

Pharmaceutical consumption has been increasing for decades, driven by a growing need for drugs to treat age-related and chronic diseases, and by changes in clinical practice. This section examines consumption of four categories of medicines: anti-hypertensives, cholesterol-lowering agents, anti-diabetics, and anti-depressants. These medicines address illnesses for which the prevalence has increased markedly across OECD countries in recent decades.

Consumption of anti-hypertensive drugs in OECD countries increased by 70% on average between 2000 and 2017, nearly quadrupling in Luxembourg and Estonia (Figure 10.6). It remains highest in Germany and Hungary, which report almost five times the levels of consumption seen in Korea and Turkey. These variations probably reflect both differences in the prevalence of hypertension and variations in clinical practice.

Even greater growth was seen in the use of cholesterol-lowering agents, with consumption in OECD countries increasing by a factor of three between 2000 and 2017 (Figure 10.7). The United Kingdom, Denmark and Belgium report the highest levels of consumption per capita in 2017, with a seven-fold variation in consumption levels across the OECD.

The use of anti-diabetic drugs also grew dramatically, almost doubling in OECD over the same period (Figure 10.8). This growth can be explained in part by the rising prevalence of diabetes, which is largely linked to the increasing prevalence of obesity (see indicator on “Overweight and obesity” in Chapter 4), a major risk factor for the development of type 2 diabetes. In 2017, consumption of anti-diabetic drugs was highest in Finland and lowest in Latvia, with a two-fold variation.

Consumption of anti-depressant drugs doubled in OECD countries between 2000 and 2017 (Figure 10.9). This may reflect improved recognition of depression, availability of therapies, evolving clinical guidelines and changes in patient and provider attitudes (Mars et al., 2017[1]). However, there was significant variation between countries, with Iceland reporting the highest level of consumption in 2018, at a rate ten times that of Latvia.

Definition and comparability

The 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 in a given therapeutic class by international expert consensus. For example, the DDD for oral aspirin is 3 grammes, 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. They can be aggregated within and across therapeutic classes of the Anatomic-Therapeutic Classification (ATC). For more detail, see <http://www.whocc.no/atcddd>.

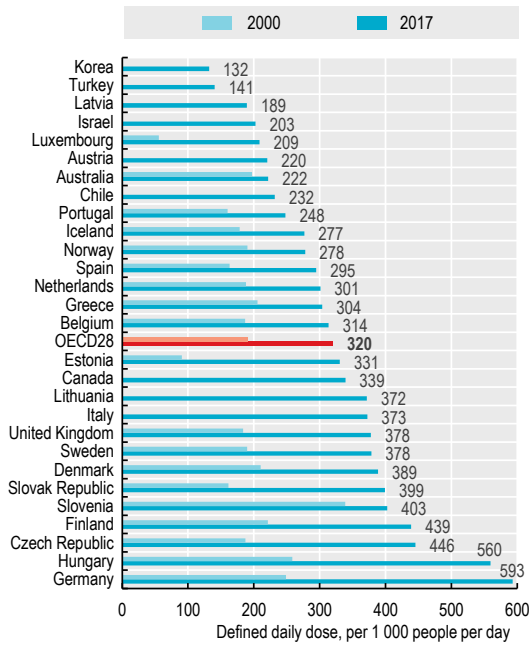
The volume of anti-hypertensive drugs consumption presented in Figure 10.6 refers to the sum of five ATC2 categories, which may all be prescribed for hypertension (C02-anti-hypertensives, C03-diuretics, C07-beta blocking agents, C08-calcium channel blockers, C09-agents acting on the renin-angiotensin system). ATC codes for other classes are: C10 for cholesterol lowering drugs; A10 for antidiabetic drugs; and N06A for anti-depressants.

Data generally refer to outpatient consumption only, except for Chile, the Czech Republic, Estonia, Finland, Iceland, Italy, Korea, Norway, the Slovak Republic 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 Luxembourg and 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.

References

- [1] Mars, B. et al. (2017), “Influences on antidepressant prescribing trends in the UK: 1995–2011”, *Social Psychiatry and Psychiatric Epidemiology*, Vol. 52/2, pp. 193-200, <http://dx.doi.org/10.1007/s00127-016-1306-4>.

