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JOURNAL OF THE AMERICAN HEART ASSOCIATION

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Oral Presentations From the WORLD CONGRESS OF CARDIOLOGY Scientific Sessions 2012

Circulation published online April 15, 2012

Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX
72514

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ISSN: 1524-4539

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Scientific Sessions 2012**

Dubai, United Arab Emirates
18–21 April 2012



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0295

Effects of working environment on ischemic heart disease burden profile in young Egyptian males

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Introduction: Ischemic Heart Disease "IHD" recently observed in young population is mostly attributed to increased exposure to traditional risk factors where atherosclerosis is the prime mover. Few studies were directed to understand the environmental and occupational determinants as potentially modifiable risk factors. **Objectives:** To evaluate the impact of various working environments on ischemic heart disease burden profile in young Egyptian male workers. **Methods:** Three years follow up of ischemic events in 13,622 young men. They were randomly enrolled in three groups based on type of industrial profession. Group I (Motor Industry) which included 4779 individuals, group II (Construction) which included 6230 individuals & group III (Food industry) which included 2613 individuals. Main risk factors analysis were collected from out-patient visits and investigations results, followed by multicenter in time on site monitoring on group records of in-patient admissions, Coronary care unit admissions, Diagnostic coronary angiography, Interventional coronary procedures and coronary artery bypass surgeries. **Results:** Mean age in Motor industry group was 34.6 ± 9 and in Construction group was 35.8 ± 9 while in Food industry group it was 31.6 ± 7. Total prevalence of coronary artery disease in the three groups was 1.5% and Prevalence of hypertension was 4.3 %. Total prevalence of diabetes mellitus in the three groups was 3.5 % while prevalence of dyslipidemia was 2.3 %. Prevalence of coronary events in Motor industry was significantly higher than the other two industries. Whilst the prevalence of coronary events in construction industry was higher than food industry. Highly significant increase in number of total in-patient and critical care admissions due to acute coronary syndromes and Myocardial infarction in addition to number of interventional coronary procedures "diagnostic and therapeutic" was observed in Motor industry and Construction industry when compared to food industry. **Conclusion:** There is marked increase in number of risk factors in young Egyptian male workers with considerable probability of early development of coronary heart disease. Psychological, physical or chemical work environments might attribute to coronary artery diseases either directly or through augmenting known risk factors. Morbidity due to IHD might be affected by the type of industry. Cooperation between general practitioners-occupational diseases specialists-cardiologists may improve the efficiency of prevention programs.

0296

The influence of cultural and social factors on exercise, diet, and smoking of Arabic women living with cardiovascular diseases in the State of Qatar

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Introduction: Cardiovascular diseases are the leading cause of mortality and morbidity globally. Similar to other Western and Gulf countries, the incidence of cardiovascular disease and coronary artery diseases such as acute myocardial infarction is rising rapidly in Qatar. Diabetes mellitus, smoking, and hypertension are the most common risk factors causing acute myocardial infarction, congestive heart failure, and stroke. Obesity as the result of physical inactivity and unhealthy diet can lead to metabolic changes and raise the risk of heart diseases. Studies show that these health problems can be prevented and/or controlled by modifying lifestyle risk behaviours related to physical activity, diet, and smoking habits. **Objectives:** Funded by the Qatar National Research Fund, the ultimate goal of this study was to find ways to effectively promote cardiovascular/coronary artery disease prevention and management activities among Qatari women (citizen and resident Arabic women) by exploring factors affecting the ways in which Qatari women participate in physical activities, healthy diet and smoking. **Methods:** An exploratory, ethnography qualitative research approach was used in this study, with a semi-structured questionnaire using open ended questions to gather data. Individual in-depth interviews were conducted with 50 Arabic women who are 30 years and over, have confirmed diagnosis of CVD/coronary artery diseases to investigate factors influence lifestyle risk behaviours associated with cardiovascular diseases amongst Qatari women (citizen and resident Arabic women). **Results:** Social support networks; cultural knowledge, values, practices, and religion; changing environmental and social conditions as the result of rapid economic growth, and individual health status influence Qatari women participation in physical activities, healthy dietary practices and abstain from smoking. **Conclusion:** Socio-cultural factors play a key role in Qatari women's decisions to participate in healthy lifestyle. The promotion of healthy lifestyle which could lead to increase quality of life, prevention of and better management for cardiovascular diseases should facilitate women's informal and formal social support networks; provide culturally appropriate and acceptable public educational programs and services; create healthy environment with more recreational facilities for women and children; consider women's specific health condition and socio-economic status; and lastly, empower women to take charge of their health.

