

A PARADIGM SHIFT IN NUTRITIONAL DISORDERS IN CHRONIC KIDNEY DISEASE PATIENTS ON DIALYSIS: THE RISING TIDE OF OBESITY IN THE DIALYSIS POPULATION IN A SOUTHERN EUROPEAN REGION

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INTRODUCTION

Obesity is an epidemic phenomenon worldwide. In the past decades, the prevalence of obesity in the general population MORE doubled in the USA and in most European countries. This trend is parallel to the growth of the population with end stage kidney disease (ESKD) on dialysis, a population considered to be at high risk for malnutrition. No time-trend analyses of nutrition status by the Body Mass Index are available in European countries.

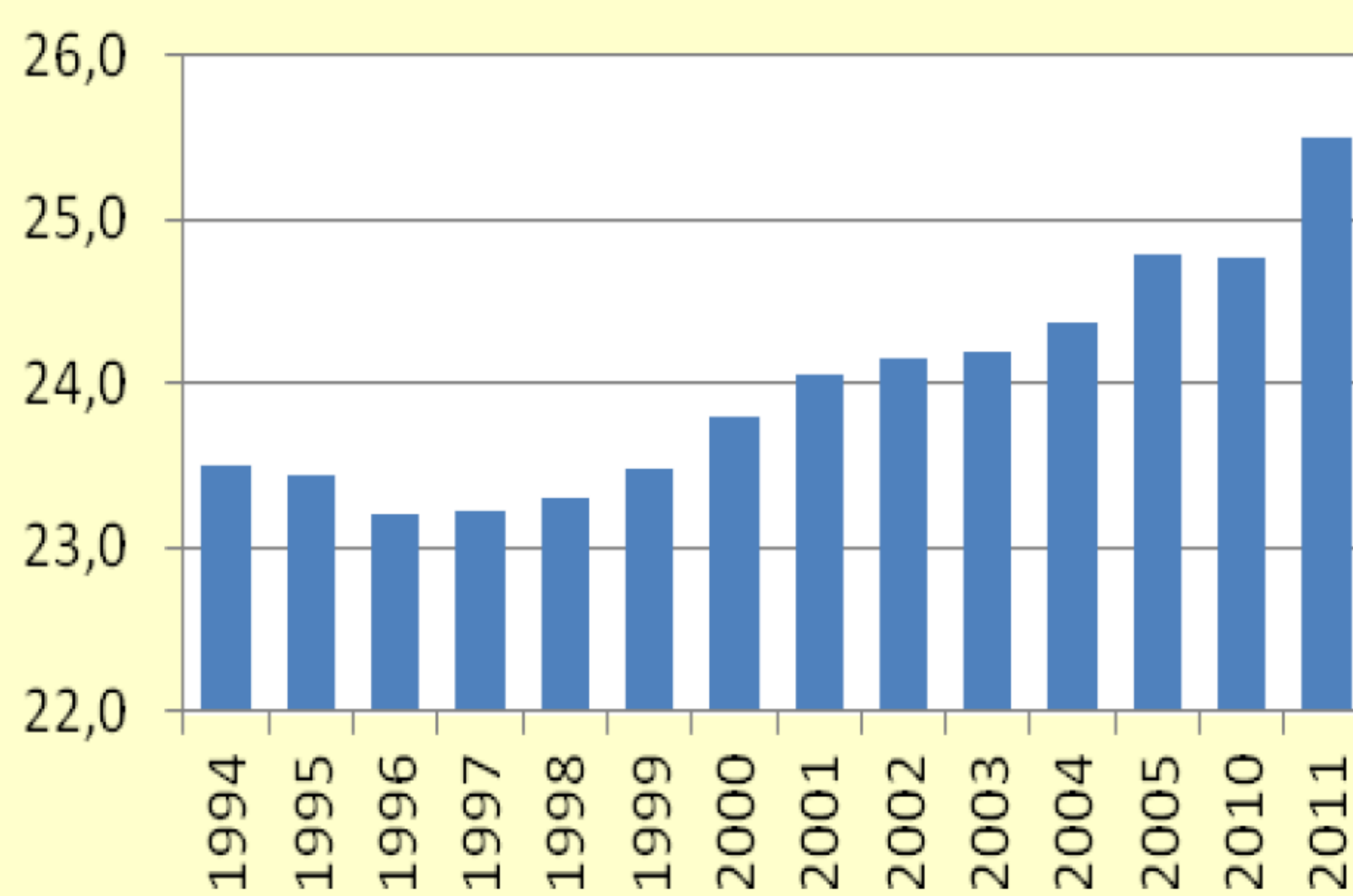
METHODS

We investigated mean BMI and the time trends of the prevalence of nutrition disorders (from underweight to obesity) across 18 years (1994-2011) among patients included in a dialysis Registry (the Calabrian Registry of Dialysis and Transplantation) affiliated with the ERA-EDTA Registry with average demographic characteristics, death risk and comorbidities very close to the corresponding average values of the same Registry.