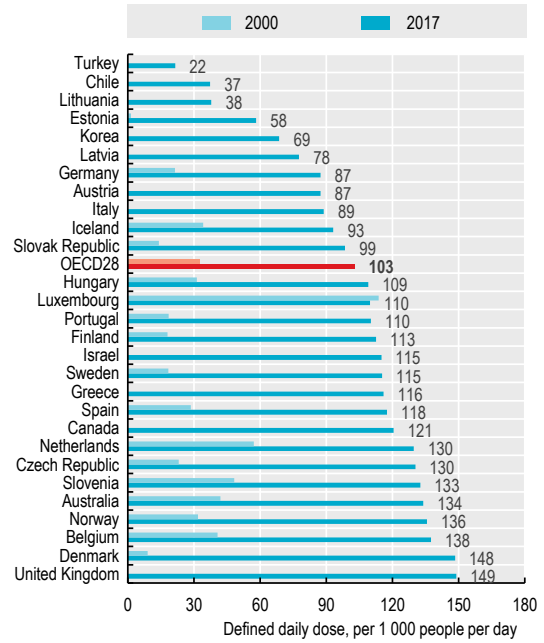
Figure 10.6. Anti-hypertensive drug consumption, 2000 and 2017 (or nearest year)



Note: Data refer to the sum of classes: C02-antihypertensives, C03-diuretics, C07-beta blocking agents, C08-calcium channel blockers, C09-agents acting on the renin-angiotensin system.
Source: OECD Health Statistics 2019.

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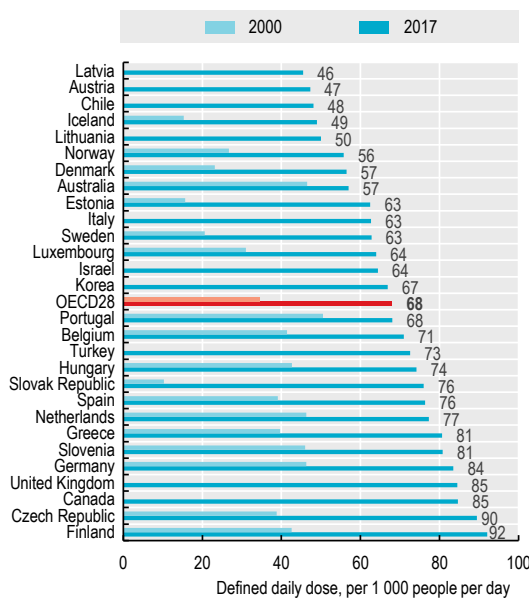
Figure 10.7. Cholesterol-lowering drug consumption, 2000 and 2017 (or nearest year)



Note: Data refer to class C10-lipid modifying agents. Source: OECD Health Statistics 2019.

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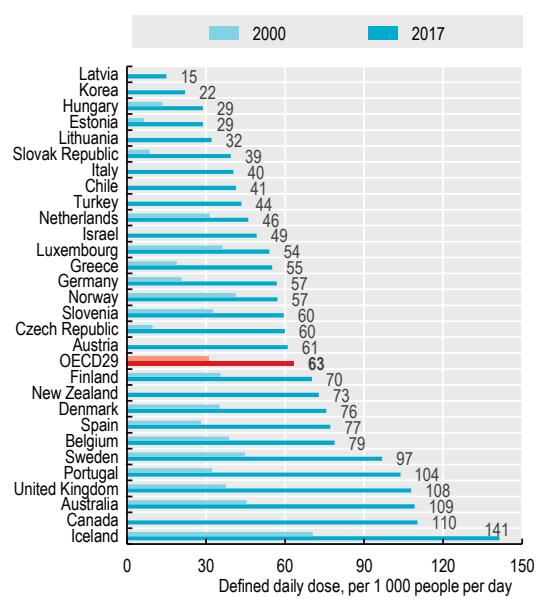
Figure 10.8. Anti-diabetic drug consumption, 2000 and 2017 (or nearest year)



Note: Data refer to class A10-drugs used in diabetes.
Source: OECD Health Statistics 2019.

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Figure 10.9. Anti-depressant drug consumption, 2000 and 2017 (or nearest year)



Note: Data refer to class N06A-antidepressants.
Source: OECD Health Statistics 2019.

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