Creeping epidemic of obesity hits Asia Pacific region
20 February 2013

Over eating, sedentary lifestyles, cultural attitudes, and lack of prevention programmes are to blame for the rising epidemic of obesity in the Asia Pacific region. Overweight and obesity has quadrupled in China and societies still label people of healthy weight as poor.

Prevention will be an important theme at the 19th Asian Pacific Congress of Cardiology held 21-24 February 2013 in Pattaya, Thailand. Experts from the European Society of Cardiology (ESC) will lead a one day collaborative programme on 23 February.

Professor Kui-Hian Sim, President Elect of the Asian Pacific Society of Cardiology, said: "In many of the countries in Asia Pacific the malnutrition problem nowadays is not undernutrition it is overnutrition, which has resulted in overweight and obesity."

He added: "Asia Pacific has developed rapidly and technological advances mean that children now spend too much time on the internet and mobile devices so they don't take up much physical activity. The Asian culture revolves around food as a way of showing hospitality because in the past there was a lot of famine. As a result there is a cultural perception that if you're not fat or obese then you are not well off."

The Asia Pacific Cohort Studies Collaboration (APCSC) found that the prevalence of overweight and obesity among 14 countries in the Asia Pacific region varied considerably by country.\(^1\) The prevalence of obesity (BMI>30k/m\(^2\)) in men ranged from 0.3% in India and 1.3% in Indonesia to 13.8% in Mongolia and 19.3% in Australia. In women the lowest rates were found in India (0.6%), China and Japan (both 3.4%) and the highest rates in Australia (22.2%) and Mongolia (24.6%).

But Dr Rachel Huxley (Minneapolis, Minnesota, USA), APCSC co-investigator, said: "Although the absolute prevalence of obesity in Australia was considerably higher than that of China and Japan, the relative increases in the prevalence over the last 20 years, has been much greater in these two Asian countries than in Australia."

The combined prevalence of overweight and obesity increased by 46% in Japan from 16.7% in 1976-1980 to 24% in 2000 and by 414% in China from 3.7% in 1982 to 19% in 2002.

The APCSC researchers also calculated the population attributable fraction for cardiovascular disease due to overweight and obesity in these 14 countries. Taking China as an example, despite the relatively low prevalence of overweight and obesity, it accounted for just over 3% of fatal coronary heart disease and 3.5% fatal ischemic stroke. At the other end of the scale, overweight and obesity accounted for nearly 8% of coronary heart disease in Mongolia and over 9% in Australia. It also accounted for nearly 9% of ischaemic stroke in Mongolia and more than 10% in Australia.

Dr Huxley said: "There is convincing evidence that a sedentary lifestyle (due to a combination of reduced physical activity in the workplace and during leisure time), combined with energy dense diets are the key drivers of the obesity epidemic. Increasing 'westernisation' of lower- and middle-income countries in the Asia Pacific region is associated with increasing gross domestic product (GDP) and the adoption of more westernized patterns of physical inactivity and diets richer in calories and fat. The influx of fast food, confectionary and soft drink companies into the region is likely to further exacerbate the obesity problem."

She added: "In high income countries there is an inverse association between income/education with obesity, whereas in lower-middle income countries the reverse is more commonly found."
The longest ongoing cardiovascular epidemiological study in India found that over a 20 year period BMI and overweight increased in urban middle-SES populations. More education was significantly associated with an increase in overweight. The authors concluded: "The process of disease transition has started in the Indian middle class and a decline fuelled by socioeconomic changes and increasing education is inevitable in this group".

The APCSC found that Western risk factors act similarly in Asia and Australasia as in other parts of the world meaning that risk reduction strategies are equally important here – if not more important given the vast population.

Dr Huxley said: "Strategies should focus on the food environment (ie making healthy food choices the easiest and cheapest option) and the physical environment to promote incidental physical activity (for example making using the stairs instead of lifts more convenient and increasing the walkability of towns and cities) as well as leisure time physical activity."

She added: "In addition there are a number of policy areas that could influence the food environment such as mandatory use of food labelling, higher taxes on high fat/energy foods, restricted advertising on fast food (especially to children) and food subsidies for fruits and vegetables."

The ESC advocates such regulations, particularly when lifestyle changes have not worked. Professor Panos Vardas, President of the ESC, said: "The 2012 European prevention guidelines state that 80-90% of all cardiovascular disease is preventable. Politicians and health professionals in the Asia Pacific region need to do more to make the healthy choice the easy choice, to avoid the high rates of obesity increasing even further."

Professor Sim concluded: "Very little has been done about overweight and obesity in the Asia Pacific region because it doesn't belong to any specialty. Cardiologists focus on smoking and risk stratification while diabetologists look at blood sugar. Cardiologists need to take up the challenge of obesity in order to curb the cardiovascular epidemic."

**More information:** References


Provided by European Society of Cardiology