

Report on the

# First regional conference on health promoting schools in the Eastern Mediterranean Region

Damascus, Syrian Arab Republic  
3–5 September 2007



9



© World Health Organization 2007

All rights reserved.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The World Health Organization does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

Publications of the World Health Organization can be obtained from Distribution and Sales, World Health Organization, Regional Office for the Eastern Mediterranean, PO Box 7608, Nasr City, Cairo 11371, Egypt (tel: +202 670 2535, fax: +202 670 2492; email: [DSA@emro.who.int](mailto:DSA@emro.who.int)). Requests for permission to reproduce WHO EMRO publications, in part or in whole, or to translate them – whether for sale or for noncommercial distribution – should be addressed to the Regional Adviser, Health and Biomedical Information, at the above address (fax: +202 276 5400; email [HBI@emro.who.int](mailto:HBI@emro.who.int)).

## CONTENTS

1.	INTRODUCTION .....	1
2.	CURRENT TRENDS IN HEALTH PROMOTION AND SCHOOL HEALTH .....	3
2.1	The WHO global technical meeting on school health, Vancouver, Canada, June 2007 .....	3
2.2	The 19th International Union for Health Promotion and Education World Conference on Health Promotion and Health Education, Vancouver, Canada, June 2007 .....	4
2.3	Health-promoting schools: case study experiences of implementation .....	5
2.4	Health-promoting schools in the Eastern Mediterranean Region—achievements, challenges and future directions .....	6
3.	CURRENT STATE OF PARTNERSHIP ON SCHOOL HEALTH PROMOTION (FRESH FRAMEWORK) .....	8
3.1	UNESCO perspective .....	8
3.2	World Bank perspective .....	9
3.3	WHO perspective .....	10
4.	COUNTRY PRESENTATIONS .....	11
4.1	Bahrain .....	11
4.2	Egypt .....	13
4.3	Iraq .....	13
4.4	Islamic Republic of Iran .....	13
4.5	Jordan .....	14
4.6	Lebanon .....	14
4.7	Libyan Arab Jamahiriya .....	15
4.8	Morocco .....	15
4.9	Oman .....	16
4.10	Palestine/UNRWA .....	16
4.11	Pakistan .....	17
4.12	Sudan .....	17
4.13	Syrian Arab Republic .....	18
4.14	Tunisia .....	18
4.15	United Arab Emirates .....	18
4.16	Yemen .....	19
5.	NETWORKING FOR BUILDING PARTNERSHIP .....	19
5.1	Approaches and mechanisms for creating national and regional networks of health-promoting schools .....	19
5.2	Eastern Mediterranean Network of Health-promoting Schools .....	21
5.3	Multimedia action-oriented school health curriculum (web-based) .....	21
5.4	Information systems for health-promoting schools .....	22

6.	INTERNATIONAL SUCCESS STORIES: THE HEALTHY BUDDIES PROJECT .....	23
7.	CONCLUSIONS .....	24
8.	RECOMMENDATIONS .....	26

#### Annexes

1.	AGENDA .....	29
2.	PROGRAMME .....	30
3.	LIST OF PARTICIPANTS .....	33

## 1. INTRODUCTION

The first regional conference on health promoting schools in the World Health Organization (WHO) Eastern Mediterranean Region was held in Damascus, Syrian Arab Republic, from 3 to 5 September 2007. The meeting was sponsored by WHO together with the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Islamic Educational, Scientific and Cultural Organization (ISESCO).

The objectives of the conference were to:

- review, share and document accumulated experiences and research papers on health promoting schools in the countries of the Region
- coordinate efforts, resources and initiatives among the regional and national authorities and organizations concerned with and interested in promoting health at schools and with schools
- launch the Eastern Mediterranean Network of Health-promoting Schools (EMNHPS).

Dr Soliman El-Khatib (Syrian Arab Republic) was elected Chair of the meeting, and Drs Mariam Al-Mulla (Bahrain) and Abdel Aziz Al-Nahar (Syrian Arab Republic) were elected Vice-Chairs. The meeting agenda, programme and list of participants are attached as Annexes 1, 2 and 3, respectively.

Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean addressed the conference. Education was one of key social determinants of health, he said, and schools were widely regarded as important settings for promoting health as they reached over 1 billion children worldwide and, through them, school staff, families and the community as a whole. Numerous studies had consistently documented the role of education in reducing morbidity, increasing life chances and improving well-being in general. Poor health and malnutrition were important underlying factors for low school enrolment, absenteeism, poor classroom performance and early school dropout. Programmes to achieve good health, hygiene and nutrition at school age were therefore essential to the promotion of basic education for all children.

Schoolchildren needed to be provided with appropriate knowledge and life skills in order to enable them to make healthy decisions and choices, to adopt a healthy lifestyle and to deal with conflicts. This principle was behind the adoption in 1988 of the prototype action-oriented school health curriculum for primary education, in close collaboration with other regional partners.

Dr Gezairy noted that promoting children's health through schools had always been a goal for WHO. In 1995 WHO launched the Global School Health Initiative,

aiming to foster health-promoting schools. A regional consultation on health promoting schools was held in Sana'a, Yemen in December 2005. The FRESH initiative (Focusing Resources on Effective School Health) launched by UNESCO, WHO, UNICEF and the World Bank at the World Education Forum in Senegal in April 2000 represented an interagency framework for consolidating health and educational achievement among schoolchildren. The first Gulf Conference on School Health, organized in Oman in April 2007, which was technically supported by WHO and UNESCO, resulted in creation of a regional forum for school health. The Global WHO Meeting on Building School Partnership for Health, Educational Achievement and Development, which was held in Vancouver, Canada, from 5 to 8 June 2007 [see report below], noted what had been achieved so far.

Documentation of the accumulated experiences and lessons learned in developing health-promoting schools in the Region was of great importance. National standards for such schools should also be developed. Cooperation between the health and education sectors for the successful implementation of school health programmes at national level, and development of regional and country databases in order to support evidence-based decision-making should be promoted. By working in partnership with other international, regional, national and local agencies in the public and private sectors, we could create coordinated approaches to school health that advance the goals of health, education and human development. By coordinating efforts, resources and initiatives among the regional and national authorities and organizations concerned with and interested in promoting health in and through schools, and with schools, the Eastern Mediterranean Network of Health-Promoting Schools (EMNHPS) could be developed and sustained.

Dr Soliman El-Khatib, Undersecretary of Education, delivered a message from Dr Ali Said, Minister of Education. In his message, the Minister noted that today's generation was responsible for building the future generation. Partnership between health and education was very important for schools, families and the community to promote the health of children. The political leadership in the Syrian Arab Republic gave special attention to improving the quality of education in schools and other educational institutes; schoolchildren comprised 28% of the total population.

Health-promoting schools was present in the Syrian Arab Republic through the project for the school health curriculum, through which many objectives had been reached including: establishment communication between schools, families and the community together with an improvement in team spirit, giving students an opportunity to share in research, discussion and implementation of activities.

Dr Mohamed Jamil Oayed, Assistant to the Syrian Minister of Health, delivered a message on behalf of Dr Maher El Hosamy, Minister of Health. The health sector in the Syrian Arab Republic had achieved much in recent years. The number of health centres reached 1700 in 2007. There were 92 ministry of health hospitals compared to 52 hospitals in year 2000. Infant mortality in the country had declined to 19/1000 in

2007 compared to 29/1000 in 2000, and maternal mortality was 58/1000 compared to 71/1000 in 2000. Much of this was done with the help of international organizations, especially WHO, and the European Union, which gave great support for many national health programmes.

Dr Ghassan Saleh, representative of the Islamic Educational Scientific and Culture Organization (ISESCO), relayed a message from its Director-General, Dr Abdulaziz Othman Altwaijri. School was one of the most important forums for individual development in all aspects, whether physical, psychological or cognitive. ISESCO advocated two principal concepts: education for all and health for all. As health-promoting school programmes depended mainly on these concepts, ISESCO supported them fully.

Dr Abdel Muneim Osman, the head UNESCO's office in Beirut and the representative of the organization in Lebanon and the Syrian Arab Republic, addressed the meeting. He expressed his pleasure at the collaboration and the active participation between ministries of education, ministries of health, WHO, UNESCO and ISESCO in the conference. He also noted that the conference reflected the national and international efforts and cooperation to implement the conception of health-promoting schools, including the UN's FRESH initiative.

The website of the Eastern Mediterranean Network of Health-promoting Schools was introduced to the conference ([www.emro.who.int/hps](http://www.emro.who.int/hps); see below).

## **2. CURRENT TRENDS IN HEALTH PROMOTION AND SCHOOL HEALTH**

### **2.1 The WHO global technical meeting on school health, Vancouver, Canada, June 2007**

*Moustafa Abol-Fottouh, WHO Temporary Adviser, WHO EMRO*

The WHO global technical meeting on school health was cohosted by WHO and the Pan Canadian Joint Consortium on School Health. It was held in Vancouver, Canada in June 2007, and was attended by 104 experts from more than 30 countries and UN organizations, including Egypt, Islamic Republic of Iran and the WHO Regional Office for the Eastern Mediterranean. The objectives of the meeting were to review the current status of school health promotion, to explore approaches to community health that included social and economic factors and to derive strategies for promoting health through schools and school communities.

