



CVD Prevention global news update
is produced for Heartfile by
ProCOR

Heartfile (www.heartfile.org) is a Pakistan-based non-profit, health-sector NGO recognized worldwide for its pioneering contributions in health policy, public health planning, and disease prevention and control. Heartfile focuses on developing innovations in the health sector, contributes to knowledge in the areas of health policy and public health planning for low-resource settings, and forms the empirical basis for health system reforms within the framework of an integrated approach to the prevention and control of chronic diseases.

ProCOR (www.procor.org) is a global health communication network promoting cardiovascular health in low-resource settings. ProCOR uses email and the internet for the exchange of timely, accurate, and relevant information among a global community involved in medicine, public health, policy, and research.

The *CVD Prevention global news update* compiles recent news about advances in heart health knowledge and practice around the world. To receive email updates on relevant topics and join the ProCOR email network, send a message to procor-join@healthnet.org or visit www.procor.org. For more information or to contribute to the next issue, contact Catherine Coleman, editor in chief, ccoleman5@partners.org

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Case for prevention: Soweto

South Africa's public transport system is dominated by minibus taxis, which are the only form of public transport that penetrates every sector in cities, including the poorest settlements.

In Soweto, the most populous black urban residential area in the country, the "busiest taxi rank in the world" is located in front of the 3200-bed CH Baragwanath Hospital. An innovative pilot project developed by the "Heart of Soweto" project is organizing "heart awareness days" at the taxi rank.

During "heart awareness days," people waiting for taxis are offered screening and education about heart health. A team of ten nurses and dietitians working in two large tents measure height, weight, blood pressure, glucose, and cholesterol.

According to Prof. Karen Sliwa, Soweto Cardiovascular Research Unit, who helped organize the events, "We were surprised to see what a success our little campaign was! People were extremely keen to get tested and receive advice from our dietitians. We managed to test more than 200 people a day. The results were alarming--50% of the 1195 people were obese (BMI>30 kg/m²) and about 40% had a high BP, glucose or cholesterol."

The campaign was featured on SABC II--a popular TV program in South Africa--and reported in local newspapers, creating even broader awareness of heart health.

Many of the people who participated asked if they could bring their relatives and friends in 2007. Expenses for the events were donated by a large company, and Sliwa notes, "We are fortunate to have funds to continue with the project in 2007."

For more information: Heart of Soweto (www.socru.org).

Information about this innovative community-based model was contributed to ProCOR's Global Dialogue by Prof. Karen Sliwa, Soweto Cardiovascular Research Unit, University of the Witwatersrand

Childhood Obesity in the Eastern Mediterranean Region

Reviewed by Carlos Mendoza Montano, PhD
ProCOR Contributing Editor

Reference: "Global Dimensions of Childhood Obesity,"
Roya Kelishadi, Nova Science Publishers, 2006, pp. 71-89

Childhood obesity is an increasing public-health problem globally. In Western countries, the incidence of childhood obesity has more than doubled over the past generation. A similar pattern is emerging in developing countries. In the last decades, the Eastern Mediterranean region (EMR) has undergone a rapidly epidemiologic transition. Through a systematic review, Dr. Kelishadi compares surveys on prevalence of overweight and obesity among children living in the EMR and explores environmental influences and variations among population sub-groups .

Childhood obesity comorbidities

As with adults, obesity in childhood causes hypertension, dyslipidemia, chronic inflammation, increased blood clotting tendency, endothelial dysfunction, and hyperinsulinemia. This cluster of risk factors is known as metabolic syndrome or insulin resistance syndrome and has been identified in children as young as 5 years of age. Among adolescents and young adults who died of traumatic causes, the presence of such risk factors correlated with asymptomatic coronary atherosclerosis and lesions, and were more advanced in obese individuals. Findings of many studies indicate substantial psychosocial consequences of childhood obesity. Obese children are stereotyped as unhealthy, academically unsuccessful, socially inept, unhygienic and lazy. Healthcare providers with expertise in obesity treatment share these stereotypes to some degree. Overweight children as young as five years can develop negative self-images and adolescents exhibit declining degrees of self-esteem associated with sadness, nervousness and high risk behaviors.

Etiology of childhood obesity

Although the mechanism of childhood obesity is not fully understood, obesity occurs when energy intake exceeds energy expenditure. Some studies have revealed that obese children have less moderate to vigorous physical activity than their non-obese counterparts. Another study revealed association of low vigorous physical activity and TV watching with obesity. Familial environment and parental habits can have influence in this regard. Parents

parental habits can have influence in this regard. Parents provide both the genes and the eating environments for their children; familial patterns of adiposity are the result of gene-environment interaction. Genetic factors can have a great effect on individual predisposition; however, rising prevalence rates among genetically stable population indicate that environmental and possibly, perinatal factors must underline the childhood obesity epidemic. Observational studies reveal a direct relation between maternal obesity, birth weight and obesity later in life. However undernutrition in some important stages of fetal development can also lead to permanent physiological changes that may induce obesity. Studies have shown that low-birth weight is associated with hypertension, hiperlipidemia and other risk factors in adult life.

