

Healthcare professionals' perception of overweight in preschool-aged children

Gianni Bocca¹, Eva Corpeleijn², Jasper Broens¹, Ronald P. Stolk², Pieter J.J. Sauer¹

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



Background

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

Objective

We studied whether healthcare professionals adequately perceive preschool children's overweight and whether this is influenced by their own body mass index (BMI).

Patients and Methods

Healthcare professionals received a questionnaire containing pictures and sketches of 7 preschool children with body weights ranging from underweight to morbidly obese. The professionals rated the pictures on a five-point scale from "too heavy" to "too light". Concurrently, at each picture, healthcare professionals assigned 1 from 7 sketches most adequately depicting the child's body shape. Healthcare professionals' height and weight were self-reported and BMI was calculated. Groups were made based on quartiles: low (Q1), average (Q2 and Q3), or high BMI (Q4).

Results

- Of the 716 questionnaires, 353 (49.3%) were returned and 346 (48.3%) were used for analysis.
- Healthcare professionals most often chose sketches lighter than the correct one.
- Depending on the healthcare professionals' BMI group, the overweight child was perceived as "normal weight" by 74-79% of the healthcare professionals. The obese children were rated correctly by 44-52% of the healthcare professionals, but as "normal weight" by 14-15% of them. The morbidly obese child was adequately assessed by 93-98% of the professionals.
- Healthcare professionals in the lowest BMI group less frequently perceived the underweight child as too light, compared to professionals in the average BMI group ($P = 0.01$).

Conclusion

Independently of their own BMI, healthcare professionals are unlikely to adequately perceive overweight in preschool-aged children. The lack of identifying overweight or obese children may hinder early intervention.

Visual perception of the series of photographs of Dutch children with different weight status by healthcare professionals, divided per field of expertise.

Photograph	Visual perception	Field of expertise			
		GP	Pediatrician	Youth healthcare specialist	Specialist child abuse
Underweight	too light	40 ^S	42 ^S	17 ^S	29
	a little too light	49	47	68	46
	normal weight	11	11	16	25
Normal weight	a little too light	2	2	6	4
	normal weight	85	85	85	87
	a little too heavy	13	13	9	9
Overweight	too heavy	0	0	1	0
	a little too light	1	1	0	0
	normal weight	78	75	72	92
Obese	a little too heavy	21	25	28 ^T	8 ^T
	normal weight	13	17	12	13
	a little too heavy	40	31	39	45
Morbidly obese	too heavy	47	52	49	43
	normal weight	0	1	0	0
	a little too heavy	5	4	6	4
	too heavy	95	95	94	96

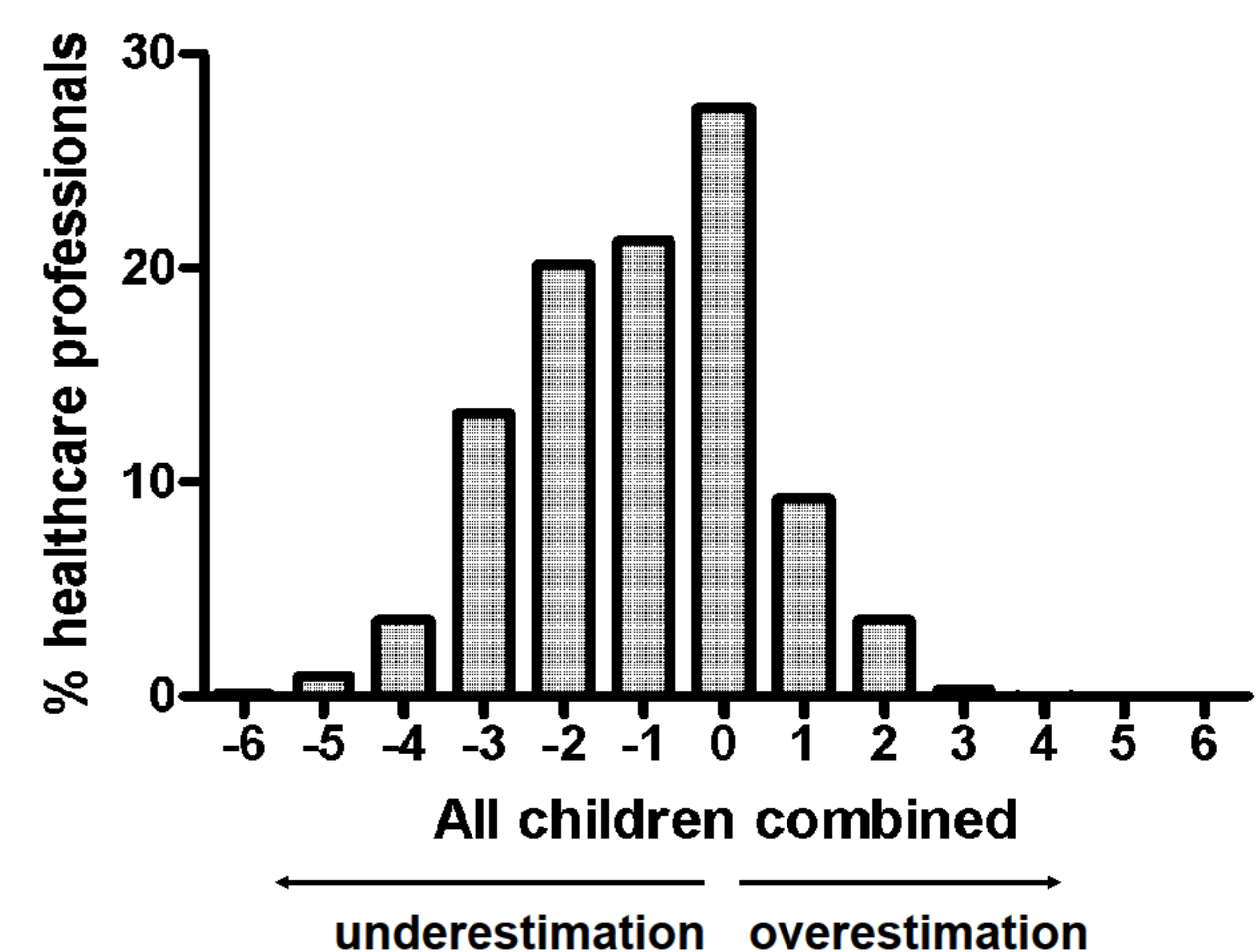
Data are expressed as percentages.

In bold, the correct visual perception of the weight status of the child on the photograph.

GP, general practitioner

$P = 0.002$, GP's and pediatricians vs. youth healthcare specialists (Mann-Whitney U test)

$\ddagger P = 0.048$ (Mann-Whitney U test)



Healthcare professionals' rating of the photographs showing all children combined. Positive numbers indicate sketches heavier than the sketch representing the child. Negative numbers indicate sketches lighter than the sketch representing the child.