The Millennium Development Goals (MDG), adopted at the 55th UN General Assembly, represent a global commitment in the struggle against poverty and inequity in income distribution within and among countries. School health and nutrition programmes provide a significant contribution to the achievement of education for all and the Millennium Development Goals. Eradication of poverty and hunger (MDG 1)

requires increasing the educational level of the population. Health-promoting schools can offer support in the development of school vegetable gardens, or school feeding programmes that contribute to the nutrition of the school-age population and the eradication of hunger in this age group. Close collaboration between health and education authorities is required to ensure full primary education for all children (MDG 2) and to eliminate gender disparities in primary and secondary education (MDG 3). School health programmes can help reduce infant and maternal mortality (MDGs 4 and 5) and reduce HIV-AIDS and other communicable diseases (MDG 6). They can ensure environmental sustainability through environmental health programmes.

The meeting issued a call to action, identifying five broad areas of action in order to attain education, health and development goals in the next decade: achieving leadership and commitment at national, community and school levels; investing in education; building safe and sanitary school infrastructure; investing in the development of teachers and school health professionals using traditional and new media; implementing what is known to be effective; and building sustainable partnerships, especially in low-income countries.

## **2.2 The 19th International Union for Health Promotion and Education World Conference on Health Promotion and Health Education, Vancouver, Canada, June 2007**

*Abdel Halim Joukhadar, WHO EMRO*

The 19th International Union for Health Promotion and Education World Conference on Health Promotion and Health Education was held in Vancouver, Canada, in June 2007 immediately after the WHO global technical meeting reviewed in the previous section. The overall mission of the conference was to review and critically reassess health promotion's progress since the 1986 Ottawa Charter on health promotion and to help set the course for navigating through the new challenges facing health promotion in an increasingly globalized world. The conference focused on health inequities and disparities, and on the social, economic and political factors that create these inequities, and called for increase worldwide collaboration and enhance the health promotion and education knowledge necessary to work towards decreasing health inequities for marginalized populations throughout the world. It supported a shift from an exclusive focus on disease reduction to a more positive focus on the strengths, assets and capacities that lead to better health and social development outcomes. Health promotion strategies should be part of a broader attempt to facilitate systemic change of health systems to achieve this.

There are new challenges to good health and new approaches for achieving and maintaining it. There are increasing health inequalities within and between nations; with the rise of globalization, transboundary influences on the determinants of health often lie beyond the dominion of individuals, communities and nations; population growth, urbanization, and consumerism are stretching global resources beyond the



limit and critically damaging the environment; and there is an increased spread of disease in the most disadvantaged societies.

More needs to be done to reorient the healthcare sector to take greater responsibility for health promotion and chronic disease management as an integral part of service delivery; health protection must draw on the health promotion skills of health education and communication to address the increasing threats to health: control of communicable diseases and chemical, environmental, radiological and biological threats. Health-promoting schools and health-promoting workplaces act effectively on healthy behaviour and their determinants, and reach of settings-based health promotion should be greatly expanded.

National and transnational mechanisms for the collection, collation and transfer of knowledge of effective health promotion must be extended to improve practice: there is an urgent need to develop internationally comparable data systems that integrate information on health promotion, public health and social determinants.

Further investment must be made in the education and training of health promotion specialists, practitioners and other workers in order to develop the knowledge and skills for advocacy and mediation with politicians and the private sector, to assess the impact of policies on health and its determinants, assess and use available information and evidence, and to evaluate interventions.

Health promotion programs are most successful when linked to the normal daily life of communities, building on local traditions and led by community members. To influence future healthy public policy health professionals must work hand in hand with communities and civil society.

### **2.3 Health-promoting schools: case study experiences of implementation**

*Dr Carmen Aldinger, Education Development Center, USA*

In anticipation of the global WHO meeting on school health (Vancouver, June 2007) 17 case studies from all WHO Regions were analysed, including studies from Bahrain and the United Arab Emirates in the Eastern Mediterranean Region. Case studies ranged from reaching one school in the Cook Islands to nationwide coverage in Mauritius, Scotland and Maldives. The literature was reviewed and synthesised with the case-study analysis.

Implementation is defined as a specified set of activities designed to *put into practice* an activity or programme of known dimensions. Activities are purposeful and described in sufficient detail such that independent observers can detect the presence and strength of the specific set of activities. Most research has focused on the effectiveness of intervention, rather than on the effectiveness of the implementation process.

Combined approaches to health promotion work best, with improved health and learning resulting from school health policy, safe water and sanitation, health and nutrition services and skills-based health education.

The case studies gave illustrative examples of research-based key factors in changing policy and practice: the importance of vision and concept; adaptation to local concerns; the role of data for planning and decision-making; participation and ownership of stakeholders; cross-sector collaboration; and tools for implementation.

Data about health or education problems among youth that caused alarm among policy-makers were often an impetus for action, as were economic and other hardships in the community and the recognition of the link between education and health. International guidelines were significant in moving from a narrow view of school health as primarily health education or curriculum to multiple components of health-promoting schools.

Countries adapted the vision and concept of health-promoting schools to their local culture. Stakeholder ownership and participation of health and education ministries, schools and communities, including students, were a key to successful implementation in several countries.

The survey found that many countries reported barriers and difficulties in cross-sectoral collaboration, but all 17 cases eventually achieved collaboration; most schemes began in the ministry of health but eventually made formal partnership with the ministry of education. Few cases used the explicit term “leadership”, yet almost all cases reported how essential was leadership, commitment and political will from the government and key officials (including the naming of a national coordinator); the leadership of WHO and United Nations agencies was most instrumental in convincing national level government leaders.

The weakest implementation strategies were: inadequate staff development and teacher training to implement multiple components and curriculum; little attention was paid to advocacy strategies; and education ministries were involved too late in the process.

## **2.4 Health-promoting schools in the Eastern Mediterranean Region—achievements, challenges and future directions**

*Dr Said Arnaout, WHO EMRO*

The Global School Health Initiative was launched by WHO in 1995 and proved to be a turning point in health policy. It was aimed at mobilizing and strengthening health promotion and education activities at the local, national, regional and global levels and designed to improve the health of students, school personnel, families and other members of the community through schools. The Initiative embraced four main strategies—research, capacity-building, strengthening national capacity and creating

networks and alliances. It envisaged strong collaboration between the health and education sectors and active community involvement. One result of the Initiative has been functional regional networks of health-promoting schools in Europe, the western Pacific and Latin America and now the Eastern Mediterranean Network of Health-promoting Schools. A functional global network is on the way.

Challenges facing the Global School Health Initiative include developing and apply practical tools for monitoring and evaluation at all levels; coordinating between all global efforts and initiatives to prevent confusion and duplication at national level; and developing a real partnership among health-promoting schools in the South (South–South) and the North (North–South).

Other global initiatives include FRESH (Focusing Resources on Effective School Health, 2001; see below), the Global School-based Student Health Survey and global conferences on health promotion.

The Eastern Mediterranean Region saw activities intended to establish health promoting schools, and a decade after the launch of the Global School Health Initiative, assessment tools were needed. Thus a survey tool was developed to monitor achievements in such a way that results could be compared with efforts worldwide. The survey questionnaire was distributed to the countries of the Region, and replies were received from 17. The results were presented at a conference in Sana'a, Yemen, in 2005.

In 1988 the prototype action-oriented school health curriculum was launched, and in 2005 a multimedia version of the same.

Challenges facing the countries of the Region include poverty, illiteracy, conflicts, emergencies and natural disasters; rapid demographic and epidemiological shifts; educational gaps and high school dropout in some countries (education reform is needed); unemployment; lack of reliable information for better action; and lack of effective coordination and role conflict. Unemployment is a particular challenge; if children have no prospect of work in the future, why educate them?

The concept of health-promoting schools has been well received by the majority of countries of the Region, and partnership between the education and health sectors has been strengthened. Health-promoting schools have increased the sense of responsibility among students and developed decision-making skills and taking initiatives. Many countries have prepared manuals and guidelines on health-promoting schools. In some countries, a teacher has been allocated as a full-time supervisor to monitor and coordinate health promotion activities. Students have been successful in introducing positive changes in the school and neighbouring community and in changing parents' attitudes and health-risk behaviour.

Constraints facing the countries of the region include lack of effective coordination between concerned authorities and duplication of efforts; insufficient financial resources and technical capacities; inadequate or insufficient infrastructure; and lack of unified guidelines and standards for evaluation. There is a lack of research and national policy, and sustainability is a challenge.

More advocacy for health-promoting schools is required to improve countries' political commitment. Health and education policies should be reviewed, updated and coordinated, and clear strategies, plans of action, integrative approaches and guidelines should be developed. National and regional standards are needed as is more research. Collaboration with WHO and other UN organizations should be strengthened, and effective support to the Eastern Mediterranean Network of Health-promoting Schools.