Childhood obesity in developing countries

Childhood obesity is becoming increasingly prevalent in developing countries, where the rapid progress of urbanization and demographic trends is associated with a cluster of NCD and unhealthy lifestyle described as the "Lifestyle Syndrome" or the "New World Syndrome". This is suggested as the most important etiology for the very high rates of obesity and its consequent morbidity and mortality in developing nations.

Prevalence in the Eastern Mediterranean region

The prevalence of overweight among preschool children varies from near 3% in the United Arab Emirates (UAE), Iran and Pakistan to 8.6% in Egypt. Among older children and adolescents (6-18 years), the prevalence of overweight among girls ranges between 6.3% in Bahrain to 31.8% in Kuwait; among boys, it ranges between 4.9% in Saudi Arabia to 30% in Kuwait. Prevalence of obesity in girls is reported from 3% in UAE and Iran to 35.1% in Bahrain; among boys, it ranges from 2.1% in Iran to 21% in Bahrain and 14.7% in Kuwait. Few studies in the EMR have assessed environmental influences on childhood obesity, but a few emphasized that sedentary lifestyle, especially in girls and urban residents, along with low nutrient but energy dense foods and the public belief that fatness is a sign of health and beauty, are the major factors in the high prevalence of obesity in this region.

Conclusion

The findings of recent studies in this region provide alarming evidence-based data for health professionals and policymakers about the prevalence of childhood overweight and obesity EMR countries still grappling with the public health effects of malnutrition and micronutrient deficiencies. This warrants paying special attention to the elevated future risk of chronic diseases, and increased surveillance of time-trends in child obesity based on uniform definitions.

Prevention activities *around the world*

Australia: Indigenous populations from around the world are at risk for extinction due to diabetes brought on by obesity, according to presenters at the Diabetes in Indigenous People Forum in Melbourne, Australia, which took place 13-15 November 2006. Type 2 diabetes is becoming increasingly common in Asia, the Pacific, Australia and the Americas because indigenous peoples have rapidly adopted Western diets and lifestyles. Currently, 50% of adults in the Pacific island of Nauru, 45% of Sioux and Pima Indians in the United States and 30% of Torres Strait Islanders in northern Australia have the disease. *Meeting First Australia*

Canada: Kentucky Fried Chicken Canada will change to a Canadian-made canola cooking oil early next year, reducing trans fat levels by at least 87%. A single piece of KFC Canada chicken and an individual order of fries currently contains as much as 10.2 grams of trans fat. That same serving will contain less than a single gram of trans fat after the switch. *GlobeInvestor.com*

Germany: Regular physical activity can help reduce or reverse obese children's risk of developing cardiovascular disease, including atherosclerosis, according to a study published on the 7 November 2006 issue of the Journal of the American College of Cardiology. In the small study, 67 obese teens were assigned to two groups. One group exercised three times a week: swimming, team sports and walking. The second group added no exercise to their normal routine. After six months, youth who exercised regularly significantly improved the flexibility of their arteries and reduced other risk factors for CVD, including lowering BMIs, reducing triglyceride and cholesterol levels, and lowering blood pressure. *"Improvement of early vascular changes and cardiovascular risk factors in obese children after a six-month exercise program" Journal of the American College of Cardiology 2006; 48(9):1865-70*

Hong Kong: The Hong Kong government has launched initiatives in 140 primary schools to train teachers on nutritional facts and healthy eating habits in response to an alarming increase in the number of metabolic syndrome cases among obese adolescents. More than 40% of adolescents in Hong Kong are affected by obesity, hypertension and abnormal levels of blood fat, according to research by the Hong Kong Department of Health and the Chinese University of Hong Kong; and 35% of boys and 29.5% of girls have high blood pressure.

