



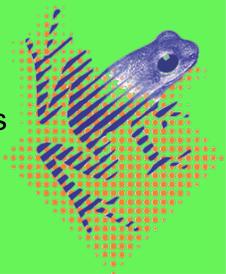
Parents' perception of overweight in 5-year-old children

Grietje Lijklema^{1,2}, Gianni Bocca¹, Pieter J.J. Sauer¹, Eva Corpeleijn²

¹ Department of Pediatrics, Beatrix Children's Hospital, University Medical Center Groningen, Groningen, The Netherlands

² Department of Epidemiology, University Medical Center Groningen, Groningen, The Netherlands

Email: g.lijklema@umcg.nl, e.corpeleijn@umcg.nl, g.bocca@umcg.nl



Background

Childhood obesity is still increasing worldwide. Early recognition of overweight or obesity in children by their parents is of utmost importance, allowing interventions to start at a young age.

Objective

We studied whether parents adequately perceive 5-year-old children's overweight and whether this is influenced by their social economic state and the percentage overweight within the family.

Patients and Methods

- Between 2011 and 2013 parents of 2203 5-year-old children from the GECKO Drenthe cohort received a questionnaire and were asked to score on a 5-point scale their perception on their child's weight, ranging from 'too light' to 'too heavy'.
- Youth health assistants measured children's height and weight. Parent's and siblings height and weight were self-reported.
- Social economic state (SES) was scored based on living area and divided in 3 groups: low – medium – high.
- Percentage overweight family members based on BMI of the parents and siblings was also divided in 3 groups: 0-25%, 25-50%, 50-100%.

Results

- 1470 (66.7%) questionnaires were returned and 1417 (64.6%) used for analysis.
- Parents underestimated their overweight child in 85% of the cases, normal weight children where in 24.5% of the cases underestimated, see figure 1.
- Correct perception of children's weight depends on the prevalence of overweight: more overweight gives more underestimation.
- Perception of overweight children is better by parents with a high SES in absolute terms, after adjustment for prevalence of overweight, SES was no longer significant.
- After adjustment for SES, parents from families with more than 50-100% overweight family members underestimated the weight of their child significantly more (56.2% vs. 28.3% $p < 0.001$).

Conclusion

Parents are unlikely to adequately perceive overweight in 5-year old children. Parents' perception depends on percentage overweight within the family and these families are mostly found in low SES. This lack of identifying overweight children may hinder early intervention.

Figure 1: Parents' perception on the weight of their 5 year-old children, divided by weight category based on BMI classification.

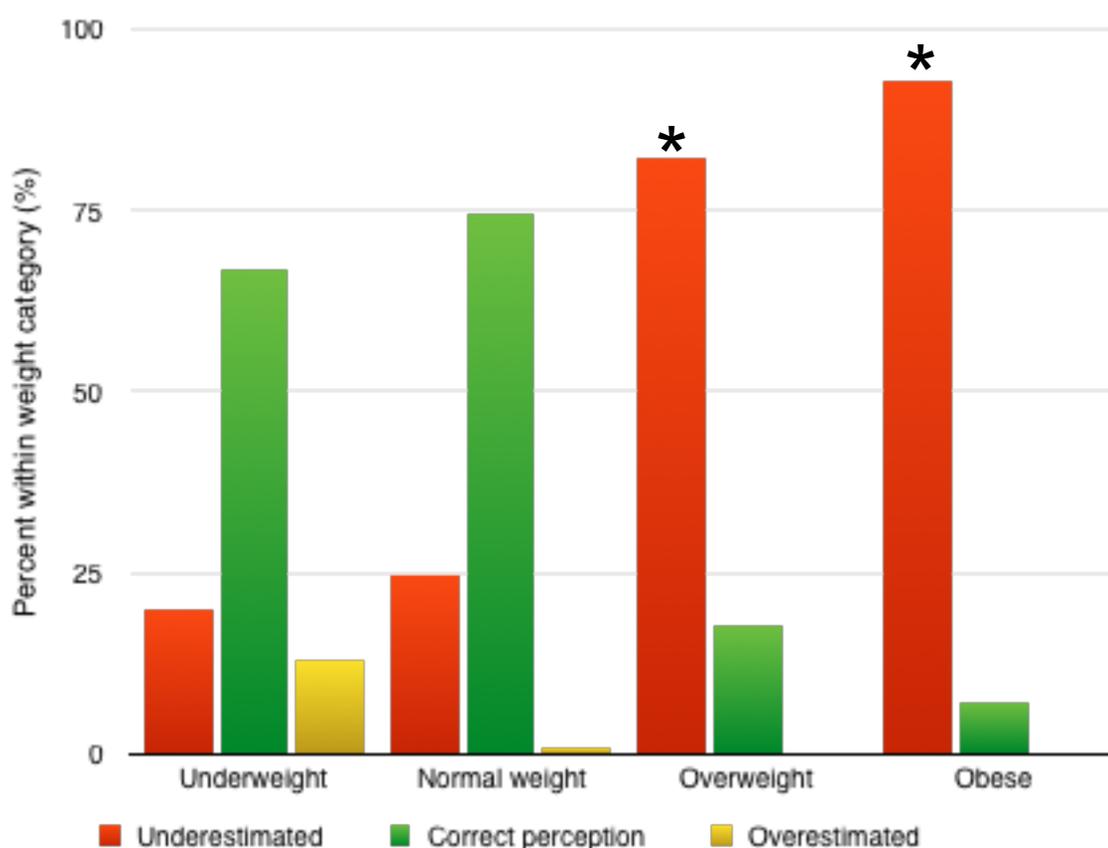


Figure 1: Overweight and obese children are significantly more underestimated by their parents than normal weight children, $*p < 0.001$.

Figure 2: SES is of influence on the prevalence of overweight and thereby influences the perception of overweight children, $*p < 0.001$.

Figure 3: The prevalence of overweight within the family influences the perception of parents on the total group of children, overweight as well as normal weight children, $*p < 0.001$.

Figure 2: Parents with a high SES perceive the weight of their 5-year-old overweight children significantly better.

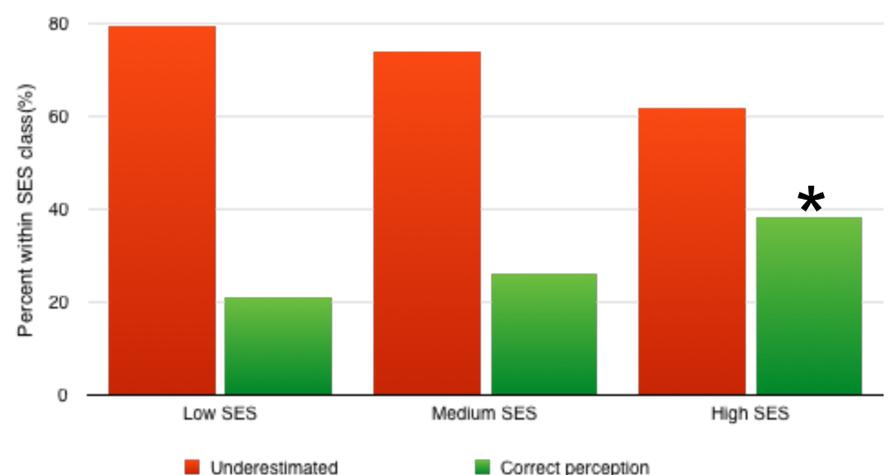


Figure 3: Parents from families with >50% overweight family members underestimate their child's weight significantly more.

