Factors Associated with the Discrepancy Between Referred and Measured BMI

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INTRODUCTION

The need to understand the determinants of weight gain leading to overweight/obesity has motivated research in the area, in order to prevent and revert this pandemic. Unrealistic perception of body weight and BMI may interfere with the efficacy of public health interventions.

AIM

To compare BMI assessed by measured or self-reported weight and height in Portuguese adults.

METHODS

Data from the study "Portuguese Population's Food Habits and Lifestyles" were used. A national representative sample of 3529 subjects was interviewed at home between February and April 2009. Subjects were firstly asked about their current weight and height and subsequently these measurements were taken according to international procedures. Fifty-five subjects refused to be weighted and/or to have their height measured. BMI was calculated and percentual discrepancies between measured and reported by the subjects were analyzed in relation to demographic characteristics.

RESULTS AND DISCUSSION

Values of measured BMI were significantly higher than referred BMI. The discrepancy between them was higher in men compared to women (1.47 vs. 1.19%). Significant correlations between the percentual discrepancy between measured and referred BMI and age and education showed greater underestimation in older and less educated subjects, although being very weak (r = 0.268 for men and r = 0.211 for women).

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Contribution of Walking, Moderate and Vigorous Physical Activity to Total Physical Activity Amongst Portuguese Adults

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INTRODUCTION

Leading an active lifestyle is one of many lifestyles' variables which influence the incidence and prevalence of non-transmissible chronic diseases. The knowledge about the contribution of different kinds of physical activity to the total physical activity practice may help draw future interventions.

AIM

To evaluate the determinants of higher percentual contribution of walking, moderate and vigorous physical activity to total physical activity among the Portuguese adult population.

METHODS

Data from the first phase of the study "Portuguese Population's Food Habits and Lifestyles" (2009) were used. A national representative sample of 3529 Portuguese adults was interviewed at home between February and April 2009. The present analysis is carried out in 2459 subjects due to incompleteness of 970 records. Physical activity was evaluated by the International Physical Activity Questionnaire (IPAQ). Binary logistic regression models were computed to estimate the odds of higher (above median) percentual contribution of (1) walking, (2) moderate physical activity and (3) vigorous physical activity among Portuguese adults according to their sex, age and education groups, civil status, professional occupation, region of residence, BMI class and smoking habits.

RESULTS AND DISCUSSION

Women have higher contribution to total physical activity from walking and men from vigorous physical activity. Older subjects have higher contribution from walking and lower from vigorous physical activity. Normal weight subjects have higher contribution from vigorous physical activity (vs. all other BMI groups) and overweighted and obese have higher contribution from walking (vs. normal weighted). The contribution of different kinds of physical activity to total physical activity should be taken into account while making recommendations to promote the practice of physical activity.