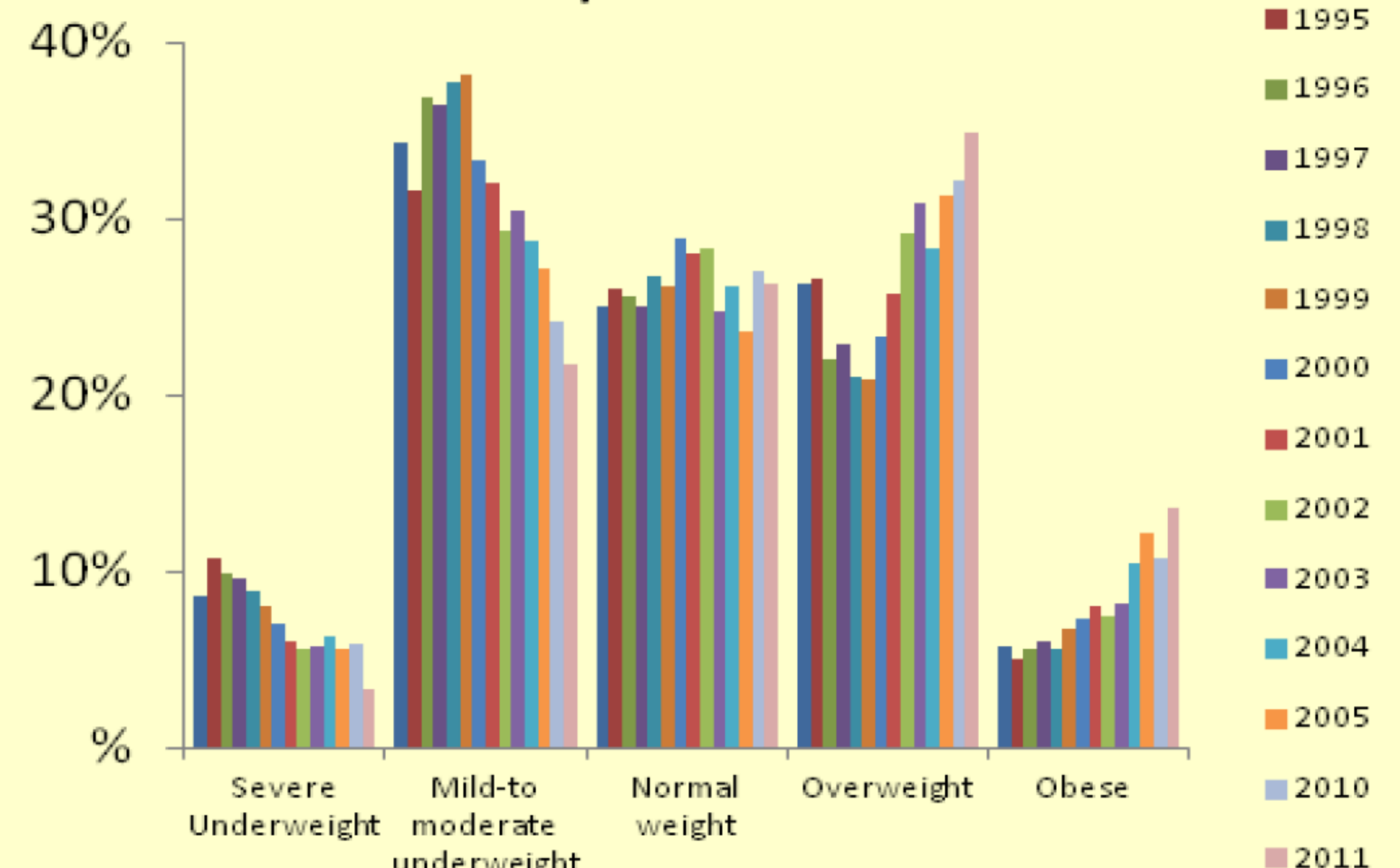
RESULTS I

The average BMI rose 23.5 kg/m² in 1994 to 25.5 kg/m² in 2011 (P<0.001) (Fig.1). This temporal evolution of average BMI was accompanied by a decline in the severe (BMI <18.5 kg/m²) and mild to moderate (BMI 18.6-22.5 kg/m²) underweight. Remarkably, both the prevalence of overweight (BMI 25.1-30 kg/m²: 26%→35%), and frankly obese patients (BMI>30kg/m²: 6%→14%) increased considerably (P<0.001) (Fig.2) over the same time-frame.

Average BMI



Prevalence of patients in each BMI class



RESULTS II

Of note, these secular trends were evident across gender as well various population strata including young (≤ 65 years) and elderly (> 65 years) patients. The rising tide of overweight and obesity in this population was accompanied by a parallel increase in the prevalence of diabetic nephropathy as a diagnosis of ESKD (1994: 7%; 2011:15%). Similar analyses focusing exclusively in incident patients showed a substantial decline in the risk of underweight (from 12% to just <3%) and a doubling in the risk of overweight and obesity.

CONCLUSIONS

Analysis of BMI in a Registry representative of the ERA-EDTA population during the period 1994 to 2011 shows a fast growing rise of overweight and obese patients and a specular decline of patients in the underweight categories. These secular trends have obvious implication for the growth of the total ESKD population in the years to come.

** CREDIT workgroup

** Alati G., Andreoli D., Ascoli G., Barreca E., Bovino M., Bruzzese V., Caglioti A., Candela V., Caruso F., Chiarella S., D'Agostino F., De Gaudio M., D'Anello E., Ferrari L., Foscaldi A., Franco C., Galati D., Grandinetti F., Gullo M., Lucà N., Maimone I., Mancuso F., Mannino M.L., Marsico M.L., Martire V., Mellace A., Procopio P., Plutino D., Pugliese A., Reina A., Rizzuto G., Rocchetti V., Santangelo M., Sapio C., Sellaro A., Vardè C., Zingone F.

