



## “Atlas of social inequalities in the use of medicines”

### HIGHLIGHTS

In the adult population, data were analysed of local-level pharmaceutical prescriptions paid by the National Health Service (NHS) of medicines for **hypertension, dyslipidaemias, hypothyroidism, hyperthyroidism, depression, dementia, Parkinson's disease, osteoporosis, benign prostatic hypertrophy, hyperuricemia and gout, diabetes and chronic obstructive pulmonary disease (COPD)**.

In the paediatric population, prescription data were analysed for medicines used for **asthma, epilepsy and attention deficit/hyperactivity disorder (ADHD)**.

#### Consumption in the adult population

- In absolute terms, the therapeutic categories with the **highest consumption rates** are **antihypertensive and lipid-lowering drugs**, followed by drugs for **benign prostatic hypertrophy** in men and **antidepressants** in women.
- On average, in all the Italian provinces, men recorded higher drug consumption levels for most of the therapeutic categories analysed, with the exception of **antidepressants, anti-osteoporotic** medicines and drugs for the treatment of **thyroid diseases** (hyper- and hypothyroidism), for which consumption is significantly higher in women than men.
- At a geographical level, **overall higher levels of consumption** are observed **in the South and in the Islands** for most of the therapeutic categories. **An inverse trend**, with higher consumption in the North and lower in the South, is instead reported for **antidepressants**.
- As for **anti-dementia drugs**, the consumption rate is higher in the provinces of Central Italy.
- The drug consumption rate confirms as a valid measure of disease identification (consumption is used as a proxy of the disease) since for almost all the clinical conditions studied the geographic and gender distribution observed reflects the already known disease epidemiology.
- The results suggest that **socioeconomic position** strongly correlates with **drug use** and that drug **consumption is higher in subjects residing in the most disadvantaged areas**, probably due to poorer health conditions, which could be connected with an incorrect lifestyle.

## Consumption in the paediatric population

- Within the therapeutic categories analysed, a **higher consumption** is reported of **respiratory drugs**, more in males than females, followed by **antiepileptic drugs** and by **drugs for the treatment of attention deficit/hyperactivity disorder**.

## Adherence and persistence

- **The average levels of adherence and persistence to pharmacological treatment** calculated at national level are **generally unsatisfactory**, even if a **decreasing North-South gradient** is observed for both indicators. In general, **women are less adherent than men** for all the therapeutic categories analysed, with the exception of anti-osteoporotic drugs.

- **At the national level, it is noted that adherence and persistence are higher in the less deprived areas**; however, in most cases the interpretation of the trend proves difficult because of the high regional variability. As regards **adherence**, the therapeutic categories with a higher percentage of subjects with **high adherence** are **anti-osteoporotic drugs**, both for men and women (about 70%) and **drugs for benign prostatic hypertrophy for men** (about 62%).

**Extremely low levels** (even below 25%) are recorded for **drugs for hypothyroidism** (19.1% for men and 11.4% for women) and for **Parkinson's disease** (22.9% for men and 18.3% for women).

- In general, **women are less adherent than men** for all the therapeutic categories analysed, **with the exception of anti-osteoporotic drugs**.

- With regard to **persistence**, the percentage of subjects still on drug treatment 12 months after the start of therapy **exceeds 50% only with antihypertensive, lipid-lowering and anti-dementia drugs in men**, and with **anti-dementia and anti-osteoporotic drugs in women**.

- Also for this indicator, **women show a lower persistence to treatment** than men do.

- By removing the deprivation effect, the levels of adherence and persistence do not change. This result could indicate that national **differences between geographic areas are due to different regional health systems** and are not influenced by socioeconomic deprivation levels, suggesting that, **once the patient has had access to pharmaceutical care, taking charge does not change as the level of deprivation varies**.