

The international scientific community meets to find solutions to the global epidemic of overweight and obesity.

ITH the increased significance of obesity worldwide, channels for sharing of research findings as well as experiences in obesity prevention and control programmes have become very important. At the 11th International Congress of Obesity (ICO), held in Stockholm in mid July 2010, more than 3,000 participants met in Stockholm to discuss this serious global health problem.

The main scientific programme was made up of five tracks, each focused on rather distinct topics, namely: basic science; experimental medicine and physiology; treatment and co-morbidities; diet, activity, and behaviour; and public health and policy.

I followed the fifth track on public health and policy and would like to share with readers some of the interesting and useful highlights. We can certainly learn from experiences elsewhere as we struggle to combat this growing problem here.

Prevalence and trends of obesity

The increase in the worldwide prevalence of obesity in children has been widely documented. However, a number of recent studies from countries including England, France, Greece, Russia, Switzerland, and the US reported that the rates of increase in overweight and obesity among children may be levelling off, or even reversing. A few presentations discussed if this is indeed so.

Nick Townsend, from the University of Oxford, UK, examined available evidence to determine if obesity prevalence has stopped rising in the United Kingdom and internationally. The authors did find some evidence of levelling off of overweight and obesity prevalence among children internationally. It was, however, pointed out that due to limitations of these studies, it is not possible to conclude confidently that a levelling off is currently occurring.

Also in relation to this question, Kristian Midthjell of the HUNT Research Centre, Norwegian University of Science and Technology, reported findings from the HUNT Study. This comprises three surveys of adult populations in Nord-Trondelag County, Norway, between 1984 and 2008. Obesity and diabetes were reported to have increased for both men and women, especially those below 40 years.

An increase in obesity incidence was also reported for a rural population in Pakistan by Syed Shah, United Arab Emirates University. Data was obtained from two independent cross-sectional adult population surveys conducted in 1995 and 2007.

On the other hand, Melanie Nichols of the WHO Collaborating

Globesity – It's a fat, fat world

Centre for Obesity Prevention, Deakin University, Australia, reported that the prevalence of overweight and obesity among Victorian preschool children decreased significantly between 1999 and 2007. Decreases occurred in both genders and all quartiles of socio-economic status, with no concurrent increase in the prevalence of thinness.

New approaches to improve public health

As a result of the increase in obesity rates, there has been increased use of economic tools to reverse this trend, e.g. taxes, subsidies, and regulation. Prof Roland Sturm of RAND Corporation presented an overview of such approaches in the United States.

There are a variety of approaches underway, mostly regulation (e.g. the Fast Food Ban in Los Angeles, menu labeling laws) and some taxes (caloric soft drinks, "junk food"). The Department of Agriculture is also conducting a randomized price experiment to test the effects of a 30% discount on fruits and vegetables.

Alison Hardy of the Department of Health, UK, described a new social marketing approach to obesity prevention launched in England in January 2009. Called "Change4Life", it sets out to create a societal movement that would engage families, communities, grass roots organisations, teachers, healthcare professionals, NGOs, and businesses, so that everyone could play their part in combating obesity. I was rather impressed to hear that over 400,000 families have joined Change4Life.

Bruce Silverglade of the International Association of Consumer Food Organizations summarised efforts by consumer advocacy organisations that work with the scientific community to influence public health policies related to the reduction of obesity. These include removing soft drinks from schools; and conducting a trans-Atlantic project persuading restaurant chains in Europe to provide calorie content and other nutrition information for standardised food items at the point-of-sale.

Community-based interventions

Community-based interventions are an essential part of comprehensive approaches to obesity prevention. A number of interesting interventions were presented, several of them reporting encouraging results in obesity reduction.

Prof Boyd Swinburn, of the WHO Collaborating Centre for Obesity Prevention, Deakin University, Australia, discussed some lessons learnt from these intervention programmes. The Barwon region around Geelong, Australia, was established as a "Sentinel Site for Obesity Prevention" to develop and evaluate the effectiveness of three demonstration programmes. The "Romp & Chomp" achieved substantial reductions in overweight/obesity prevalence. The "Be Active Eat Well" programme for primary



There are many different aspects of obesity that need to be looked at and addressed before the problem spirals out of control (if it hasn't already). – Reuters

school children achieved significant reductions in unhealthy weight gain. The "It's Your Move!" adolescent programme had virtually no impact on weight gain.

In another presentation, Andrea de Silva-Sanigorski from the same centre provided more information on the Romp & Chomp (R&C) programme. This intervention (2004-2008) programme aimed to prevent childhood obesity and promote healthy eating and active play in children up to five years old through environmental intervention in family day cares (FDC). The FDC created more opportunities for children to be more active physically and eat more nutritious foods during their time in care.

