

Student name: Lara Ajokeade

Adigun

Student ID: 1920483

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1.

Application of the UK foresight obesity model in Ireland: the health and economic consequences of projected obesity trends in Ireland

Laura Keaver, Laura Webber, Anne Dee, Frances Shiely, Tim Marsh, Kevin Balanda, Ivan J Perry

Considering the level of the current obesity epidemic and associated health consequences in the world over, there has been increasing concern about the economic burden placed on society in terms of direct healthcare costs and indirect societal costs. This therefore requires attention in order to curb the high growth and increase.

Aim: the aim of the study is to examine the health and economic consequences of obesity trends in the nation.

Objectives: to project disease burden and direct healthcare costs for these conditions in Ireland to 2030 using the established model developed by the Health Forum (UK) for the Foresight

Methodology: Routine data sources were used to derive incidence, prevalence, mortality and survival for six conditions as inputs for the model. The model utilises a two stage modelling process to predict future BMI rates, disease prevalence and costs.

Results

Overweight and obesity are projected to reach levels of 89% and 85% in males and females respectively by 2030. This will result in an increase in the obesity related prevalence of stroke by 97%, cancers by 61% and type 2 diabetes by 21%

Discussion

These findings have significant implications for national policy, highlighting the need for effective strategies to prevent this avoidable health and economic burden that will result.

Conclusion

Based on the findings of this study, the costs are substantial, and urgent public health action is required to address the problem of increasing prevalence of overweight and obesity, which if left unchecked will lead to unsustainable cost escalation within the health service and unacceptable societal costs.

2.

Higher maternal BMI early in pregnancy is associated with overweight and obesity in young adult offspring in Thailand

By: Sakaewan Ounjaijean, Antika Wongthanee, Kanokwan Kulprachakarn, Amaraporn Rerkasem, Sakda Pruenglampoo, Ampica Mangklabruks, Kittipan Rerkasem and José G B Derraik

Introduction:

Rates of overweight and obesity among women of reproductive age have been steadily increasing worldwide. There is mounting evidence that maternal obesity during pregnancy is associated with an increased risk of obesity and other adverse health outcomes in the offspring, but such data are lacking for Thailand.

Aim/Objectives: the study examined the associations between maternal body mass index (BMI) and obesity including cardiometabolic parameters in young adult offspring.

Methodology:

The study make use of a prospective follow-up study of a birth cohort. Pregnant women carrying singletons were recruited at their first antenatal visit (< 24 weeks of gestation) and followed until delivery. Participants were their young adult offspring followed up. Maternal BMI was recorded at the first antenatal visit. The offspring underwent clinical assessments, including anthropometry, lipid profile, insulin sensitivity (HOMA-IR), blood pressure, and carotid intima-media thickness. The primary outcome of interest was the likelihood of obesity in the offspring.

Results

The study assessed 628 young adults (54% were females) at 20.6 ± 0.5 years of age (range 19.1–22.1 years). The young adult offspring of mothers with overweight/obesity was 14.1 kg and 9.4 kg heavier than those born to mothers with underweight or normal weight, respectively, and had BMI 3.46 kg/m^2 and 5.27 kg/m^2 greater, respectively. For every 1-kg/m^2 increase in maternal BMI, the adjusted odds ratio (aOR) of offspring obesity was 25% greater. Thus, the aOR of obesity in offspring of mothers with overweight/obesity was 4.6 times greater and nearly 17-fold greater compared to young adults born to mothers with normal weight or underweight, respectively.

Discussion

Maternal overweight/obesity early in pregnancy was associated with increased BMI and greater odds of obesity in their young adult offspring. These findings highlight the public health importance of fostering healthier lifestyle choices among women of reproductive age.

Conclusion

Despite the growing evidence that maternal obesity adversely affects the offspring's long-term health, the rates of women entering pregnancy with obesity continue to increase. Therefore, greater recognition of the impacts of maternal obesity on the health of future generations is required to inform public health policy and intervention, particularly to foster healthier lifestyle choices among women of childbearing age (i.e., before conception).

3.

Relationship between obesity and health problems in help-seeking military veterans

By: Victoria Williamson¹, A Rossetto^{2,3}, D Murphy

Introduction:

There is now good evidence that obesity in the elderly increases cardiometabolic risk, physical disability, impaired quality of life and sexual dysfunction, lower urinary tract symptoms as well as decreased cognitive function and dementia. A number of longitudinal studies have shown that obesity from the middle age years increases the risk of dementia in older ages which therefore has a strong relationship with help seeking behavior.

Aim/Objectives:

To examine the relationship between body mass index (BMI), physical health problems, mental health disorders and sociodemographic characteristics in UK AF veterans engaged in psychological treatment

Methodology: Information regarding veteran BMI, demographic characteristics, physical health conditions and mental health problems was collected and analysed using univariate and multivariate regression analyses. Rates of veteran obesity were also compared with the UK general population

Results

Of the 384 help-seeking veterans, 37.5% (n=151) were overweight (BMI 26–30) and 35.5% (n=143) were obese. Obesity in help-seeking male veterans was two to four times higher than that of the general population of UK. Higher scores on measures of anger and common mental health problems were significantly associated with greater BMI. Problems with physical systemic functioning and mobility were also significantly associated with greater BMI

Discussion

Obesity is a common but increasing problem in the elderly. Its prevalence is lower in extreme old age but this is also likely to increase in the future. Decreased physical activity and decreased energy expenditure with ageing predispose to fat accumulation and fat redistribution, but muscle loss, so BMI may not increase with adiposity.

Conclusion

The results indicate that treatment-seeking UK AF veterans exhibit higher levels of obesity compared with the general population, and clinically significant physical and mental comorbidities. The findings highlight a need for mental health services to offer treatments that effectively integrate physical and mental healthcare in the treatment of people with mental health problems