

4. HEALTH CARE ACTIVITIES

4.10. Pharmaceutical consumption

Growth in pharmaceutical spending slowed down in many OECD countries in recent years (see Indicator 7.4 “Pharmaceutical expenditure”). However, for many categories of pharmaceutical drugs, the quantities consumed continue to increase, partly driven by growing demand for drugs to treat ageing-related and chronic diseases.

This section discusses the volume of consumption of four categories of pharmaceuticals: antihypertensives, cholesterol-lowering drugs, antidiabetics and antidepressants. Indicator 5.2 in Chapter 5 presents data on the consumption of antibiotics. Consumption of these drugs is measured through the defined daily dose (DDD) unit (see the box on “Definition and comparability” below).

Hypertension is an important public health problem. It has been estimated that one in three adults worldwide is affected by hypertension, and 13% of mortality is associated with high blood pressure (WHO, 2012). Hypertension is an important risk factor for cardiovascular and other diseases. The consumption of antihypertensive medications has nearly doubled on average in OECD countries over the past decade, and it has more than tripled in Estonia and Luxembourg (Figure 4.10.1). Consumption is the highest in Germany, Hungary and the Czech Republic, and the lowest in Korea.

The use of cholesterol-lowering drugs has more than tripled across OECD countries from fewer than 30 DDDs per 1 000 people per day in 2000 to over 90 DDDs in 2011 (Figure 4.10.2). Both the epidemiological context – for instance, growing obesity – and increased screening and treatment explain the very rapid growth in the consumption of cholesterol-lowering medications. Australia, the United Kingdom and the Slovak Republic had the highest consumption per capita in 2011, with levels that were over 40% higher than the OECD average. While these cross-country differences may partly reflect differences in the prevalence of cholesterol levels in the population, differences in clinical guidelines for the control of bad cholesterol also play a role.

The use of antidiabetic medications has almost doubled on average across OECD countries between 2000 and 2011 (Figure 4.10.3). This growth can be explained by a rising prevalence of diabetes, largely linked to increases in the prevalence of obesity (Indicator 2.7), a major risk factor for the development of Type-2 diabetes. In 2011, the consumption of antidiabetics was highest in Finland, Germany and the United Kingdom, and lowest in Chile and Iceland.

The consumption of antidepressants has also increased significantly in most OECD countries since 2000 (Figure 4.10.4). Guidelines for the pharmaceutical treatment of depression vary across countries, and there is also great variation in prescribing behaviors among general practitioners and psychiatrists in each country. Iceland reported the highest level of consumption of antidepressants in 2011, followed by Australia, Canada, Denmark and Sweden. In 2008, almost 30% of women aged 65 and over had an antidepressant prescription in Iceland, compared with less than 15% in Norway (NOMESCO, 2010).

Greater intensity and duration of treatments are some of the factors explaining the general increase in antidepressant consumption across countries. In England, for example, the increase in antidepressant consumption has been associated with a longer duration of drug treatment (Moore et al., 2009). In addition, rising consumption levels can also be explained by the extension of the set of indications of some antidepressants to milder forms of depression, generalised anxiety disorders or social phobia (Hollingworth et al., 2010; Mercier et al., 2011). These extensions have raised concerns about appropriateness. Changes in the social acceptability and willingness to seek treatment during episodes of depression may also contribute to increased consumption.

Some of the increases in the use of antidepressants may also be linked to the insecurity created by the economic crisis (Gili et al., 2012). In Spain, the consumption of antidepressants per capita has increased by 23% between 2007 and 2011, although this increase was slightly lower than in the preceding four-year period (28% between 2003 and 2007). In Portugal, antidepressant consumption went up by 20% between 2007 and 2011. The consumption of antidepressants rose even more quickly in countries such as Germany (a rise of 46% between 2007 and 2011) which were less affected by the economic crisis and have experienced a more rapid economic recovery.

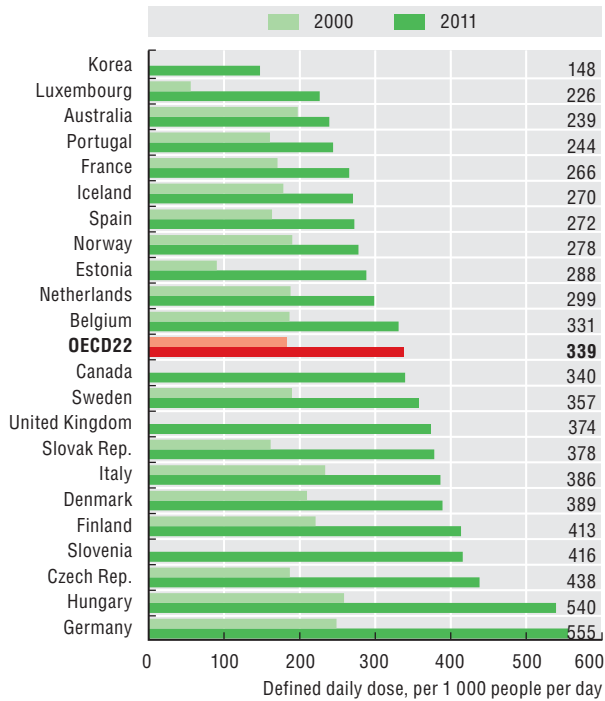
Definition and comparability

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 4.10.1 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).