0297

Effectiveness evaluation of a school program for obesity prevention

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Introduction: Due to rapid lifestyle changes in Brazil, we are now facing a childhood obesity epidemics. There is a need for effective programs to address this problem. **Objectives:** Adoption

of healthy lifestyles by school children, through achieve health literacy, increase physical activity, decrease sedentary behaviors, reduce fatty food consumption, increase fruits and vegetables consumption. **Methods:** Cohort multi-component health promotion intervention study, with 9 intervention of interest (TAKE 10!) and 8 comparative intervention control (Shake It Up Kids) Brazilian schools for matched comparison to determine its impact on outcomes assessed longitudinally in a cohort of 2,038 children using pre-intervention (April 2009) and follow-up (November 2009) children survey on transtheoretical stage of behavior changing evaluation. **Results:** Analyzing only the preparation and action stages, there was respectively a 54.33 and 25.31; 17.15 and 64.06; 91.97; 29.12 and 50.89; 4.65 and 14.38 percent increase in TAKE 10! Program children numbers in these stages at post-intervention compared to pre-intervention ($P < 0.001$), for fatty foods consumption, consumption of fruits & vegetables, physical activity, sedentary habits behavior related to TV / DVD screen time, sedentary habits behavior related to computer / games screen time, respectively. This suggests a strong intervention instrument content of cognitive-experiential and behavior processes of self-reevaluation and social-liberation, and also behavior processes of self-liberation, helping relationship, contingency management and counter conditioning. Analyzing only the precontemplation and contemplation stages, we found similar numbers, suggesting a strong intervention instrument content of cognitive-cognitive-experiential processes of Consciousness Raising, Dramatic Relief, Environment-Reevaluation. **Conclusion:** The TIRE 10! program stimulated children forward movement through eating and physical behavior stages, providing them with processes that facilitate healthy lifestyle choices, potentially reducing children obesity prevalence.

0298

From CVD epidemiology to public health: Finnish experience on sustained national CVD prevention

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Introduction: The presentation describes the background and the historical development in Finland for action to influence public health through prevention of cardiovascular (CVD) and other major noncommunicable diseases (NCD). **Objectives:** The work in Finland from the North Karelia Project to national action is presented, with emphasis on broad intersectoral work to achieve sustained improved public health. **Methods:** In 1972, the North Karelia Project was started as national demonstration programme to reduce the extremely high CVD mortality rates. The project was based on the results of some classical epidemiological studies with the aim to change the risk related lifestyles in the whole population through broad intersectoral community action, first in the pilot area of North Karelia and later on on national level. **Results:** Over years great reduction in the population levels of the risk factors has taken place, associated with dramatic reduction in age adjusted CVD and NCD rates and improvement in public health. The all cause mortality in working age has greatly reduced, life expectancy increased and functional capacity & subjective health much improved. **Conclusion:** Successful national action in Finland has much been based on many intersectoral actions that have taken place, due to increasing interest and awareness of the population. This has been accompanied by political commitments and supporting legislation. The experience emphasizes the importance of strong leadership and broad collaboration - also the importance of strong epidemiological and social theory base combined with sustained strong practical work. The experience is a powerful demonstration on how CVD and NCD can be much reduced and in a cost effective and sustainable way. The experience in Finland also gives strong support to the approaches of the WHO Global NCD Strategies and the political efforts for NCD prevention and control of global health work.

0299

Cardiac rehabilitation: not only aerobic capacity improvement, but also quality of life

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Introduction: Phase II cardiac rehabilitation (CR) is a class I indication in secondary prevention (PREV-2). CR has demonstrated positive effects not only on aerobic capacity and mortality, but also on quality of life of CHD patients. The latter have been also described in high risk primary prevention (PREV-1) subjects. **Objectives:** To describe the impact of CR on aerobic capacity and quality of life in subjects completing 36 program sessions. **Methods:** Prospective study in a Chilean university CR program in subjects with or without CHD, who completed 36 CR sessions between 2002 and 2009. All subjects underwent a symptom-limited stress test and a 6-minute walking test (6MWT) at the beginning of CR. Both at admission and at 36 sessions, 6MWT distance, blood pressure, heart rate, body mass index, waist and quality of life were measured. Quality of life was determined by SF36 survey and the scores were differentiated by physical and mental health dimensions for analysis. **Results:** 1043 subjects were admitted to the program, of which 21% (n = 220, age 58 ± 11 yo, 24% women) completed 36 CR sessions: 138 where in PREV-2 and 82 in PREV-1. As shown in the table, both PREV-1 and PREV-2 subjects improved aerobic capacity measured by 6MWT (11% increase in PREV-2 and 8% in PREV-1) as well as quality of life (in both physical and mental health dimensions) to the end of the CR program. No differences were registered between PREV-2 and PREV-1 subjects regarding to walking distance or SF36 scores. Also, there were no differences in these parameters by gender.