

Editorials

Overweight and Obesity Worldwide now Estimated to Involve 1.7 Billion People

Prof. Philip James,¹ Chair of the International Obesity TaskForce (IOTF) – a collaborative program of the International Association for the Study of Obesity (IASO) and the World Health Organization (WHO), announced the new 1.7 billion overweight/obesity estimate. Previous studies, using WHO classic definitions (BMI ≥ 25 = overweight, BMI ≥ 30 = obese) estimated that 1.1 billion people globally were overweight or obese. This may indicate that most governments have been ignoring one of the most major risks to health affecting the world's population. Among the recommendations are improvements in long-term diet, increased activity levels, early education, and treatment which may include behavior, lifestyle and drugs.

This new estimate by the WHO expert group results from the finding that obesity-related health-risks increase among Asians from a lower BMI threshold.² Asians have been found to be particularly vulnerable to obesity-related diseases, with rising rates of co-morbidities from BMI 23. Thus, the WHO has recommended that the optimal BMI for Asian populations be narrowed to 18.5-23 kg/m².³⁻⁶ Compared with western populations, the percentage of body fat and the risk factors for cardiovascular disease, diabetes and hypertension at a given BMI are higher among Asian populations. The IOTF estimates that a significant proportion of the 3.6 billion Asian population already has BMI ≥ 23 .

The prevalence of the serious sequelae, eg. type 2 diabetes, heart disease, hypertension, stroke, arthritis of weight-bearing joints, many forms of cancer, poor quality of life, depression, premature death, etc. are prevented or reduced by weight loss – even by modest weight loss.⁷⁻⁹ The burden of the medical complications of “globesity” threatens to overwhelm health services, and the impact on health may soon overtake that of tobacco.¹

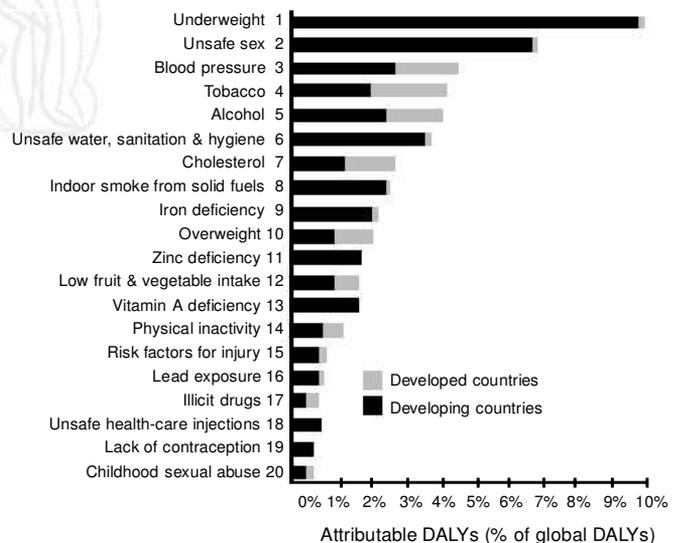
In the USA, adult obesity rates rose from 14.25% in 1978 to 31% in 2000. In the UK, adult obesity rates rose from 6% of men and 8% of women in 1980, to 21% of men and 23.5% of women in 2001. The World Health Report 2002 estimated that

worldwide >2.5 million deaths per year are weight-related – 220,000 per year in Europe and >300,000 per year in USA.¹⁰

The extreme forms of obesity are rising even faster than the overall epidemic.¹ In the USA, the percent of black women with BMI ≥ 40 has doubled in less than a decade to 15%. Overall, 6.3% of US women (1 in 16) are morbidly obese. Morbid obesity has also increased rapidly in Europe; in the UK, 1 in 40 are morbidly obese, with a threefold rise in the past decade.

Obesity is prevalent in both developed and developing countries, and is now affecting children. The epidemic reflects changes in behavioral patterns, including decreased physical activity and over-consumption of high-fat, energy-dense foods. Furthermore, many individuals become obese because of a biological predisposition to gain weight readily when they are exposed to an unfavorable environment.

In the World Health Report April 25, 2003, the WHO identifies the main global risks affecting today's disease, disability and death rates (Figure 1).¹¹ The top 10 risks account for 40% of global



DALYs= disability-adjusted life years. 1DALY=loss of 1 year of healthy life.
Figure 1. Global burden of disease attributable to the 20 leading risk factors (World Health Report 2002).

deaths, while the next 10 are responsible for <10%. Note that overweight and obesity are 10th, but hypertension, elevated cholesterol and inactivity (numbers 3, 7 and 14) are frequently related to obesity.

