A Secondary analysis of the cross-sectional data available in the ‘welsh health survey for children’ to identify risk factors associated with childhood obesity in Wales

Claire Beynon
Public Health Wales and Cardiff University, UK

Introduction: The prevalence of obesity in children in Wales is approximately 12%. The health problems associated with obesity are estimated at £5.1bn/year in the UK (equivalent to US$8 billion/year). With childhood obesity come poorer health outcomes; immediately and in the long term.

Aims: To determine risk factors associated with childhood obesity from the Welsh Health Survey (WHS) 2008 to 2011.

Methods: Secondary analysis of data from the WHS, n=11,279 children (aged 4-15 years). Multivariable logistic regression was used to explore associations with childhood obesity and unhealthy food consumption; sugar sweetened beverages; physical activity (PA); currently treated illnesses; sex; age; deprivation quintiles; parent's employment type and housing tenure.

Results: The study found a significant association between childhood obesity and the following factors: parents being in the routine, manual, or unemployed group OR 1.32 (95% CI: 1.14 to 1.54, p<0.001); mid and high quintiles of deprivation OR for mid 1.23 (95% CI: 1.01 to 1.50, p=0.04) and for high deprivation OR 1.33 (95% CI: 1.09 to 1.63, p=0.005); having one or two currently treated illnesses OR for one illness 1.20 (95%CI: 1.05 to 1.38, p=0.008) and for two or more illnesses OR 1.50 (95% CI: 1.22 to 1.85, p<0.001) and not meeting the PA recommendations OR 1.33 (95% CI: 1.17 to 1.52, p<0.001).

Conclusions and implications: This study shows an association between physical activity and childhood obesity; and level of currently treated illness and childhood obesity (the management plan for children with chronic illness is potentially modifiable). The recommendations are to ensure that every child meets the PA guidelines, and any child with a chronic illness should receive a holistic package to prevent or manage obesity.

Biography
Claire Beynon has completed her Masters in Public Health from Cardiff University, UK. She is the a Specialist Registrar in Public Health with Public Health Wales with an interest in obesity. She has worked in the NHS in the UK for nearly 10 years in a variety of senior roles. Claire also has a MSc in Sport and Exercise Science, and is passionate about reducing obesity in the UK.

Claire.Beynon@wales.nhs.uk

Notes: