

## **Forty Percent of Children Attending General Paediatric Clinics in an Irish Hospital are Overweight**

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Dear Sir,

Childhood obesity poses a significant threat to the health of children in Ireland. The Childhood Obesity Surveillance Initiative 2020 report found that 19.1% of school-aged children in Ireland were overweight or obese<sup>1</sup>. Overweight and obese children are at an increased lifetime risk of cardiovascular disease, respiratory disease, type 2 diabetes, osteoarthritis, and all-cause mortality<sup>2</sup>. Many of these complications are seen in adulthood but they are increasingly being diagnosed in children and adolescents. Children who are overweight are also at risk of low self-esteem, depression and emotional and behavioural disorders<sup>3</sup>. We carried out a study to assess the rates of overweight and obesity among the local paediatric population attending general paediatric clinics in an Irish hospital. Data was collected from thirteen paediatric clinics which took place between 4/11/20 and 2/12/20 in a hospital in the south east of Ireland. Most were general paediatric clinics; one was a paediatric endocrine clinic. Heights and weights of all attending children between two and eighteen years were measured and recorded by a paediatric nurse. Corresponding BMI centiles were calculated using the UK-WHO centile charts.

142 eligible patients attended clinic during this period. Data was available for 135 of these. 54 patients (40%) had a BMI on the 91<sup>st</sup> centile or above, categorising them as overweight or obese. 24 (17.8%) of patients were 91<sup>st</sup>-98<sup>th</sup> centile (overweight), 16 patients (11.9%) were 98<sup>th</sup>-99.6<sup>th</sup> centile (severely overweight/obese) and 14 patients (10.4%) were above the 99.6<sup>th</sup> centile (severely obese). Just two patients (1.5%) were less than the 2<sup>nd</sup> centile (underweight). To account for any over-representation of patients attending clinic for weight-related issues, we removed all endocrine patients, and those who had attended clinic with weight concerns. After these adjustments, 110 patients remained in the data set. 43 of these (39%) had a BMI on the 91<sup>st</sup> centile or above. Nine (8.2%) were 91-98<sup>th</sup> centile, 14 (12.7%) were 98<sup>th</sup>-99.6<sup>th</sup> centile and 10 (9.1%) were above the 99.6<sup>th</sup> centile.

Rates of overweight and obesity within the studied population were above national averages. It is possible that the study population is not a true representation of the local paediatric population given they were children attending a paediatric clinic; however, findings were little changed when children attending with a weight-related or endocrine issue were removed. It is also possible there may have been an overrepresentation of overweight children attending with other issues associated with obesity, such as asthma. Another consideration is that this study was carried out during winter, and during the Covid-19 pandemic. It is likely these factors could have had an effect on the paediatric population's activity levels which may have impacted on their measured weights. The pandemic and resulting school closures and stay-at-home notices have impacted significantly on lifestyle and activity over the past year<sup>4</sup> and are likely to have aggravated the childhood obesity epidemic.

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**References:**

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