

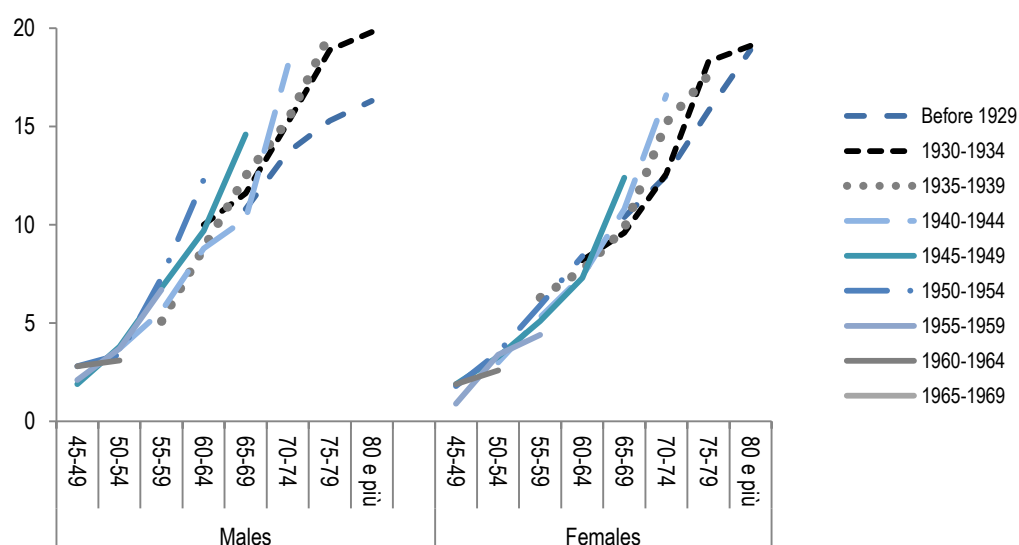
Diabetes in Italy

Years 2000-2016

In 2016 more than 3 million 200 thousand people in Italy reported to suffer from diabetes, 5.3% of the total population (16.5% among people aged 65 and over).

The prevalence of self-reported diabetes has almost doubled in the last thirty years (it was 2.9% in 1980). In a more recent perspective, the number of people with diabetes has increased by 1 million and over comparing to the year 2000. The prevalence has increased from 3.8% to 5.3%, but comparing standardized prevalence (controlling aging effect of the population), the increase is significantly smaller (from 4.1% to 4.9% in 2016). This increase is therefore due to the aging of the population and other factors, such as early diagnoses and increased survival of patients with diabetes. Mortality due to diabetes has decreased more than 20% in all age groups in the last decade. In addition, in the most recent birth cohorts, the proportion of people with diabetes increases more at earlier ages than in previous cohorts, also as an effect, among other factors, of the progressive anticipation of the age at which the disease is diagnosed (Graph 1).

GRAPH 1. PEOPLE AGED 45 AND OVER WITH SELF-REPORTED DIABETES BY SEX, AGE GROUP AND GENERATIONS.
Years 1995, 2000, 2005, 2010 and 2015 (percentages)



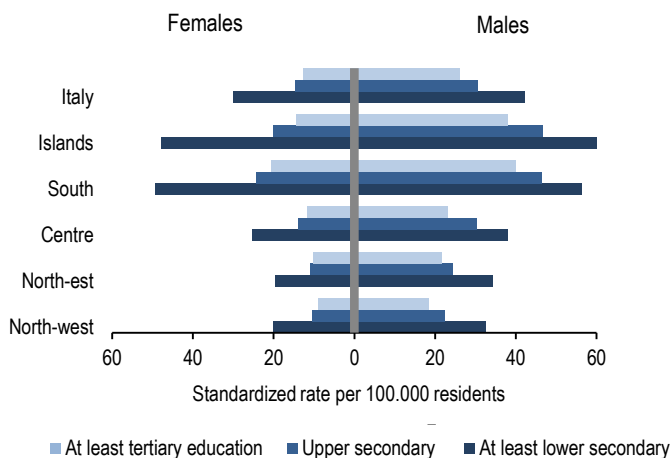
Source: Istat, Survey on Aspects of daily life

Diabetes is more common in socio-economically disadvantaged groups of the population.

Diabetes is negatively associated with the level of education, which may be considered as a proxy of the socio-economic status. Inequalities are greater among women than men in all age groups: among women aged 65-74 with a university degree or a secondary school diploma the prevalence of diabetes is 6.8%, it increases to 13.8% among women with the same age and a lower level of education (among males aged 65-74 the prevalence is 13.2% and 16.4%, respectively).

An increased mortality risk for diabetes is observed in people with a low level of education and the gap is greater among women, as opposed to what happens for other causes of death: among women with a low level of education the risk of mortality due to diabetes increases by 2.3 times comparing to graduated women. Diabetes is most common in the South of Italy, where the age-standardized prevalence rate is 5.8% versus 4.0% of the North. In the Southern area mortality rate for diabetes is significantly higher for both sexes and differences in mortality rates due to inequalities in socio economic status are more evident in women (Graph 2).