### **3. CURRENT STATE OF PARTNERSHIP ON SCHOOL HEALTH PROMOTION (FRESH FRAMEWORK)**

#### **3.1 UNESCO perspective**

*Ms Dana el-Kaissi, UNESCO*

In April 2000, WHO, UNESCO, UNICEF, and the World Bank jointly organized a strategy session at the World Education Forum in Dakar, Senegal. The strategy session was aimed at raising the education sector's awareness of the value of implementing effective school health, hygiene and nutrition programmes as one of its major strategies to achieve education for all. Thus was born the FRESH framework. FRESH stands for Focusing Resources on Effective School Health, and is a joint initiative of WHO, the World Bank, UNICEF and UNESCO, amongst others. There are four core components to the initiative: school health policies, a safe and sanitary school environment, skills-based health education and school-based health services.

FRESH offers many benefits: it is responsive to new needs, increases the efficacy of other investments in child development, ensures better educational outcomes, achieves greater social equity and is a highly cost-effective strategy.

Regarding Arab experiences in the application of FRESH, the first stage (2002–03) included Jordan, Sudan, Oman, Egypt, Lebanon and Yemen. The 2nd stage included Tunisia, Saudi Arabia, Syrian Arab Republic, Palestine, Qatar and Morocco. The last stage (2006–2007) included all the Arab countries. Reports on the 1st and 2nd stages reflect the existing human and non-human resources present for the execution of effective school health programmes and ways for the establishment of the FRESH initiative in the Arab countries included in these stages. These data were used to map out future strategies for the years 2008 to 2013. Different steps are needed from different governmental sectors and ministries concerning with health and education: establishment of strategies for school health including all partners, performance of health education programmes for all sectors in the community and especially for young

people, development of skills in effective school health and the provision of financial and technical support to Arab countries in order to improve strategies.

### **3.2 World Bank perspective**

*Dr Donald Bundy, World Bank*

The FRESH partnership was launched at the Education for All forum, held in Dakar, Senegal, in 2000. FRESH stands for Focusing Resources on Effective School Health, Hygiene and Nutrition. It proposes four core intervention activities: effective health, hygiene and nutrition policies for schools; sanitation and access to safe water facilities for all schools; skills-based health, hygiene and nutrition education; and school-based health and nutrition services.

For example, the FRESH framework for action against worm infestation calls for policies in schools that ensure well maintained sanitation and specific agreements that teachers can deliver treatment, healthy environments in schools with effective sanitation and safe water to reduce transmission, skills-based health education that promotes hygiene and healthy behaviour, and school based delivery of anthelmintics by teachers that follows WHO guidelines.

FRESH seeks to harmonize the various initiatives run by international organizations to promote health at school such as Health Promoting Schools (WHO) and the School Health Initiative (World Bank) in the areas of policy, school environment, education, services and supportive partnerships.

According to a 2006 study, in 2000, of 41 organizations reviewed, only 16 promoted an integrated school health and nutrition programme covering all aspects of FRESH. In 2006, 29 out of 38 organizations promoted integrated packages. The trend is clear. In addition, most of the organizations polled cited partnerships with other organizations.

The participation of the education sector in school health programmes is vital. For an effective plan, there must be strong leadership from the education sector. School health must be included on the education sector's agenda, and technical assistance must be provided in order to develop this new area.

There have been important changes since the 2000 forum. There is a more holistic approach to school health, and increasing recognition of the need to work across the whole school. We have seen more harmonization among sectors and development partners—more cost-effectiveness, lower transaction costs and less confusion. There are also more partnerships across sectors and among development partners around school health programmes in low- and middle-income countries.

Key issues yet to be resolved under the FRESH framework include: FRESH framework does not yet reflect developments, for example in health promotion and

addressing violence. Accountability and monitoring of health issues by the education sector are often the weakest part of the programme; there is a need for a common set of indicators. Focus on low-income countries has missed opportunities for cross-learning with high- and middle-income countries. There is a need for information sharing among networks. In the Eastern Mediterranean Region, one major challenge is a lack of donors interested in school health.

### **3.3 WHO perspective**

*Dr Abdel Halim Joukhadar, WHO EMRO*

FRESH is an inter-agency initiative for Focusing Resources on Effective School Health. It proposes a framework for designing and implementing effective school health programmes. The overall goal of FRESH is to make schools healthier for children and children more able to learn.

Health problems interfere with students' ability to come to school, stay in school or make the most of their opportunity to learn. Schools, even those with limited resources, can do a great deal to improve student health and thus educational outcomes. Using the FRESH programmatic model, education policy makers and local school authorities can identify and address health-related problems that interfere with learning.

As well as the four core strategies (policy, safe environment, skills-based education and school health programmes), there are three supporting strategies: partnerships between education and health, community partnerships and pupil awareness and participation.

School health policy may cover any or all of the following issues: rights, discrimination and gender issues, inclusive practices for students with special needs, environmental concerns and health education programmes, school-wide/community-wide efforts to address significant health problems, school feeding programmes, health services and emergency procedures and responsibilities.

Research has shown that children in the Eastern Mediterranean Region are at risk in many areas such as mental health, physical fitness, diet and obesity, violence and accidents.

Schools are particularly effective sites for health services because of their unique ability to promote health on several fronts at once. Many of the common conditions of ill health among school-age children can be managed effectively, simply and inexpensively through school-based health and nutrition programmes.

School feeding has significant potential benefits: it can improve students' nutritional status, reduce short-term hunger and associated learning deficits, and bring more children to school. Infection with parasites undermines the nutritional benefit,

and nothing is gained if students are absent due to illness or if parents keep them home because they fear for their safety. Schools can provide nutritional supplements. At the same time, schools can diagnose and treat worm infections, which cause and exacerbate nutrient deficiencies. Schools can also provide clean water and appropriate sanitation facilities to reduce the incidence of parasite infection/re-infection, and they can teach children to wash their hands before eating and after defecating. Without these corollary activities, the benefit of micronutrient supplementation is likely to be limited and diminishing.

The key to the effectiveness of the FRESH approach lies in the reinforcing effect of activities across each of the core components. For example deworming services are supported by hygiene education that helps children prevent reinfection, and by water and sanitation facilities that prevent reexposure. Anti-tobacco education is reinforced by a policy prohibiting smoking on school grounds.

Programmes that include activities in all four components of the FRESH initiative are simply more effective than piecemeal, single-strategy approaches.

## **4. COUNTRY PRESENTATIONS**

### **4.1 Bahrain**

The health promoting schools programme in Bahrain is a collaborative effort between the Ministry of Health and the Ministry of Education.

It started in 2002 when an agreement between the Ministry of Health and the Ministry of Education was reached to form a joint committee to establish a comprehensive school health programme for Bahrain. The goal of the Bahrain Comprehensive School Health Programme (BCSH) is to respond effectively to the needs of children and adolescents based upon the population health model and the determinants of the health framework, which require a systematic and comprehensive approach to programme and service development.

In order to put in place the BCSH, strategic plans were drawn up at the Ministry of Health level and the Ministry of Education school programme level. At the Ministry of Health level there are six strategic areas for emphasis: awareness and advocacy, partnership, resource development and promotion, teacher education, research and evaluation, and management, planning and support. At the school programme level there are eight key elements: health services, health education, healthy school environment, health promotion for the staff, nutrition and food safety, physical education and recreation, mental health and social services support, and community programmes and projects.

In line with these strategic keys, the Health Promoting Schools Programme was started in 2004, in collaboration with the Gulf Cooperation Council (GCC) School Health Committee and the WHO Regional Office for the Eastern Mediterranean.

The first step in planning was to conduct advocacy in order to raise awareness about the concept of health-promoting schools, after building local support. The programme was formally announced, and schools were selected for implementation of a pilot scheme.

The first group of schools selected (2004–2005) comprised 11 schools in Muharraq governorate. This was later expanded to 50 schools in five governorates (2005–2006).

To implement the programme in the selected schools, meetings were held with community leaders to discuss the basic ideas. A small group (team leaders) of interested people from the schools and the community was established, and a number of training workshops were conducted for the people concerned in the Ministry of Health and the Ministry of Education (administrators, teachers and school health nurses, etc.) in order to explain the scope of a health-promoting schools programme, its importance, methodology of implementation, and evaluation tools. Newsletters and leaflets about the health-promoting school programme have been produced.

A local planning process was then undertaken for creation of the health-promoting school. A school health team was established, and current school health promotion efforts reviewed. Health problems were assessed, and opportunities for action determined. After goals had been set and objectives defined, an action plan was developed and mechanisms put in place to monitor progress.

For follow-up and evaluation the health-promoting school coordinators visited the school to review the implementation of the action plan and discuss the difficulties and opportunities for action.

Factors help in the success of health promoting school programme in Bahrain are support from WHO and the Gulf Cooperation Council (GCC) School Health Committee, strong commitment and partnership between the health and education sectors, a well developed school infrastructure, and the existence of health and safety committees in all schools in Bahrain which support the health-promoting school programme implementation.

Future plans are to expand the programme to cover all schools in Bahrain, to develop national standards, guidelines and evaluation tools for health-promoting schools, to continue the training programmes, and to develop a website for the national network of health promoting schools.



