases) respiratory infection (40-50%) of OPD cases) accidents, and chronic diseases such as, malaria, tuberculosis, rheumatic fever, kidney diseases, disability etc. are at high level.

The child in Yemen is at the lowest level at the educational scale compared with MENA region. Adult literacy rate is 67 for males and 25% for females. Putting a quality measure on education, then the outcome would be unfortunately very poor.

The main policy of HCFMC is to create awareness of mother and child needs in the society, initiate and integrate public and official efforts in this respect. MOH is emphasizing the need for public health services; IMCI (integrated management of childhood illnesses) is one of the current major objectives. The educational systems for paramedical and medical students need some reorientation in order to meet the major problems of mothers and children. A big sector of the population has got no access to medical services especially emergency and specialized services. This fact together with the current need for thousands who travel abroad for medical treatment costing the country millions of hard currency every year, make the use of internal network of communication as well as abroad a necessity to cover some of the needs, save huge expenditure, and raise the standard of local practice and enforce the educational system.