

Objective

In a previous paper, we demonstrated that the lack of medical screening for overweight is the leading factor associated with poor perception of overweight among adult overweight Guadeloupeans. Our objective was then to estimate the relationship between underestimation of weight status and cardiovascular (CV) risk behaviors in this population.

Methods

We used data from CONSANT, a cross-sectional study carried out in 2007 on a representative sample of the adult Guadeloupean population (1005 subjects aged 25-74 years, selected by stratified random sampling). Interviews and measurements were done at subjects' homes by trained investigators working in pairs. Overweight was defined by a body mass index (BMI) $\geq 25\text{kg/m}^2$. Overweight perception and dietary habits were measured with closed-ended questions, behavioral beliefs about cardiovascular protection with open-ended questions.

Results

Misperception of overweight and CV risk behaviors in overweight subjects^a

	CV Risk Behaviors		
	%	crude OR	adjusted OR ^b
No, I have not increased my consumption of fruits & vegetables			
Misperception of overweight	52.5	2.1 ^c	2.2 ^d
Perception of overweight OK	34.9	1	1
No, I have not decreased my consumption of deli meats			
Misperception of overweight	54.2	1.5 ^e	1.7 ^e
Perception of overweight OK	44.3	1	1
No, I have never dieted to lose weight			
Misperception of overweight	76.6	5.2 ^c	2.9 ^c
Perception of overweight OK	38.8	1	1

a: BMI $\geq 25\text{kg/m}^2$; b: Odds ratio adjusted for age, sex, education, income, BMI, previous screening for overweight, family status, television viewing, and behavioral beliefs
c: $p < 10^{-3}$; d: $p < 10^{-2}$; e: $p < 0.05$

Among overweight subjects who did not correctly perceive their weight status, 52.5% stated not having increased their consumption of fruits and vegetables, compared with 34.9% among those who did perceive their overweight.

Adjusting for all variables of interest, the odds ratio for not increasing consumption of fruits and vegetables was estimated at 2.2 ($p < 10^{-2}$) in overweight subjects who underestimated their weight status, compared to those who correctly perceived their weight status.

Similar results were observed when considering consumption of deli meats and attempts at weight loss.

Conclusion

In this representative sample of the overweight adult Guadeloupean population, the relationship between misperception of overweight and inappropriate eating behaviors was very strong and significant. Our results suggest that the lack of screening could be indirectly responsible for CV risk behaviors.

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