## **4.2 Egypt**

The health-promoting schools initiative in Egypt started with the cooperation of WHO in 1999. The aim of this initiative was to increase awareness about health and the environment among students and give them life skills which allow them to adapt healthful life skills all through their life. The first step was implemented on 20 schools from three governorates differing geographically and environmentally. Today, the project includes 400 schools in 20 governorates.

Several one-day meetings have been held for administrators in the Ministry of Health and Population, Ministry of Education and the media plus members of parents committees and head teachers. These activities in health-promoting schools have been documented. A plan for evaluating the different activities of health-promoting schools was developed and executed. Many training courses have been held for teachers on the different methods for implementing the health-promoting schools initiative in their schools.

Different messages have been released consistent with the aims of the programme such as “physical education and sports are your way to health”, “yes to no smoking”, and “a healthy environment for us and for the future generation”. Also, many booklets have been published on the different aspects of health-promoting school.

## **4.3 Iraq**

Thirty years ago, Iraq was considered one of the leading countries in the implementation of health-promoting schools. All this stopped due to the war and unsafe circumstances. In 2005, with the help of WHO, Iraq tried to restart the health-promoting schools initiative by choosing 20 schools in parts of Baghdad. The programme had to stop due to the unsafe environment. Now, Iraq is trying to restart the program by conducting a survey on 150 schools in eight governorates in Iraq. Two primary schools were chosen from each governorate, and 12 from Baghdad forming a total of 46 schools. Psychological support is also provided in the 46 schools. School screening programmes have begun in 150 schools in more secure areas. Glasses and hearing aids have been given to children who need them. The preparatory phase has ended, and Iraq will start implementing the programme at the start of the new school year.

## **4.4 Islamic Republic of Iran**

There are about 18 million students in Iran constituting 25% of the total population and about 150 000 schools. There are about 500 school health experts in the Ministry of Health and Medical Education who plan and lead the school health programme and about 30 000 health volunteers in schools. There is a national plan of health promotion for the young and a national coordination committee comprising

representatives of the Ministry of Health and Medical Education and the Ministry of Education.

The aims of the programme are to improve the structures of school health departments in the Ministry of Health and Medical Education and the Ministry of Education, improve the national coordination committee, improve the network of health volunteers in schools, collaborate with the local community and engage parents and families in promoting their health.

Collaboration between the Ministry of Health and Medical Education and the Ministry of Education resulted in approving 42 hours worth of training courses on health issues in schools at all levels, developing the health volunteers in schools programme, developing training programmes in schools on HIV/AIDS, tuberculosis and noncommunicable diseases, and monthly monitoring of the health situation of schools by health workers.

#### **4.5 Jordan**

In cooperation with WHO, the Jordanian Ministry of Health has developed a school health strategy and a health education material newsletter (three editions), prepared special country report for the Global School Health Survey in 2004 and again in 2007 and conducted school health days

A consultant from the Regional Office for the Eastern Mediterranean conducted a workshop to develop the national indicators for health-promoting schools. This development continued in collaboration with Johns Hopkins University.

In cooperation with WHO and UNICEF, the ministry selected eight schools from four governorates to be health-promoting schools. Workshops were conducted by the health and education ministries for school health providers in order to discuss, review and adapt the national indicators for health-promoting schools.

The plan is to expand the health-promoting school programme through preparation of a work plan to implement the national indicators of promoting health schools as a pilot scheme in 20 schools during 2007–2008, this number to increase to 100.

#### **4.6 Lebanon**

There is no formal health-promoting schools programme in Lebanon. However, 50 three-day training sessions were held in 2006–2007, and 100 health and environment clubs set up in schools.

In 2003 the Ministry of Public Health and the Makassed Hospital signed a joint agreement aiming to start operations in Wadi Khaled Health Care Centre, some 100 km

north of Tripoli. The intervention of Makassed aims at ensuring mother and child care services and at providing vaccination and necessary health education to the centre community, including school students and their parents. To this end, and prior to the launching and planning of activities, a pilot survey was conducted in Wadi Khaled by the Makassed Hospital, Health Care Bureau and Makassed School of Nursing in order to collect information on patterns of vaccination, prenatal morbidity, mother and child health, and various other health problems existing in the area and affecting children and the community as a whole.

The data generated from the survey gave an idea about the general health and educational conditions in Wadi Khaled. A clear idea was formed about the existing trends, norms and habits and; therefore, an action plan, targeting school students and other community members, was formulated stressing on the issues related to mothers' and child health, vaccination, health education and awareness.

#### **4.7 Libyan Arab Jamahiriya**

Health promoting school in Libyan Arab Jamahiriya started in 2007 in coordination with WHO. The first step began with a training course on how to establish health promotion inside schools. This training was for physical educators, social workers and personnel providing first aid inside schools. Seven schools in Tripoli were initially chosen to be health-promoting schools.

Several health education training courses on oral health care were held for teachers of grade two in the primary schools. Also, educational booklets were distributed to pupils in grade two. Other training courses on safety and first aid were held for teachers and security personnel in schools. Training courses on sexually transmitted diseases, endemic diseases and AIDS were held for teachers of biology. Under the title of "building a safer future", training courses were held, with the help of WHO, for 38 teachers on the proper way to use first aid and the way to tackle emergency cases. Teachers have been trained in oral health care and tobacco control, and an early detection of scoliosis programme introduced. Attention is being given to nutrition and food safety and eye care and prevention of blindness.

The main target is to increase the number of health-promoting schools to 500 schools by 2008.

#### **4.8 Morocco**

A partnership has established between the ministries of health, education, scientific research and interior for the promotion and coordination of school health with the provision of financial and human resources for improving education.

Different preventive and curative services are provided to students through this national programme for school and university health.

The aims of these services are early detection and treatment of disease, health education programmes for healthy life skills and establishment of healthy school environments.

To reach these aims the Ministry of Health integrates school health services into primary health care in all health centres throughout the country. The most important services provided by these centres are periodic medical examination, prevention of myopia and other eye diseases, observation of the school environment and health education.

#### **4.9 Oman**

The health-promoting schools initiative in Oman was started in 2004–2005 in 19 schools in all educational regions and governorates (two schools in each region except Buraimi, Musandam and Wusta). Selection of schools depended on geographical distribution and the commitment and willingness of the school administration. A national task force and a regional team in each region and governorate and school team in each school were established. Many training workshops were conducted to train the school teams. Guidelines and training manuals were produced, and a national health-promoting school guide was established. In addition an assessment guideline manual was prepared to help regional and national assessors.

The Omani health-promoting schools network was established in form of a website, an annual forum and exchange visits between schools.

The future plan for health-promoting schools in Oman is to invite each school to be a member of the national network through fulfilling the criteria of the Omani health-promoting school.

#### **4.10 Palestine/UNRWA**

During the school year 2005–2006, a total of 485 471 pupils were enrolled in 663 UNRWA schools. The school health programme is implemented by the Health Department in close coordination and collaboration with the Education Department. A total of 47 848 new entrants were registered in UNRWA schools, they received immunization, thorough medical examination and follow-up. Of the total, 107 758 were screened, a coverage rate of 97.4%. The main morbidity conditions detected were oral health problems with 40%, vision defects with 11.8% and hearing impairment in 0.87%. Booster doses of DT/Td, OPV, rubella and tetanus vaccines were administered, with immunization coverage of 98.9%. A deworming programme was implemented targeting schoolchildren in the first, second and third elementary classes with high coverage (98%). A vitamin A supplementation programme for all schoolchildren from grade 1 to grade 6 started during 2006–2007.

With the financial assistance of the Regional Office for the Eastern Mediterranean, 75 000 copies of the booklet *Facts about tobacco* and 51 500 copies of the booklet *Facts about AIDS* were distributed each year to the targeted students. Training activities targeting both health and teaching staff.

In Lebanon two surveys for vision and hearing screening were conducted in coordination with the Education Department; a total of 38 453 school children were screened for hearing and vision impairments. Other similar screening programmes were conducted in Syrian Arab Republic and Jordan.

Palestine refugees are among the most disadvantaged sectors of the population. UNRWA responded to the psychosocial needs of Palestinian schoolchildren by implementing two psychosocial support programmes in Gaza and in the West Bank through 246 school counsellors. Children with special health needs are identified and managed through screening programmes at school entry and throughout the school cycle.

In each school there is an emergency preparedness plan, which includes training of teaching staff on first aid, availability of first aid kits, alarm system, fire extinguishing system and a list of emergency telephones and addresses.

School health teams, sanitation inspectors and teaching staff are responsible to keep hygienic and safe school environments essential for proper learning and working conditions.

#### **4.11 Pakistan**

Pakistan's school health programme was launched in the early 1980s with the help of WHO when special doctors were recruited for the purpose. In the wake of the Pakistani devolution programme—a major administrative shift that has elevated district governments, the need for new strategies is apparent. Punjab alone accounts for half the Pakistani population and has 10 million primary school children.

A pilot project was launched in the Punjabi district of Gujrat in 2005. The experience and lessons learnt will be used to formulate a comprehensive policy and action plan. Provisions are being made to compile a comprehensive database of students with ailments to be incorporated into the primary health care programme.

#### **4.12 Sudan**

Sudan's school health programme aims to cover provision of health services, environmental health services, school health education, school nutrition promotion, school workers health promotion, physical education and entertainment, school mental health and local community health promotion.