Italy: Rates of admission for acute myocardial infarction in patients under age 60 decreased by 11% in the Piedmont region of Italy after a smoking ban was introduced in indoor public places. The study, based on a population of about 4 million, compared admission rates before the ban (October-December 2004) to rates after the ban (February-June 2005). The rate dropped from 922 cases in the 2004 period to 832 cases in the 2005 period. Observed reduction in active smoking after the ban could account for a 0.7% decrease in AMI admissions during the study period, suggesting that most of the observed effect (11%) may be due to reduction of passive smoking. *"Short-term effects of Italian smoking regulation on rates of hospital admission for acute myocardial infarction" European Heart Journal 2006; 27: 2468-72*

Pakistan: The Punjab government has made plans to enforce a smoking ban on all public transportation vehicles after a Supreme Court ruling ordered the four Punjab provinces to implement the Prohibition of Smoking Ordinance 2002. Effective implementation of the smoking ban is not possible until it is declared a traffic police offense, as around 80% of drivers and conductors smoke, according to Muttahida Transport Council Chairman Malik Abdul Qayoom Awan. *Gulf News www.gulfnews.com*

Pakistan: Authorities in Islamabad, Pakistan have banned use of water pipes because of its health hazards. Water pipes are popular among young people and many are unaware of the health consequences, according to officials. The ban was issued mid-November 2006 in select areas of the capital, but officials hope the ban will expand to other parts of the country. *India eNews: www.indiaenews.com*

Uganda: The health ministry of Uganda is assessing the alarming rise in people with diabetes, including the ability of existing facilities to handle the growing problem. The number of people with diabetes is thought to have passed one million, in a nation of 28 million, and doctors and government officials attribute it to changes in lifestyle and rising obesity. In 1972 only 254 people in Uganda had been given a diagnosis of diabetes. Now Uganda has 560,000 registered diabetics, with an additional 560,000 patients unaware of their condition. The disease is particularly acute among the cattle-keeping population of the southwestern part of Uganda, where people consume a great deal of milk, ghee, and animal products, and do not exercise. *"Uganda struggles to cope with rise in diabetes incidence" BMJ 2006; 333: 672*

Connecting for Health: Global Vision, Local Insight

(Report for the World Summit on the Information Society)
Information and communication technologies are changing health care delivery and are at the core of effective, responsive health systems. This report by WHO and the European Commission Information Society highlights opportunities for eHealth and the need for a global, long-term and collaborative approach. PDF (3.39 MB):
http://www.who.int/kms/resources/wsis_report/en/index.html

Global Tobacco Treaty Action Guide: Challenging Tobacco Industry Interference

The 2006 second edition of the Global Tobacco Treaty Action Guide identifies ways in which tobacco transnationals attempt to interfere with health policy and what government officials and NGOs can do to expose and challenge their efforts. PDF available in English, French, and Spanish.
<http://www.stopcorporateabuse.org/cms/page1167.cfm>

Women's Health Exchange

All issues of Hesperian's "Women's Health Exchange" newsletter are available for free download. The newsletter helps women and community groups share training ideas and promote popular education about women's health worldwide. Each issue focuses on a specific health topic and includes a training guide, useful for planning workshops. Other Hesperian resources, including Where There Is No Doctor and Where Women Have No Doctor, are downloadable in PDF format by chapter.
http://www.hesperian.org/publications_download.php#whx

IDF Consensus Worldwide Definition of the Metabolic Syndrome

The new International Diabetes Federation (IDF) Worldwide Definition of the Metabolic Syndrome provides physicians with tools to identify those at risk and compare the impact of diabetes across nations and ethnic groups. The 24-page booklet, along with information about the workshop, is available for download in PDF format.
<http://www.idf.org>

Turning a New Leaf: Women, Tobacco, and the Future

The British Columbia (Canada) Centre of Excellence for Women's Health and the International Network of Women Against Tobacco launched this report to highlight women's relationship to tobacco. The organizations suggest crucial actions to prevent the rising epidemic of women's tobacco use. PDF (936 KB):
http://www.inwat.org/pdf/newleafdoc_06-28-06.pdf

International Stroke Conference 2007

7-9 February 2007
San Francisco, USA
www.strokeconference.org
E-mail: strokeconference@heart.org

Cardiology Update 2007: Educational Programme

12-16 February 2007
Davos, Switzerland
www.heartfoundation.ch/index.php?id=124
E-mail: uwe.fritz@congressorg.ch

First International Conference on E-Medicine

27-30 March 2007
Cairo, Egypt
www.onlinediabetes.net/emedicine/
E-mail: aibrahim@onlinediabetes.net

Campaign for Tobacco-Free Kids: 12th Annual Kick Butts Day

28 March 2007
www.kickbuttsday.org

International Symposium on Diabetes and Pregnancy

29-31 March 2007
Istanbul, Turkey
<http://www.kenes.com/dip07/>
E-mail: dip07@kenes.com

World Health Day

7 April 2007

Unite For Sight International Health Conference

14-15 April 2007
Palo Alto, USA
<http://uniteforsight.org/conference/2007/index.php>
E-mail: JStaple@uniteforsight.org

World Hypertension Day 2007

17 May 2007

34th Annual International Conference on Global Health (Global Health Council)

29 May-1 June 2007
Washington, DC, USA
www.globalhealth.org/conference
E-mail: conference@globalhealth.org