

Monitoring of BMI and obesity in the Italian adult population within the CUORE Project: preliminary results of 1998-2018 trend

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Background: Obesity is a risk factor for the majority of non-communicable diseases-NCD. In the Italian country profile, the NCD Risk Factor Collaboration estimated the 2010 obesity prevalence at 19.0% (95% confidence interval-C.I. 15.7-22.7) in women aged 18 years and over and 18.5% (95% C.I. 15.1-22.0) in men, with a very low probability (2-9%) of halting the increase of obesity by 2025 (WHO global obesity target). This preliminary analysis aims to assess 20 years trend of BMI and obesity in the Italian general adult population using the data collected within the CUORE Project.

Methods: Mean of BMI and prevalence of obesity ($\text{BMI} \geq 30 \text{ kg/m}^2$) in random samples of resident population in 6 Italian Regions, aged 35-74 years, stratified by age and sex, were assessed in an on-going survey started in 2018 (men 612; women 649), and compared to those assessed in the same Regions in 1998-2002 (men 1933, women 1926) and in 2008-2012 (men 1306; women 1318). Weight and height were measured using standardized methodologies. Surveys were partly funded by the Italian Ministry of Health-CCM and approved by the National Institute of Health ethical committee.

Results: In men, mean values of BMI resulted 26.6 kg/m^2 (95% C.I. 26.4-26.8) in 1998 survey; 27.5 (27.2-27.7) in 2008; and 26.5 (26.1-26.8) in 2018; prevalence of obesity was 16.8% (95% C.I. 15.1-18.4) in 1998; 23.5% (21.2-25.8) in 2008; and 17.3% (14.4-20.4) in 2018. In women mean values of BMI were 26.1 kg/m^2 (95% C.I.: 25.9-26.4) in 1998; 26.4 (26.1-26.7) in 2008; and 25.5 (25.1-25.9) in 2018; prevalence of obesity was 20.7% (95% C.I.: 18.9-22.5), 21.9% (19.7-24.2) and 19.0% (15.9-22.0) respectively.

Conclusions: Preliminary data of first 6 Regions (out of 10 to be examined in the on-going survey) suggest that mean BMI and prevalence of obesity in Italian adult population are still very high; if confirmed, in the last ten years a reduction seems to be occurred increasing the probability of meeting the WHO obesity target by 2025.

Main messages: Mean BMI and prevalence of obesity in Italian adult population are still high; if confirmed, in the last ten years a reduction seems to be occurred.