

Divorce may be linked to higher risk of overweight/obesity among kids involved

Boys may be especially prone to excess weight gain

[Parental marital status and childhood overweight and obesity in Norway: a nationally representative cross-sectional study doi 10.1136/bmjopen-2013-004502]

Divorce may be linked to a higher risk of overweight and obesity among children affected by the marital split, suggests research published in the online journal **BMJ Open**.

Boys may be especially prone to excess weight gain, the findings indicate.

The researchers base their findings on a nationally representative sample of more than 3000 pupils attending 127 schools across Norway. All the children were part of the national 2010 Norwegian Child Growth Study.

School nurses measured the height, weight, and waist circumference of the children whose average age was 8, to gauge general overweight, as defined by the International Obesity Task Force (IOTF), and (abdominal) obesity, as defined by a waist to height ratio of 0.5 or more.

The results were stratified by gender and parents' marital status - married, never married, to include co-habiting, single and separated, and divorced - taking account of influential factors, such as the mother's educational attainment, ethnic origin and area of residence.

Around one in five (19%) of the children was overweight or obese according to the IOTF definition, while just under one in 10 (8.9%) was (abdominally) obese.

Overall, significantly more of the 1537 girls were overweight or obese than the 1629 boys, but there were no differences in the prevalence of (abdominal) obesity.

More of the children whose parents were categorised as divorced were overweight or obese than those whose parents remained married.

They were 54% more likely to be overweight/obese and 89% more likely to be (abdominally) obese. Children whose parents had never married had a similar prevalence of overweight and obesity to those with married parents.

The findings held true even after taking account of other possible explanatory factors.

But these differences were generally larger for boys whose parents were divorced. They were 63% more likely to be generally overweight/obese than boys whose parents were married. And they were 104% more likely to be abdominally obese.

The absolute differences were 9.9 and 7.4 percentage points, respectively.

The same pattern was seen among girls, but the associations were less marked and, unlike the boys, not statistically significant.

The authors caution that the design of their study does not provide a basis for establishing cause and effect. Furthermore, they were unable to glean how long parents had been divorced, nor were they able to include lifestyle factors such as the children's normal diet and exercise regime.

But the associations they found are consistent with findings from other studies they say.

Possible explanations for the link could include less time spent on domestic tasks such as cooking; an over-reliance on healthier convenience foods and ready meals; and lower household income.

The emotional fall-out of a divorce and resulting stress generated by disruptions in the parent-child relationship, ongoing conflict between the exes, moving home and the need to create new social networks, might also explain the findings, the authors suggest. And boys might just be more vulnerable, they say.