Furthermore, in the USA, losing weight could prevent 1 in 6 cancer deaths – more than 90,000 each year. Excess weight in the US could account for 14% of all cancer deaths in men and 20% in women.¹²

Mervyn Deitel, MD
Editor, Toronto

References

1. Professor Philip James, Chair of the London-based International Obesity TaskForce, Monte Carlo, March 17, 2003. www.iotf.org/media
2. WHO reassesses appropriate body-mass index for Asian populations. *Lancet* 2002; 360: July 20, 2002.
3. James WPT, Chunming C, Inoue S. Appropriate Asian body mass indices? *Obes Rev* 2002; 3: 139.
4. Zhou B, Wu Y, Yang J et al. Overweight is an independent risk factor for cardiovascular disease in Chinese populations. *Obes Rev* 2002; 3:147-56.
5. Moon OR, Kim NS, Jang SM et al. The relationship between body mass index and the prevalence of obesity-related diseases based on the 1995 National Health Interview Survey in Korea. *Obes Rev* 2002; 3: 191-6.
6. Deurenberg-Yap M, Chew SK, Deurenberg P. Elevated body fat percentage and cardiovascular risks at low body mass index levels among Singaporean Chinese, Malays and Indians. *Obes Rev* 2002; 3: 209-15.
7. Goldstein DJ. Beneficial health effects of modest weight loss. *Int J Obes* 1991; 16: 397-415.
8. Busseto L, Pisent C, Rinaldi et al. Variation in lipid levels in morbidly obese patients operated with the Lap-Band® adjustable gastric banding system: effects of different levels of weight loss. *Obes Surg* 2000; 10: 569-77.
9. Kuhlmann HW, Falconi RA, Wolf AM. Cost-effective bariatric surgery in Germany today. *Obes Surg* 2000; 10:549-52.
10. World Health Report 2002. www.iotf.org
www.who.int/peh/burden/globalestim.htm
11. World Health Organization. Global Burden of Disease Project, April 25, 2003.
www3.who.int/whosis/menu.cfm?path=evidence,burden
12. Calle EE, Rodriguez C, Walker-Thurmond K et al. Overweight, obesity, and mortality from cancer in a prospectively studied cohort of U.S. adults. *N Engl J Med* 2003; 348:1625-38.

Obesity Surgery in India

The increasing incidence of morbid obesity in the world's second most populous country was recognized with the inaugural meeting of the Obesity Surgery Society of India (OSSI) in Mumbai on March 1 and 2, 2003. It was attended by almost 150 registrants, and began with a live transmission of four obesity procedures performed by invited guests Luigi Angrisani, Italy (laparoscopic banding) and Andrew Jamieson, Australia (open vertical gastroplasty) from the operating-suite of the Breach Candy Hospital to the conference center at the Taj Mahal Hotel. Other international speakers were Martin Fried (Czech Republic), Anna Maria Wolf (Germany), Camillo D'Antonio and Vincenzo Borelli (Italy). Shrihari Dhorepatil, the First President of OSSI, and the driving force behind the new society, presented his experience which is the longest and most extensive in India. Other excellent presentations were given by Milind Belsare (Anesthesia) and Shashank Joshi (Causes of Obesity). The meeting ran extremely smoothly, and there were lively discussions after all papers.

It is pleasing that surgery for obesity is well accepted in India. This was demonstrated firstly by the fact that the meeting was inaugurated by the Minister of Health of the state of Maharashtra, Mr. Digvijay Khanvilkar. The society has had support from many of India's leading general surgeons including T. E. Udawadia and P. K. Chowbey. In addition, Dr. Shrihari Dhorepatil has been honored by being chosen to give an oration on surgery for obesity at the next meeting of the Association of Surgeons of India (ASICON 2003). It is clear that India, with increasing prosperity, is facing the same problems with obesity and the attendant co-morbidities as much of the rest of the world. It is clear that India has the surgical talent, infrastructure and enthusiasm to embrace obesity surgery and join the international community in tackling this problem. A significant first step has been made.

Andrew C. Jamieson, FRACS, FRCS
Past-President, IFSO