Lauren Prosser, University of Melbourne, presented yet another intervention programme in Australia, the "KIDS - Go for your life" (KGFYL) for elementary schools. It was found that compared to member schools, significantly more health promotion activities related to healthy eating and physical activity were being implemented in awarded schools and a higher proportion of awarded schools implemented policies promoting these behaviours.

Closer to home, Handy Amin of the Health Promotion Board Singapore reported on a national workplace weight management programme entitled "Lose to Win". It was organised to educate and motivate the workforce towards achieving healthier weight.

Participants underwent an intensive, 12-week programme comprising fitness assessments, interactive nutrition workshops, and twice weekly Boot Camp exercise sessions. Almost all participants reported weight loss, and all of them reported improved fitness scores.

Gemma Gao Yang of the Chinese University of Hong Kong reported a systematic review of community-based interventions to reduce overweight and obesity in mainland China. All non-drug-controlled interventions (≥3 months), which used anthropometric outcome measures, were selected from three Chinese and nine international electronic databases. Seventeen studies (85%) reported significant effects in anthropometric measurement outcomes.

Food environments

It is generally accepted that the food environment plays a critical

role in the prevalence of overweight and obesity. Several presentations discussed various aspects of the food environment and how it could help in the control and prevention of obesity. I noted that there was greater focus on marketing of food to children in this and other nutrition conferences.

In recent years, supermarkets have emerged as a new locus of power in food retailing.

Corinna Hawkes, from the School of Public Health at the University of Sao Paulo, Brazil. examined the implications of supermarket growth and obesity. Leading supermarket operators have developed clear competitive strategies that can influence the decisions consumers make about food. A detailed understanding of such strategies enables the identification of the most critical actions needed to encourage a healthier retail environment.

During the last 12 months, the global dimensions and future impact of obesity have become major areas of focus and activity by governments, corporations, and non-governmental agencies. Dr Derek Yach is director of global health policy at PepsiCo. He spoke of the plans and actions of leading food and retail companies based upon very recent corporate pledges at the global and some national levels. He emphasised on the need for deeper and more effective partnerships between the key players to implement these.

According to Tim Lobstein, International Association for the Study of Obesity, UK, several European Union member states now regulate the marketing of energy-dense foods to children through statutory and co-regulatory initiatives. Some food producing companies have also made "pledges" to reduce their marketing to children. Most states rely on voluntary action by the food industry to limit marketing to children whilst company pledges are limited in their scope and application.

Television food advertising has been shown to impact on children's food and brand preferences, purchase requests, and consumption. This topic was discussed in at least two presentations.

Lesley King, Sydney University, reported a study to evaluate the impact of the Australian Food and Grocery Council self-regulatory initiative to limit food marketing to children. The impact of a regulatory code is limited by the extent of

uptake by food companies. The continued advertising of unhealthy foods indicates that this self-regulatory code does not adequately protect children

Discussing the same topic, Emma Boyland, University of Liverpool, UK, revealed that food was the third most advertised category, behind channel promotions and toys on UK television during 2008. The most frequently broadcast were supermarket advertisements, fast food, and high sugar breakfast cereals. It was concluded that children are exposed to greater TV food advertising for unhealthy than healthy items

Fabio Gomes, National Cancer Institute of Brazil, reported that in 2006, the Brazilian government launched a proposal to regulate advertising and marketing of food products with high content of sugar, saturated fat, trans fat and sodium, and also sugary soft drinks.

Several multinational F&B companies have also developed self-rules and/or have signed pledges to regulate their marketing practices. However, these have not been effective and the self-regulations have not been honoured.

Cost-effectiveness analyses are important tools in the effort to prioritise interventions for obesity prevention. Using a models approach, Gary Sacks, Deakin University, Melbourne, compared the cost-effectiveness of conservative scenarios for two commonly proposed interventions: front-of-pack "trafficlight" nutrition labelling and a tax on unhealthy foods ("junk-food" tax).

Based on estimated reduced mean energy intake, reduced mean weight, and disability adjusted life years (DALYs), the cost-effectiveness analysis showed both interventions were effective and cost-saving.

Note: The 12th International Congress of Obesity will be held in Kuala Lumpur in 2014. It will be jointly hosted by ICO and the Malaysian Society for the Study of Obesity (MASO). There is a great deal of useful information on the website of IASO: www.iaso.org. For more information of MASO, its activities and set up, visit: www.maso.org.my

■ NutriScene is a fortnightly column by Dr Tee E Siong, who pens his thoughts as a nutritionist with over 30 *years of experience in the research* and public health arena. For further information e-mail starhea tar.com.my. The information provided is for educational and communication purposes only and it should not be construed as personal medical advice. Information published in this article is not intended to replace, supplant or augment a consultation with a health professional regarding the reader's own medical care. The Star does not give any warranty on accuracy, completeness, functionality, usefulness or other assurances as to the content appearing in this column. The Star disclaims all responsibility for any losses, damage to property or personal injury suffered directly or indirectly from reliance on such information.