GRAPH 2. MORTALITY DUE TO DIABETES BY LEVEL OF EDUCATION, SEX AND GEOGRAPHICAL AREA. Year 2014
Standardized rates per 100.000 residents.

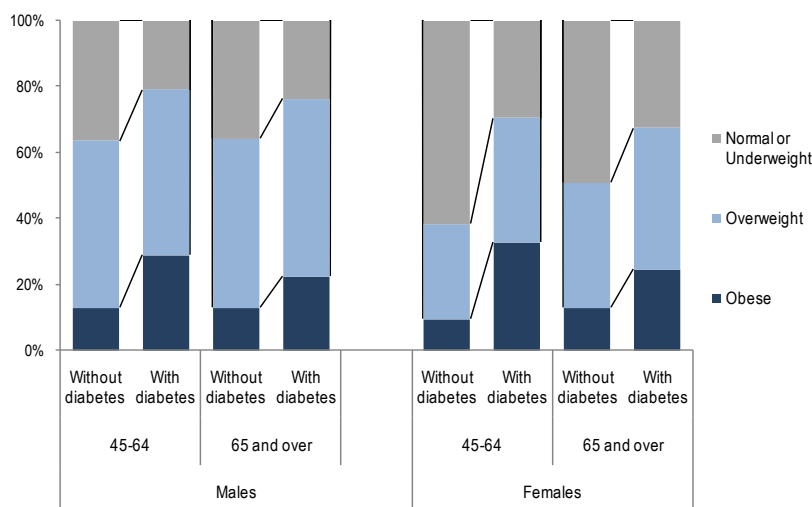


Source: Istat, Project on "Socio-economic inequalities in mortality " <http://www.istat.it/it/archivio/201175>

Obesity and sedentary behaviors are major risk factors for diabetes.

The proportion of obese people suffering from diabetes in the age group 45-64 is 28.9% for men and 32.8% for women (the prevalence of obesity is 13.0% and 9.5% respectively among people without diabetes). In the same age group 47.5% of men and 64.2% of women with diabetes do not practice any light physical activity in their leisure time (Graph 3).

GRAPH 3. PEOPLE AGED 45 AND OVER BY BODY MASS INDEX (BMI), WITH OR WITHOUT DIABETES, SEX AND AGE GROUP. Year 2016, percentages



Source: Istat, Survey on Aspects of daily life

As diabetes is associated with obesity and sedentary behaviors, special attention should be paid to childhood obesity, as it is a predictive value of overweight gain in adulthood. It is estimated that at least a third of children and about half of overweight teenagers remain in this condition when adult, thus compromising healthy aging. In Italy the 24.9% of children and teenagers aged 6-17 years are obese or overweight (2014-2015 data).

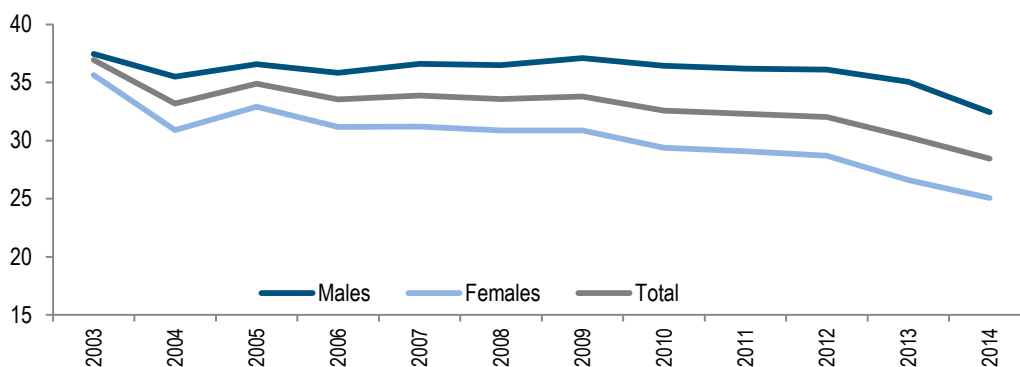
Mortality rate and hospitalization due to diabetes have been decreasing in the last decades

Diabetes caused 20.119 deaths in 2014. Italian diabetes mortality rate is higher than the EU (28) average (EU standardized rate in 2014 is 22.0 per 100 thousand residents) and Italy is ninth in the ranking of the 28 EU countries.

The standard mortality rate has decreased by 23% in about 10 years, from 36.9 per 100 thousand residents in 2003 to 28.4 in 2014 (Graph 4).

Over time, there is a steady decline in mortality among women, while for men the decline only occurred after 2009. Therefore, elderly diabetes mortality rates are higher for males and the gender gap has increased until 2013.

