

Abstract O13.2

Morbid obesity projections in the UK to 2035

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Introduction: The prevalence of morbid obesity is increasing worldwide with numbers doubling in the past 20 years. Morbid obesity (Body mass index of $\geq 40\text{kg/m}^2$) carries a high risk of non-communicable disease such as type 2 diabetes, coronary heart disease, stroke, mental illness and some cancers and increased all-cause mortality rates. In addition, morbid obesity is associated with more complex health issues and challenges in the health care system than having a lower BMI. While overweight and obesity trends have been projected to 2035 for these countries, no work has been carried out looking at recent and likely future trends in morbid obesity specifically. Aim To project trends in morbid obesity to 2035 in male and female adults in Scotland, Wales and England.

Methods: Modelling projection study. BMI prevalence by group (healthy weight, overweight, obesity, morbid obesity) was obtained from the Health Survey for England, Welsh Health Survey and the Scottish Health Survey, from 2004 to 2014 were collected for males and females aged 15+ (in five-year age groups). A categorical multi-variate nonlinear regression model was fitted to the data to project BMI trends.

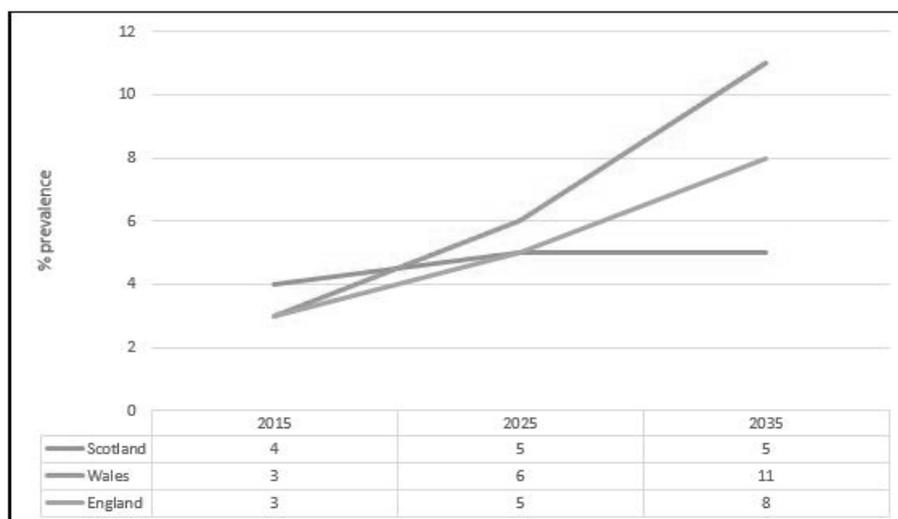
Results: Morbid obesity prevalence was predicted to increase to a prevalence of 5%, 8% and 11% in Scotland, England and Wales respectively by 2035. When exploring the data by age group, English males aged 55–64 years have the highest projected prevalence at 16%. In total, over 4 million people will be classified as morbidly obese across the three countries in 2035.

Conclusion: The prevalence of morbid obesity is predicted to increase to 2035 across the three UK countries, with Wales projected to have the highest rates, followed by England then Scotland. This is likely to have serious health and financial implications for society and the health system.

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FOR FIGURE 1 AND TABLE 1, SEE NEXT PAGE

Figure 1: Morbid obesity projections to 2035 for Scotland, Wales and England



Tab. 1. Prevalence (%) of morbid obesity in Scotland, Wales and England in 2035, by gender and age group

Age (years)	Scotland (% prevalence)		Wales (% prevalence)		England (% prevalence)	
	Males	Females	Males	Females	Males	Females
Total	6	5	13	9	7	8
15-19	0	2	6	2	6	6
20-24	0	2	6	2	6	6
25-29	4	10	5	2	7	8
30-34	4	9.5	5	2	7	8
35-39	1	3.5	9	5	12	10
40-44	1	3.5	9	5	12	10
45-49	1	5	6	7	10	10
50-54	1	5	6	6	10	10
55-59	4	5	4	10	16	8
60-64	3	5	4	10	16	8
65-69	2	2	4	6	5	12
70-74	2	2	4	7	5	12
75+	*	6	*	5	9	8

*unable to determine reliable projections for these groups due to small sample sizes and a lack of data