Its small budget is funded mainly by the Sudanese government and international agencies. There is increased attention from higher level authorities, and new partnerships are developing.

Difficulties and challenges include funding constraints, high turnover of staff, inactive school health laws, and geographic and demographic factors.

#### **4.13 Syrian Arab Republic**

The Syrian school health programme is comprehensive, covering health, education and the environment and stressing the involvement of all of the community. It emphasizes self-learning with the teacher as facilitator. The ministries of health and education are closely involved with its running.

After a successful pilot scheme, the programme was introduced nationally in 1998, concentrating on third-grade pupils with age-appropriate curricula. It is expanding and is expected to cover grades three to six by the end of 2008. Each class studies about six subjects, such as leishmaniasis, per year and is usually taught by the biology teacher. The teachers are taught through theoretical and practical training courses. About 8000 so-called community schools were affiliated to this programme in 2006–2007, of which about 2000 had dedicated “health halls”.

In addition to the health programme in schools, the Syrian Arab Republic has introduced modules on health-promoting schools and school health into its medical education syllabus at Damascus University that stress amongst other things preventive medicine and hygiene. As well as theoretical education, emphasis is placed on learning through field visits. School health is also being introduced into teacher-training programmes, although the emphasis is on theory rather than practical skills at present.

#### **4.14 Tunisia**

School medicine services started formally in Tunisia in 1948. At the outset, they were mainly concerned with pathologies related to hygiene and sanitation. At present, school medicine is prevalent at the level of the educational institutions. It aims to track all diseases that impede schooling. The Tunisian programme promotes a healthy lifestyle, focusing on three axes: the prevention of obesity, the control of smoking and the promotion of physical activity. A plan of action has been drawn up for the short, medium and long terms.

#### **4.15 United Arab Emirates**

The comprehensive school health programme in the United Arab Emirates is concerned with the medical services provided to students from the nursery to the university levels. It serves about 275 000 students through multiple school health departments, including 388 clinics—one in almost every government school

throughout the country. The FRESH framework is used as the basis for implementation of the programme; highlights include the establishment of asthma-friendly schools and participation in the Global School Health Survey. The impetus for the programme came from a document produced by the WHO Regional Office for the Western Pacific. Both the ministry of education and the ministry of health are involved in the healthy schools programme. The first international conference on school health was held in the United Arab Emirates. In 2002, a representative from the Emirati school health programme participated in a meeting on the European network of health-promoting schools in Amsterdam. In 2003, a workshop was held in coordination with the Regional Office for the Eastern Mediterranean. The current health-promoting schools committee comprises members from both ministries, which have signed a commitment to health-promoting schools. A pilot scheme was introduced, and a baseline evaluation conducted. There is also a Gulf Cooperation Council school health committee, which has suggested an action plan for member countries and has visited one of the pilot health-promoting schools. Several publications have been prepared on school health, including studies evaluating the pilot programme.

#### **4.16 Yemen**

The health-promoting schools pilot project started in ten schools from five governorates. It began with a training course for the schools managers and school health directors. Specific training for each school (including the students and the local authority) was organized. Schools committees were formed within the targeted schools. The programme concentrates on health education in order to change health-adverse behaviour and develop life skills. One difficulty the programme has faced is conflict between the ministries of health and education—it is hoped that this can be overcome. A national school health committee will be formed after the pilot project has been evaluated; Yemen intends to carry out the Global School Health Survey in the near future.

### **5. NETWORKING FOR BUILDING PARTNERSHIP**

#### **5.1 Approaches and mechanisms for creating national and regional networks of health-promoting schools**

*Dr Said Arnaout, WHO EMRO*

A health promoting school can be characterized as a school constantly strengthening its capacity as a healthy setting for living, learning and working. Towards this goal, a health promoting school engages *health* and *education* officials, teachers, students, parents and community leaders in efforts to promote health. WHO's Global School Health Initiative aims at helping all schools to become health-promoting by, for example, encouraging and supporting international, regional, subregional, national and subnational networks of health promoting schools and helping to build national capacity to promote health through schools.

A network may be defined as a grouping of individuals, organizations and agencies organized on a non hierarchical basis around common issues or concerns which are pursued proactively and systematically, based on commitment and trust. Most of the countries implementing health-promoting schools have networks one way or another, such as team meetings, newsletters, conferences and exchange materials; however, the vision and mission of these networks is not always clear.

To establish an effective network at national level there should be a signed agreement from the higher authorities of the ministry of health and ministry of education. A clear vision and mission should be developed, and efficient communication arrangement that ensure all partners are appropriately consulted and informed about network business.

Most countries of the Region have websites for their ministry of health and ministry of education, and schools in most countries have access to the internet; however, specific links for health-promoting schools are very scarce. Countries should establish electronic communications with pupils, parents, school personnel, agencies etc., and with networks beyond the national one; there should be effective and systematic evaluation of the network process. The network could be also established in the form of exchange visits, newsletters, annual meetings, e-mail groups and twinning between schools.

The national networks will feed in to the web-based Eastern Mediterranean Network of Health-promoting Schools with a commitment from all countries to continuously supply the site with all materials and information needed. The experience of the European and the Latin American Networks of Health-Promoting Schools may be used as guidance, although the culture and values of the countries of the Region must be respected.

Criteria for membership in the network are needed; potential members include representatives from the government, schools, institutions, nongovernmental organizations, the private sector, individual experts and international and regional agencies and organizations. Members must commit themselves to promoting, developing, implementing and evaluating (process and impact) the initiative's activities.

A suggested organizational structure at national level for the Eastern Mediterranean Network of Health-promoting Schools is: two coordinators from the ministries of health and education; a national coordination/steering committee comprising the national coordinators, representatives of other stakeholders/partners, and representatives of concerned international organizations in the country. Countries should set up national websites dedicated to health-promoting schools.

Subregional groups might comprise the Maghrebi countries or those of the Gulf Cooperation Council. A regional secretariat based in the Regional Office would



maintain the website and would be a member of the regional coordination committee together with representatives from the national networks and other related contributors.

## **5.2 Eastern Mediterranean Network of Health-promoting Schools**

*Ms Nahed El Shazly, WHO EMRO*

The website for the Eastern Mediterranean Network of Health-promoting Schools will be hosted at <http://www.emro.who.int/hps>.

The website contains a database with data from all countries of the Region, where it is available. There are entries on school health in general plus health-promoting schools in particular. Information about health-promoting schools, FRESH, the Global School Health Initiative and the Global School Health Survey is provided together with a guide to the multi-media action-oriented school health curriculum (the last in Arabic). Global, regional and national standards are referenced. Links are provided to useful resources, and countries can add information about their own expert institutions.

## **5.3 Multimedia action-oriented school health curriculum (web-based)**

*Dr Abdel Halim Joukhadar, WHO EMRO*

School-age children represent about one-quarter of the population of the Eastern Mediterranean Region. Children spend most of their day at school, which is a privileged health promotion setting where they can receive health education and develop appropriate health-based life skills. Teachers play a key role in promoting the health of schoolchildren in close cooperation with school health services. Moreover, children interact with their siblings, family members and relatives, and transmit the health knowledge and practise the life skills they have acquired.

Based on the above-mentioned facts and endeavouring to achieve the goal of Health For All, the WHO Regional Office for the Eastern Mediterranean, in close cooperation with UNICEF and UNESCO regional offices, published in 1988 the prototype action-oriented school health curriculum (AOSHC) for primary education. The six-volume publication comprised 22 modules and a teacher's guide covering a wide range of health issues. The AOSHC was well received by educational authorities and was used in developing national school health education curricula in many Arab countries, as well as the Islamic Republic of Iran and Pakistan.

Several factors warranted the updating and revision of the AOSHC and expanding its scope to cover all the grades of basic education. The developments that followed the 1990 Jomtien World Conference on Education For All and the Dakar Forum in 2000 underscored the importance of the school setting in health promotion and the interagency initiative on focusing resources for effective school health. The epidemiological transition from communicable to noncommunicable disease witnessed in the Eastern Mediterranean Region needed to be addressed, along with the rapid

expansion of information technology and e-learning. A CD-ROM-based experimental multimedia Arabic version of the prototype curriculum was elaborated in 2005 and tested in 10 selected countries of the Region during the school year 2005–06 .

The revised updated multi-media Arabic version 1.0, integrating the findings of the experimentation, has been enriched with many updates and additions thanks to the contributions of Member States, includes 22 modules with hyperlinks, a multi-media library of books, leaflets, posters, audio tracks and videos, in addition to interactive educational games and tools that enable the teacher to add comments, operate search functions regarding any topic easily, copy and paste as well as print any part of the contents, including illustrations and photos, a lesson bar that enables teachers to prepare a lesson using a Word template and to import all the materials they need from the contents and resources available on the double CD-ROM (1.32 gigabytes). Moreover, a web-based version, with updates, is available at the EMRO Health Promoting Schools site (<http://www.emro.who.int/hps>). It is hoped that both the CD-ROM version and the web-based version will contribute to strengthening health education and promotion in the school setting.

