Methods: Starting from an historical study of the WHO's literature, we identified European countries that planed or developed a GAP. We then searched the websites of the health ministries of European countries that were in French or English, of North America and of Oceanic countries. We only kept GAPs and documents that were published in 2000 or later and were available on a website.
Results: The portal represents 17 countries, 3 states and 2 international organizations. For each GAP, we created a fact sheet providing information about its origin and content and included web links to the full documents and governmental websites. Furthermore, hyperlinks to documents produced by well-know agencies were included for each country, state or international organization as suggested reading. Attention was given to be user-friendly and searchable by topic. Finally, technical papers on GAPs can also be found in the portal.
Conclusion: This portal is a unique, resourceful and practical tool for knowledge transfer to policy-makers, researchers and public health practitioners working on obesity. An evaluation will be done about its utilization.

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Track 2: Epidemiology and the Impact of Obesity T2:RS1 – Obesity, morbidity and mortality

T2:RS1.1

Assessing the burden of overweight and obesity: an example from the United Kingdom

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Introduction: In this paper I review previous cost studies for overweight and obesity in the UK. I propose a method for estimating the economic and health costs of overweight and obesity in the UK which could also be used in other countries.
Methods: Costs of obesity studies were identified via a systematic search of electronic databases. Information from the WHO Burden of Disease Project was used to calculate the mortality and morbidity cost of overweight and obesity. Population attributable fractions for diseases attributable to overweight and obesity were applied to National Health Service (NHS) cost data to estimate direct financial costs.
Results: We estimate the direct cost of overweight and obesity to the NHS at £3.2 billion. Other estimates range between £480 million in 1998 and £1.1 billion in 2004. There is wide variation in methods and estimates for the cost of overweight and obesity to the health systems of developed countries.
Conclusion: The method presented here could be used to calculate the costs of overweight and obesity in other countries. Public health initiatives are required to address the increasing prevalence of overweight and obesity and reduce associated healthcare costs.

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T2:RS1.2

BMI is an inappropriate marker of obesity related health risks

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Introduction: Many studies find a U-shaped association between body mass index (BMI) and total, as well as coronary mortality indicating that both a low and a high BMI is associated with excess mortality. In fact, several studies document reduced longevity even among lean subjects who never smoked. Likewise, among participants without diagnosed chronic disease, or among those surviving more than 2-8 years subsequent to entering a study, the U-shaped relationship persists. On the other hand, the U-shaped association between BMI and mortality seems to result from a combined risk function of body fat (BF) and fat-free mass (FFM), where mortality increases with high BF and low FFM, making BMI an inappropriate marker of obesity related health risk. Furthermore, the distribution of the fat also has a major impact on health, not accounted for by BMI, and particularly the detrimental effect of excess abdominal fat has been investigated. Indeed, studies show that obesity related health care costs are dependent on excess abdominal obesity and not overall obesity. Less attention has been paid to the potentially protective effects of lower body size e.g. gluteal fat and muscle, and more recent data suggests that both tissue components in this localisation benefit future health. Additionally, these benefits are independent of both overall and abdominally localised obesity. In fact, a small hip-and thigh size carries a great risk of dying prematurely whereas large hips and thighs offer protection – irrespective of BMI and waist size.
Conclusion: It is clear that we need to encourage not only health authorities but also professionals in primary and secondary sectors to monitor the general development of obesity in populations. However, because BMI is an inappropriate obesity marker, and because simple circumference measures seem to capture obesity related health risks more efficiently, a recommendation towards routine measurement of fat distribution should be enforced. In this regard, measurement of lower body size (hip- and or thigh-circumference) should not be omitted.

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T2:RS1.3

The mortality after anti-obesity surgery is not different from mortality in a general population cohort, despite higher post-operative co-morbid disease

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Introduction: Several studies have demonstrated that anti-obesity surgery reduces mortality compared to a non-operated obese cohort. However, it is not clear if there remains a difference in mortality compared to the general population.
Methods: Population based cohort study of anti-obesity surgery in Sweden between 1980 and 2006. 13 301 patients (3003 men) over the age of 18 (mean ±SD, 40.0 ±10.3 years of age) who had undergone anti-obesity surgery were indentified in the Inpatient Care Register. For each subject, 10 controls matched for age and gender, were identified in the register of the total population. Censoring occurred at end of study (Dec 31, 2006), date of emigration or date of death (8.9 ±6.5 years of follow-up).
Results: The incidence rate of obesity related co-morbid disease was higher in the surgical cohort compared to the general population cohort. After surgery the hazard ratio (HR) was higher in the surgical cohort for all studied diagnoses (myocardial infarction 1.6 (95% CI 1.3-1.8), angina pectoris 2.0 (1.8-2.3), cerebrovascular lesion 2.0 (1.8-2.3), hypertension 2.4 (2.2-2.6), diabetes 1.7 (1.5-1.8)). The unadjusted HR for all-cause mortality was higher in the surgical group (1.3 (1.2-1.4)). There was no significant difference in adjusted (age, gender, pre-operative co-morbid disease) all-cause mortality (1.0 (0.9-1.1)). However, adjusted all-cause mortality after surgery was increased (1.7 (1.6-1.8)) in the male surgical cohort.
Conclusions: Despite a remaining increased risk of inpatient care for comorbid disease there is no significant difference in adjusted mortality after anti-obesity surgery compared to the general population except for men.