Pharmaceutical consumption

In general, pharmaceutical consumption continues to increase, partly driven by a growing demand for drugs to treat ageing-related and chronic diseases and by changes in clinical practice. This section examines consumption of four categories of pharmaceuticals: antihypertensive, cholesterol-lowering, antidiabetic and antidepressant drugs. Consumption is measured in defined daily doses (DDD) (see the box on "Definition and comparability").

Consumption of antihypertensives has nearly doubled in OECD countries between 2000 and 2013. It has more than tripled in Estonia and quadrupled in Luxembourg (Figure 10.8). It is highest in Germany and Hungary, almost five-fold the level of Korea and Turkey. These variations reflect both differences in the prevalence of high-blood pressure and in clinical practice. In 2008, 16% of the Korean population had high blood pressure, against 26% in Germany and 37% in Hungary, while the average number of DDD prescribed per patient with high blood pressure was lower in Korea (0.5) than in Hungary (1.1) and Germany (1.2) (OECD, 2015).

The use of cholesterol-lowering drugs has more than tripled in OECD countries between 2000 and 2013 (Figure 10.9). The Slovak Republic, the United Kingdom and Australia had the highest consumption per capita in 2013, with levels over 40% higher than the OECD average. Prescription clinical guidelines for anti-cholesterol treatments have been updated several times since the 1990s, recommending wider screening, earlier treatments, and higher dosages. This explains part of the high growth observed during the period.

The use of antidiabetics has almost doubled in OECD countries between 2000 and 2013 (Figure 10.10). This growth can be explained by a rising prevalence of diabetes, largely linked to increases in the prevalence of obesity (see indicator on overweight and obesity in Chapter 4), a major risk factor for the development of type-2 diabetes. In 2013, the consumption of antidiabetics was highest in Finland, Germany and the United Kingdom.

Consumption of antidepressants has increased considerably in most OECD countries since 2000 (Figure 10.11). This might reflect some narrowing of the treatment gap for depression. However, there is significant variation in consumption of antidepressants between countries. Iceland reported the highest level of consumption of antidepressants in 2013, twice the OECD average, followed by Australia, Portugal and Canada. Chile, Korea and Estonia reported low consumption levels.

The level of antidepressants consumption depends on the prevalence of depression in each country, and on how depression is diagnosed and treated. This, in turn, depends on other available therapies, local guidelines, and prescribing behavior (OECD, 2014; Moore et al., 2009). These factors vary between countries. In England and in France, the increase in antidepressants consumption has been associated with a longer duration of drug treatment (Grandfils and Sermet, 2009; Moore et al., 2009).

Where antidepressants consumption is very low – Korea, Chile, Estonia – there may be a case for addressing unmet needs. In other countries with particularly high antidepressants consumption, there is a need to assess the appropriateness of prescribing patterns, and the availability of alternative treatments for depression.

Definition and comparability

Defined daily dose (DDD) is the assumed average maintenance dose per day for a drug used for its main indication in adults. DDDs are assigned to each active ingredient(s) in a given therapeutic class by international expert consensus. For instance, the DDD for oral aspirin equals 3 grams, which is the assumed maintenance daily dose to treat pain in adults. DDDs do not necessarily reflect the average daily dose actually used in a given country. DDDs can be aggregated within and across therapeutic classes of the Anatomic-Therapeutic Classification (ATC). For more detail, see *www.whocc.no/atcddd*.

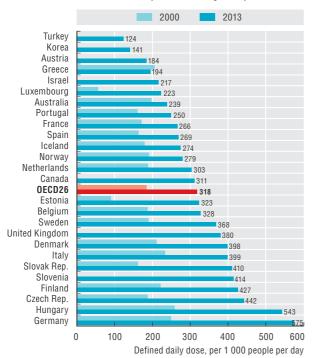
The volume of hypertension drugs consumption presented in Figure 10.8 refers to the sum of five ATC2 categories which can all be prescribed against hypertension (antihypertensives, diuretics, beta-blocking agents, calcium channel blockers and agents acting on the renin-angiotensin system).

Data generally refer to outpatient consumption only, except for the Czech Republic, Estonia, Italy and Sweden where data also include hospital consumption. The data for Canada relate to three provinces only (British Columbia, Manitoba and Saskatchewan). The data for Spain refer to outpatient consumption for prescribed drugs covered by the National Health System (public insurance). Data for Luxembourg are underestimated due to incomplete consideration of products with multiple active ingredients.

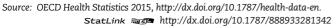
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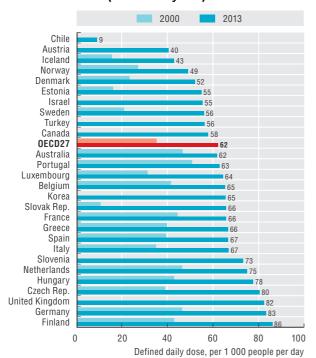
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Pharmaceutical consumption



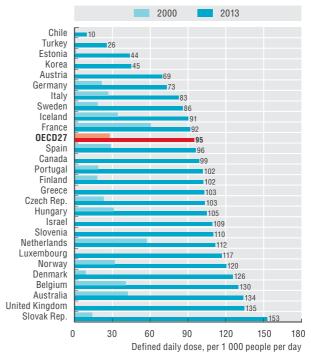
10.8. Antihypertensive drugs consumption, 2000 and 2013 (or nearest years)





10.10. Antidiabetic drugs consumption, 2000 and 2013 (or nearest years)

Source: OECD Health Statistics 2015, http://dx.doi.org/10.1787/health-data-en. StatLink age http://dx.doi.org/10.1787/888933281342 Information on data for Israel: http://oe.cd/israel-disclaimer

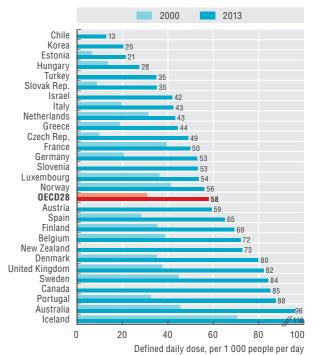


10.9. Cholesterol-lowering drugs consumption,

2000 and 2013 (or nearest years)

Source: OECD Health Statistics 2015, http://dx.doi.org/10.1787/health-data-en. StatLink and http://dx.doi.org/10.1787/888933281342

10.11. Antidepressant drugs consumption, 2000 and 2013 (or nearest years)



Source: OECD Health Statistics 2015, http://dx.doi.org/10.1787/health-data-en. StatLink and http://dx.doi.org/10.1787/888933281342



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