#### **5.4 Information systems for health-promoting schools**

*Dr Kholoud Tayel, WHO Temporary Adviser, WHO EMRO*

A health promoting school is one in which all members of the school community work together to provide pupils with integrated and positive experiences and structures which promote and protect their health. This includes both formal and the informal curricula in health, the creation of a safe and healthy school environment, the provision of appropriate health services and the involvement of the family and wider community in efforts to promote health.

Gathering accurate information about the needs, views, opinions and current status of the school community is an important part of the health-promoting process. Thus the purpose of an information system for health-promoting schools is to provide high-quality, relevant and timely data, information and knowledge in order to support decision-making at local, national and regional levels.

Managing an information system for HPS means designing organizations capable of running the information process in an orderly way. Choosing the most relevant set of data and indicators, up-to-date information technology and relevant statistical analysis represent some of the essential steps to ensure a functional information system for health-promoting school programmes. Also, there must be a harmonization of data collection by countries of the Region as it is impossible to collect data and produce indicators without a very good basis in the form of instruments to gather this information. It is important to focus on improving quality and comparability of these instruments in order to make it easier to compare and analyse information across countries and over time.

There are several sets of indicators which can be effectively used to evaluate and collect information on health-promoting schools including indicators to evaluate resources, whether human or non-human, performance indicators and outcome indicators.

All the information gathered should be properly disseminated to all levels; whether national, regional or international through effective networking, which is considered the most effective way to take forward health promotion in school settings at all levels.

## **6. INTERNATIONAL SUCCESS STORIES: THE HEALTHY BUDDIES PROJECT**

*Dr David Barnum, WHO Temporary Adviser, WHO EMRO*

A community on the Sunshine Coast of British Columbia, Canada, expressed interest in implementing a structured programme in elementary school classrooms to promote nutrition, activity, and healthy eating-related attitudes.

In a scientific, prospective, randomized study (>350 students in two schools), a health-promotion programme was developed and implemented using “buddy teaching”—children teaching each other.

Comprehensive assessments were conducted on all students pre- and post-intervention, and on students at the control school. Objective evaluation of the students who received the programme showed statistically significant improvement in healthy living knowledge and behaviour for both the older and younger buddies.

Older students (grades 4–7) received a healthy living lesson and then delivered that lesson to their paired younger “buddies” (kindergarten–grade 3). “Buddy pairs” lasted for the whole school year. The programme was implemented in the entire school and targeted attitudes and behaviour about body image, nutrition, and physical activity.

During the first 10 weeks buddy pairs learned how to be positive buddies and the three components of a healthy life. In the second 10 weeks, they learned about challenges to living a healthy life and how to overcome these obstacles. Buddy-lessons are delivered using a variety of techniques (presentations, card games, art activities, etc.).

The study found that Healthy Buddies increased healthy knowledge, attitude and behaviour not only in grades 4–7 schoolchildren but also in the younger “buddies”. Body-mass index and weight increased less in older Healthy Buddies children compared to the control school. Height increased more in younger Healthy Buddies children compared to the control school. Systolic blood pressure was reduced in children who received the Healthy Buddies programme as compared to the control school.

Perhaps most important, the children had fun.

These preliminary findings need to be confirmed by a larger study. Thus the programme is being expanded to 40 schools in British Columbia (25% with evaluation) during 2005–2008.

US\$ 30 000 has been earmarked to adapt Healthy Buddies for the Eastern Mediterranean Region.

More information about Healthy Buddies is at <http://www.healthybuddies.ca>.

## 7. CONCLUSIONS

- Implementing the health-promoting school concept requires many capacities and processes. Five core elements of national capacity are: knowledge base, policy, leadership and management, collaboration, tracking, and evaluation. Other processes are; pupil awareness and participation, partnerships between teachers and health workers, and community participation. Most research has focused on effectiveness of the intervention, rather than on the effectiveness of the implementation process.
- The existence of health-promoting school programmes has contributed to the institutionalization of the health promotion concept in both health and education ministries in many countries of the Region.
- Health-promoting schools increase the sense of responsibility among students and develop decision-making skills and initiative-taking.
- Almost all case studies from different countries originated with the ministry of health but could not move to scale until formal collaboration developed with the ministry of education.
- Cases presented at the conference described critical role of professional development: training, technical assistance and forums for ongoing sharing and coaching.
- Research institutions, universities, medical colleges (family and community medicine departments) and colleges of education have been involved in health-promoting schools programmes.
- Nongovernmental and subregional organizations play an important role in the application of health-promoting schools programmes.
- In some countries, a teacher was allocated as a full-time supervisor to monitor and coordinate health promotion activities.

- Few programmes use the explicit term “leadership”. Yet almost all cases report how essential the leadership, commitment and political will of the government and key officials is. The leadership of WHO and United Nations agencies has been most instrumental in convincing national-level government leaders.
- Some health-promoting schools have encouraged neighbouring schools to become health-promoting schools; others have twinned with other health-promoting schools.
- Training has been conducted in many countries on the different aspects of health-promoting schools at all levels.
- In some countries, students have been successful in introducing positive changes in the school and neighbouring community and in changing parents’ attitudes and health-risk behaviour.
- The use of international guidelines is significant in moving from a narrow view of school health as primarily education or a curriculum on health to multiple components of health-promoting schools or FRESH: policy, skills-based curriculum, services, and psychosocial and physical environments. Examples of these guidelines are:
  - *Improving health through schools*. Geneva, WHO Expert Committee on Comprehensive School Health Education and Promotion, 1995.
  - FRESH publication document. Dakar, World Education Forum, Education for All Assessment, 2000.
- Suggested indicators for tracking and monitoring are: 1) national capacities in place, policy, training; 2) number of schools meeting criteria for health-promoting school awards, 3) child health indicators, 4) changes in surrounding school environment, e.g. latrines, water pumps.
- What makes health promotion sustainable in schools is integrating it into existing policies aimed at improving teaching and learning and the whole school environment and putting it in the hands of those who live and construct everyday life in schools.
- More advocacy of health-promoting schools is required to improve the political commitment of the countries. Advocacy could help in strengthening the inter-sectoral cooperation of the concerned sectors

Challenges and limitations include the following:

- Poor staff development and teacher-training programmes to implement multiple components and curriculum.

- High turnover of staff.
- Presence of conflict between the health-promoting schools initiative and other similar projects or initiatives in some countries. Also, schools are overloaded with many initiatives. Thus, collaboration between these initiatives is necessary.
- The education sector gets involved too late and is late to perceive the benefits of health promotion and disease prevention.
- Lack of effective coordination between the authorities concerned.
- Insufficient financial resources and technical capacities.
- Inadequate or insufficient infrastructure.
- Lack of unified guidelines and standards for evaluation.
- Lack of research and scientific publications on health promoting schools
- Absence of national policy for health-promoting schools, except in a few countries
- Sustainability is a real challenge.

## **8. RECOMMENDATIONS**

### *To Member States*

- Encourage ministries of health and ministries of education to adopt clearly defined and widely publicized health-promoting school programmes, based on existing successful educational experiences and health activities in school health and health promotion.
- Provide effective and sustainable support to the Eastern Mediterranean Network of Health-promoting Schools (EMNHPS) through establishing active national networks of health promoting schools, guided by two national coordinators (one from the ministry of health and one from the ministry of education).
- Base health-promoting school strategies on up-to-date evidence-based models and behaviour change theories.
- Develop national standards and accreditation and/or competition systems for health promoting schools.

- Establish a suitable comprehensive database on health-promoting schools services and indicators at national and local levels to be used in advocacy, planning, intervention and evaluation of school health and health-promoting schools; provide easy access to the database through a network and website.
- Encourage and develop operational research on health-promoting schools through the active involvement of academia and research institutions.
- Establish a surveillance system through conducting regular periodic surveys in order to assess risk factors and the impact of the programme and for early detection of obstacles.
- Ensure allocation of adequate financial and human resources for schools to enable them become health-promoting.
- Develop a core training curriculum for training of health-promoting schools trainers and ensure quality initial and in-service training and continuing education of all staff and persons involved in health-promoting schools programmes.
- Encourage colleges of medicine and education to incorporate health promoting schools approach in their curriculum.

*To WHO, UNESCO, ISESCO and other international organizations*

- Include school health and health-promoting schools on the agenda of the regional governing bodies and regional coordination meetings. A high level meeting between ministers of health and education and other stakeholders at regional level would provide an opportunity to enhance partnership for strengthening school health and expanding health promoting schools in the region.
- Continue to provide effective and sustainable support to the Eastern Mediterranean Network of Health-promoting Schools (EMNHPS) through pooling resources and coordinated actions.
- Develop regional standards, indicators, model accreditation/competition systems, guidelines, training curricula, modules and manuals for health-promoting school programmes which could be adapted by Member States.
- Formulate a regional coordination committee on school health and health-promoting schools in order to coordinate activities of the EMNHPS at the regional level.

- Consolidate efforts to strengthen the cooperation between the regional networks of health-promoting schools and activate the FRESH framework at international, regional, national and local levels.
- Adapt and translate into Arabic the Healthy Buddies educational kit and disseminate it to Member States wishing to benefit from this experience with a view to promoting physical activity, healthy eating habits and mental health among schoolchildren.
- Disseminate the revised Arabic version of the multi-media action-oriented school health curriculum to be used in the training of teachers and strengthening school health education contents in curricula.