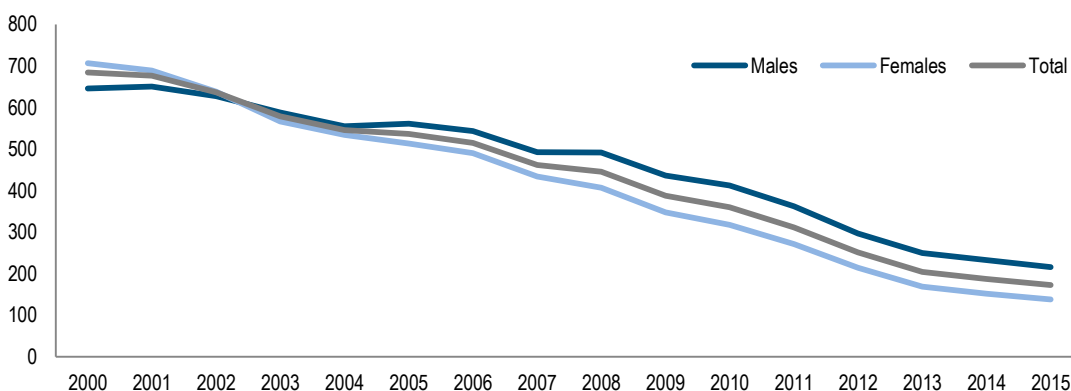
GRAPH 4. DIABETES MORTALITY TREND IN ITALY. Years 2003 -2014, Standardized rates per 100.000 residents



Source: Istat, Causes of deaths statistics

Hospitalization for diabetes has decreased over time. From 2000 to 2015 it has decreased by 66.4%, while the reduction of the total hospital discharges was 26.6%. Potentially inappropriate hospitalisations have been also dropping dramatically over the past five years from 108 to 49 per 100 thousand inhabitants (Graph 5).

GRAPH 5. HOSPITAL DISCHARGES FOR DIABETES (MAIN DIAGNOSIS) BY SEX. Years 2000-2015, Standardized rates per 100,000 residents



Source: Istat Elaborations from Ministry of Health database, Register of individual hospital discharges

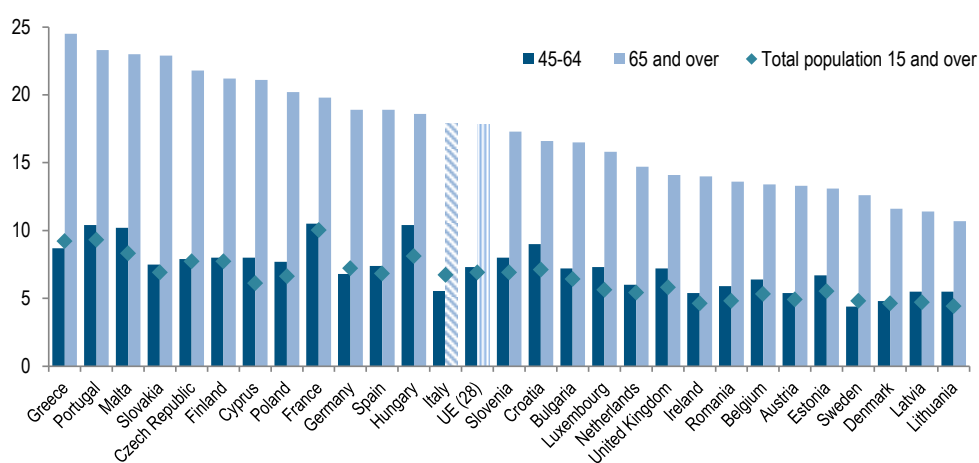
Self-reported diabetes: Italy among European countries

Diabetes is increasing worldwide and represents a relevant public health problem according to the World Health Organization (WHO)¹. Among all cases of diabetes mellitus the 90% is of type 2, which occurs almost exclusively in adulthood. Therefore the prevalence among population is expected to increase because of the increase in life expectancy.

The Italian crude prevalence rate is close to the average of the 28 EU countries, both in the population as a whole (15 years and older) and in the elderly population (Graph 6), despite our country has one of the largest share of the elderly and “old-old” population.

Italy has prevalence crude rate lower than Germany, France, and Spain, both for adults aged 45-64 and for the elderly population.

GRAPH1. PERCENTAGE OF PEOPLE AGED 15 AND OVER WITH SELF-REPORTED DIABETES AMONG EUROPEAN COUNTRIES (28 EU), BY AGE GROUPS. Year 2014, ranked by highest to lowest % among elderly people



Source: European Health Interview Survey (EHIS wave 2) <http://ec.europa.eu/eurostat/data/database>

For more details please refer to the Italian version

Contact persons:

Lidia Gargiulo (gargiulo@istat.it)

phone +39 06 4673.7251

Alessandra Burgio (burgio@istat.it)

phone +39 06 4673.7388

Francesco Grippo (frgrippo@istat.it)

phone +39 06 4673.7409

Directorate for Social statistics and population census

Istat – Italian National Institute of Statistics

¹ http://apps.who.int/iris/bitstream/10665/204871/1/9789241565257_eng.pdf?ua=1