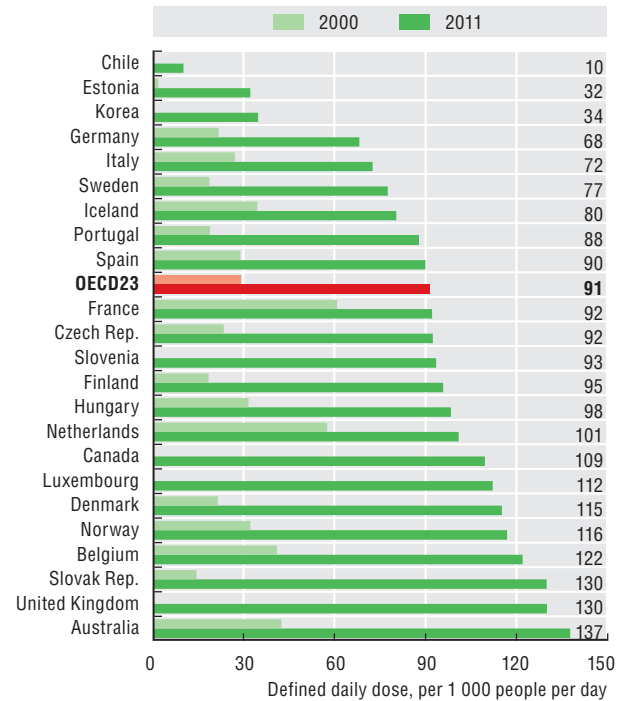
Data generally refer to outpatient consumption only, except for the Czech Republic, Estonia, Italy and Sweden where data also include hospital consumption. The data for Canada relate to two provinces only (Manitoba and Saskatchewan). The data for Spain refer to outpatient consumption for prescribed drugs covered by the National Health System (public insurance).

4.10.1. Hypertension drugs consumption, 2000 and 2011 (or nearest year)



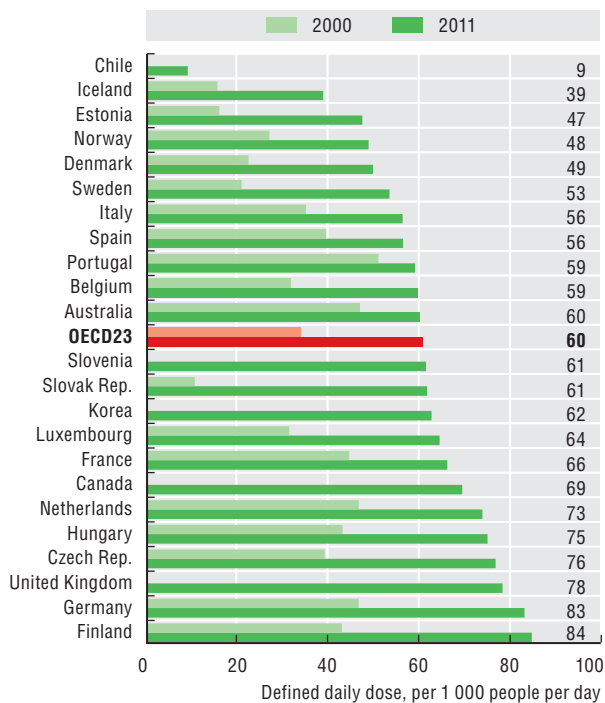
Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.
StatLink <http://dx.doi.org/10.1787/888932917693>

4.10.2. Anticholesterols consumption, 2000 and 2011 (or nearest year)



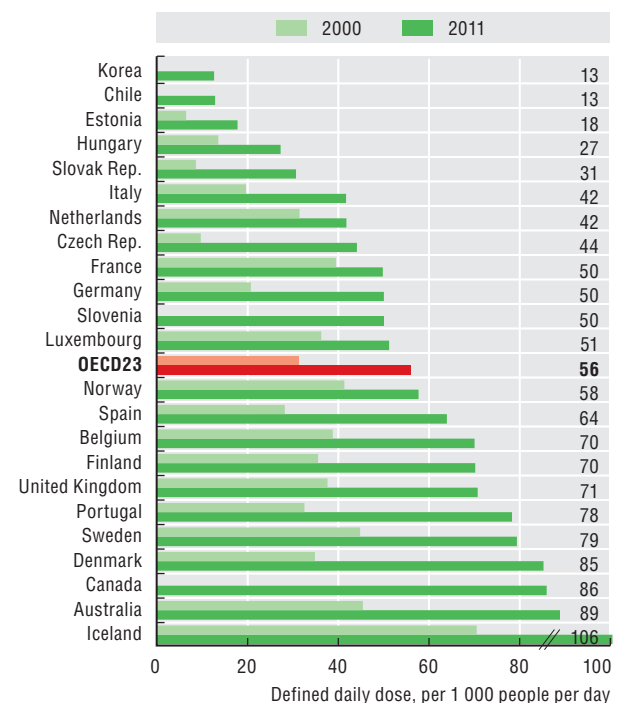
Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.
StatLink <http://dx.doi.org/10.1787/888932917712>

4.10.3. Antidiabetics consumption, 2000 and 2011 (or nearest year)



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.
StatLink <http://dx.doi.org/10.1787/888932917731>

4.10.4. Antidepressants consumption, 2000 and 2011 (or nearest year)



Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.
StatLink <http://dx.doi.org/10.1787/888932917750>



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