**Annex 1**

**AGENDA**

1. Inaugural session
2. Adoption of the agenda and election officers
3. Objectives, mechanisms and expected outcomes of the regional consultation
4. Highlights of the WHO global technical meeting on school health, 5–8 June 2007, Vancouver, British Columbia, Canada
5. Highlights of the 19th IUHPE world conference on health promotion & health education, 10–15 June 2007, Vancouver, Canada
6. Health-promoting schools: case study experiences of implementation
7. Health-promoting schools in the Eastern Mediterranean Region—achievements, challenges and future directions
8. Current status of health-promoting schools in the Eastern Mediterranean Region
9. Current state of partnership on school health promotion (FRESH framework)
10. UNESCO perspective
11. World Bank perspective
12. WHO perspective
13. Plenary discussion and country perspectives
14. Approaches and mechanisms for creating national and regional networks of health-promoting schools
15. Eastern Mediterranean Network of Health Promoting Schools (EMNHPS)
16. Multi-media action-oriented EMNHPS (web-based)
17. The Canadian experience: Healthy Buddies project
18. Information systems for health-promoting schools
19. Conclusion and closure

**Annex 2**

**PROGRAMME**

**Monday, 3 September 2007**

- |             |  |
|-------------|--|
| 08:30–09:00 | Registration   |
| 09:00–10:00 | <p>Opening ceremony</p> <p>Message from Dr Maher El Hosamy, Minister of Health, Syrian Arab Republic</p> <p>Message from Dr Ali Said, Minister of Education, Syrian Arab Republic</p> <p>Address of Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean</p> <p>Address of Dr Abdel Muneim Osman, Director, UNESCO, Regional Bureau for Education in the Arab States</p> <p>Message from Dr Abdulaziz Othman Altwaijri, Director-general of the Islamic Educational Scientific and Culture Organization (ISESCO)</p> <p>Election of chairman, vice-chairman and rapporteur</p> |
| 10:45–11:00 | <p>Objectives, mechanisms and expected outcomes of the conference</p> <p><i>Said Arnaout, WHO EMRO</i></p> <p><i>Abdel Halim Joukhadar, WHO EMRO</i></p>   |

**1st plenary session: current trends in health promotion and school health**

- |             |  |
|-------------|--|
| 11:00–11:30 | <p>Highlights of the WHO global technical meeting on school health, 5–8 June 2007, Vancouver, British Columbia, Canada</p> <p><i>Said Arnaout, WHO EMRO</i></p> <p><i>Moustafa Abol-Fottouh, WHO Temporary Adviser</i></p> |
| 11:30–12:00 | <p>Highlights of the 19th IUHPE world conference on health promotion and health education, 10–15 June 2007, Vancouver</p> <p><i>Abdel Halim Joukhadar, WHO EMRO</i></p>  |
| 12:00–12:30 | <p>Health-promoting schools: case study experiences of implementation</p> <p><i>Carmen Aldinger, Education Development Center, USA</i></p>   |
| 12:30–13:00 | <p>Health-promoting Schools in the Eastern Mediterranean Region—achievements, challenges and future directions</p> <p><i>Said Arnaout, WHO EMRO</i></p>  |

13:00–13:30 Discussion

**2nd plenary session: current status of health-promoting schools in the Eastern Mediterranean Region**

14–15–17:30 Bahrain, Egypt, Iraq, Jordan, Lebanon, Libyan Arab Jamahiriya, Morocco

**Tuesday, 4 September 2007**

**3rd plenary session: current status of health-promoting schools in the Eastern Mediterranean Region (concluded)**

08:30–13:30 Oman, Palestine/UNRWA, Pakistan, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen, Islamic Republic of Iran

**4th plenary session: current state of partnership on school health promotion (FRESH Framework)**

14:15–14:45 UNESCO perspective

14:45–15:15 World Bank perspective

15:30–16:00 WHO perspective

16:00–17:00 Plenary discussion and country perspectives

**Wednesday, 5 September 2007**

**5th plenary session: networking for building partnerships**

08:30–09:00 Approaches and mechanisms for creating national and regional networks of health-promoting schools  
*Said Arnaout, WHO EMRO*  
*Abdel Halim Joukhadar, WHO EMRO*

09:00–09:45 Eastern Mediterranean Network of Health-promoting Schools (EMNHPS)  
*Nahed Al Shazly, WHO EMRO*  
*Ahmad Adel, WHO Temporary Adviser*

09:45–10:30 Multi-media action-oriented school health curriculum (web-based)  
*Abdel Halim Joukhadar, WHO EMRO*

**6th plenary session: international success stories**

11:00–12:45	The Canadian experience: Healthy Buddies project <i>David Barnum, WHO Temporary Adviser</i>
12:45–13:30	Information systems for health promoting schools <i>Kholoud Tayel, WHO Temporary Adviser</i>
14:15–14:45	Conclusions and recommendations
14:45–15:00	Closure

**Annex 3**

**LIST OF PARTICIPANTS**

**BAHRAIN**

Dr Mariam Al-Mulla  
Head of School Health Section  
Ministry of Health

**Manama**

Email: [mealmula@batelco.com.bh](mailto:mealmula@batelco.com.bh)

**DJIBOUTI**

Mrs Fatouma Mohamed Kamil  
Head of Department of School and University Health  
Ministry of Health

**Djibouti**

Email: [medsco.2006@yahoo.fr](mailto:medsco.2006@yahoo.fr)

**EGYPT**

Dr Nagwa El Ashri  
Director General School Health Department  
Ministry of Health and Population

**Cairo**

Email: [nagwa54@yahoo.com](mailto:nagwa54@yahoo.com)

**ISLAMIC REPUBLIC OF IRAN**

Dr Mohammad Amir Amirkhani  
Director-General  
Communication and Health Education Office  
Ministry of Health and Medical Education

**Teheran**

Email: [Amirkhani2000@yahoo.com](mailto:Amirkhani2000@yahoo.com)

**IRAQ**

Dr Nadeem R. Shiyaa Almaliky  
Family Medicine Manager of School Health in Basra  
Ministry of Health  
**Baghdad**

Dr Emad A. Zaidan  
Directorate of School Health Department  
Ministry of Health  
**Baghdad**  
Email: [amosawey@yahoo.com](mailto:amosawey@yahoo.com)

**JORDAN**

Dr Basheer Al Qaseer  
Director of School Health Programme  
Ministry of Health  
**Amman**  
Email: [schoolh@moh.gov.jo](mailto:schoolh@moh.gov.jo)

Dr Samar Batarseh  
Ministry of Health  
**Amman**  
Email: [schoolh@moh.gov.jo](mailto:schoolh@moh.gov.jo)

**LEBANON**

Mrs Rindalah Farahat  
Public Health Specialist  
Head of Nutrition and Food Safety Department  
Ministry of Public Health  
**Beirut**  
Email: [rindalanuriddin@yahoo.com](mailto:rindalanuriddin@yahoo.com)

Mrs Clado Hamieh  
Health Educator  
Ministry of Public Health  
**Beirut**

**LIBYAN ARAB JAMAHIRIYA**

Dr Abdelhakim Aoun

Focal point for School Health Programme

General People's Committee for Health and Environment

Head of School Health

Ministry of Health

**Tripoli**

Email: [hakim9820@yahoo.com](mailto:hakim9820@yahoo.com)

Ms Fawzia Benghashir

School Health Department

General People's Committee for Health and Environment

**Tripoli**

Email: [l.fouzia\\_tt@yahoo.com](mailto:l.fouzia_tt@yahoo.com)

**MOROCCO**

Dr Nabil Bourquia

Head of Service "Enseignement Préscolaire et Fondamental"

Directorate of Population

Ministry of Health

**Rabat**

Email: [nabilbourquia@yahoo.com](mailto:nabilbourquia@yahoo.com)

**OMAN**

Dr Muna Al-Zakwani

Ministry of Health

**Muscat**

Email: [muna22976@yahoo.com](mailto:muna22976@yahoo.com)

**PAKISTAN**

Dr Ahmad Balal  
Special Secretary  
Health Department  
Ministry of Health

**Lahore**

Email: [ahmadbalal1138@hotmail.com](mailto:ahmadbalal1138@hotmail.com)

**QATAR**

Dr Hamda Abdalla Qotba  
Head of Noncommunicable Diseases Department  
National Health Authority

**Doha**

Email: [hqotba@hmc.org.qa](mailto:hqotba@hmc.org.qa)

**SUDAN**

Dr Wafa Hassan Yousif  
Director of School Health, Khartoum State  
Federal Ministry of Health

**Khartoum**

Email: [wafaahassan25@yahoo.com](mailto:wafaahassan25@yahoo.com)

**SYRIAN ARAB REPUBLIC**

Mr Barakat Abo Hamed  
School Health Department  
Ministry of Health

**Qunietra**

Ms Joumana Al Shaalan  
Ministry of Health

**Damascus**

Ms Majeeda Baddour  
Director of Curricula  
Ministry of Health

**Damascus**

Ms Wissam Hijo

**Damascus**



Dr Muhsen Kanaan  
Healthy Villages Director  
Ministry of Health  
**Damascus**  
Email: [mohsen.k@mail.sy](mailto:mohsen.k@mail.sy)

Mr Ryad Khoury  
School Health Department  
Ministry of Health  
**Damascus**

Mr Adib Trad  
School Health Department  
Ministry of Health  
**Damascus**

## **TUNISIA**

Dr Souha Bougatef  
Focal Point, School Health  
Institut National de Sante Publique  
Ministry of Public Health  
**Tunis**  
Email: [souha.bougatef@rns.tn](mailto:souha.bougatef@rns.tn)

Professor Hassan Ghannam  
Department of Epidemiology, University Hospital Farhat Hached  
Community Healthy Lifestyle among Schools  
Ministry of Public Health  
**Sousse**  
Email: [hassen.ghannem@rns.tn](mailto:hassen.ghannem@rns.tn)

Dr Mohamed Mokdad  
Directeur de la Médecine scolaire et universitaire  
School and University Health Directorate  
Ministry of Public Health  
**Tunis**  
Email: [Mohamed.mokdad@rns.tn](mailto:Mohamed.mokdad@rns.tn)

## **UNITED ARAB EMIRATES**

Dr Ola Ahmed Mira  
Director School Health  
Ministry of Health  
**Abu Dhabi**  
Email: [ola\\_md62@hotmail.com](mailto:ola_md62@hotmail.com)

**YEMEN**

Ms Samea Abdulla Allos  
Ministry of Public Health and Population  
**Sana'a**

Dr Nabil Nasr  
Ministry of Public Health and Population  
**Sana'a**  
Email: [nabilnesr@hotmail.com](mailto:nabilnesr@hotmail.com)

**WHO TEMPORARY ADVISERS**

Dr Moustafa Abol-Fottouh  
Professor of School Health  
Department of Family Health, High Institute of Public Health  
Alexandria University  
Alexandria  
EGYPT  
Email: [mabolfotouh@gmail.com](mailto:mabolfotouh@gmail.com)/ [mabolfotouh@yahoo.com](mailto:mabolfotouh@yahoo.com)

Dr Walid Al-Faisal  
Department of Community and Family Medicine  
Faculty of Medicine  
Damascus University  
Damascus  
SYRIAN ARAB REPUBLIC  
Email: [w-faisal@scs-net.org](mailto:w-faisal@scs-net.org)

Dr Abdel Aziz Al-Nahar  
Ministry of Education  
Damascus  
SYRIAN ARAB REPUBLIC

Mr David Barnum  
Healthy Buddies Program Development & Implementation  
British Columbia's Children's Hospital  
Vancouver  
CANADA  
Email: [info@healthybuddies.ca](mailto:info@healthybuddies.ca)

Dr Soliman El-Khatib  
Deputy Minister  
Ministry of Education  
Damascus  
SYRIAN ARAB REPUBLIC

Dr Jameel El Oweid  
Deputy Minister of Health  
Damascus  
SYRIAN ARAB REPUBLIC

Mrs Feryal El-Qahef  
Ministry of Education  
Damascus  
SYRIAN ARAB REPUBLIC

Dr Mongi Hamrouni  
Head of the School and University Health Directorate  
Ministry of Public Health  
Tunis  
TUNISIA  
Email: [mongi.hamrouni@rns.tn](mailto:mongi.hamrouni@rns.tn)

Dr Sahar Abdou Helmi  
Superintendent, Department of School Health  
Ministry of Health  
Muscat  
OMAN  
Email: [dir-sch-hlt@moh-gov.om](mailto:dir-sch-hlt@moh-gov.om)

Dr Hassan Al Haj Hussein  
Head of International Public Relations  
Ministry of Health  
Damascus  
SYRIAN ARAB REPUBLIC

Ms Nina Lahham  
General Coordinator  
School Health Programme  
Ministry of Education  
Beirut  
LEBANON  
Email: [ninalahham@hotmail.com](mailto:ninalahham@hotmail.com)

Ms Reem Rabah  
Makassed Charity Foundation  
Beirut  
LEBANON  
Email: [rerabahal@hotmail.com](mailto:rerabahal@hotmail.com)/[rerabah@makassed.org](mailto:rerabah@makassed.org)

Dr Kholoud Tayel  
Professor of School Health  
High Institute of Public Health  
Alexandria University  
Alexandria  
EGYPT  
Email: [kholoudtayel@hotmail.com](mailto:kholoudtayel@hotmail.com)

**LIST OF PARTICIPANTS (UNESCO)**

BAHRAIN  
Mrs Lulwa Al-Thukair  
Ministry of Education  
Manama  
Email: [il\\_Thukair\\_84@yahoo.com](mailto:il_Thukair_84@yahoo.com)

EGYPT  
Ms Nahed Badr El Din  
Cairo  
Email: [n\\_m\\_B2007@yahoo.com](mailto:n_m_B2007@yahoo.com)

IRAQ  
Ms Sohair Mohsen  
Scientific Researcher  
General Directorate of Curriculum  
Ministry of Education  
Baghdad  
Email: [suhair887@yahoo.com](mailto:suhair887@yahoo.com)

JORDAN  
Dr Mohamed Ghazi Al-Joban  
Head of Nutrition and Health Department  
Amman  
Email: [Mohamed\\_joban@yahoo.com](mailto:Mohamed_joban@yahoo.com)

LEBANON  
Dr Hasan Eyadeh  
Field Disease Control Officer  
UNRWA  
Beirut

OMAN

Dr Khamis Salem Rassibi  
Head of Department of Guidance and Counselling  
Ministry of Education  
Muscat  
Email: [alwafi64@hotmail.com](mailto:alwafi64@hotmail.com)

SUDAN

Mr Abo Obida Mohamed Osman  
Head of School Health  
Ministry of Education  
Khartoum

YEMEN

Mr Mohamed Ahmed Hizam  
Head of School Health  
Ministry of Health  
Sana'a  
Email: [almhrame68@hotmail.com](mailto:almhrame68@hotmail.com)

**OTHER ORGANIZATIONS**

**UNITED NATIONS RELIEF AND WORKS AGENCY FOR PALESTINE  
REFUGEES IN THE NEAR EAST (UNRWA)**

Dr Fathi Hamadeh  
Field Family Health Officer  
UNRWA  
Damascus  
SYRIAN ARAB REPUBLIC  
Email: [F.Hamadeh@unrwa.org](mailto:F.Hamadeh@unrwa.org)

Dr Ali Khader  
Chief Health Protection and Promotion  
UNRWA  
Amman  
JORDAN  
Email: [a.khader@unrwa.org](mailto:a.khader@unrwa.org)/[Akhader20002000@yahoo.com](mailto:Akhader20002000@yahoo.com)

**UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL  
ORGANIZATION (UNESCO)**

Dr Abdel Moneim Osman  
Director  
UNESCO Regional Office  
Beirut

Ms Dana El-Kaissi  
Programme Assistant  
HIV/AIDS and FRESH Initiative Programme  
UNESCO Regional Office  
Beirut  
Email: [d.kaissi@unesco.org](mailto:d.kaissi@unesco.org)

**ISLAMIC EDUCATIONAL SCIENTIFIC AND CULTURAL ORGANIZATION  
(ISESCO)**

Dr Ghassan Saleh  
ISESCO Representative  
Sharjah  
UNITED ARAB EMIRATES

**WORLD BANK**

Dr Donald Bundy  
Lead Specialist  
School Health and Nutrition  
Washington DC  
UNITED STATES OF AMERICA

Dr Michael Beasley  
Technical Expert  
School Health and Nutrition  
Washington DC  
UNITED STATES OF AMERICA

**EDUCATION DEVELOPMENT CENTER**

Dr Carmen Aldinger  
Project Director  
Health and Human Development Programmes  
Education Development Center, Inc.  
Newton MA  
UNITED STATES OF AMERICA  
[Email:Caldinger@edc.org](mailto:Caldinger@edc.org)

**UNITED NATIONS POPULATION FUND (UNFPA)**

Mr Abdul Muneim Abu-Nuwar

Director

Country Technical Services Team for the Arab States

United Nations Population Fund

Amman

JORDAN

**WHO SECRETARIAT**

Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean

Dr Ibrahim Betelmal, WHO Representative, Syrian Arab Republic

Dr Ibrahim Abdel Rahim, WHO Representative, Tunisia

Dr Abdel Halim Joukadar, Regional Adviser, Health Education, WHO Regional Office for the Eastern Mediterranean

Dr Said Arnaout, Regional Adviser, Health for Special Groups (Elderly, Workers, School), WHO Regional Office for the Eastern Mediterranean

Mr Ahmed Adel Nasser, Web Designer, WHO Regional Office for the Eastern Mediterranean

Ms Nahed El Shazly, Technical Assistant/Web Designer, WHO Regional Office for the Eastern Mediterranean

Ms Dalia Nofal, Secretary, WHO Regional Office for the Eastern Mediterranean

Manal A. Latif, Secretary, WHO Regional Office for the Eastern Mediterranean