



1.1 Users of antipsychotics (A) and antidepressants (B) in older persons in homes for older people (OLD-11) versus outside homes for older people (OLD-12)

1.1.1 Documentation sheet

Description	<p>OLD-11-12 A: Percentage of older persons (aged 65 years and over) using antipsychotics in homes for older people (OLD-11) versus outside homes for older people (OLD-12)</p> <p>OLD-11-12 B: Percentage of older persons (aged 65 years and over) using antidepressants in homes for older people (OLD-11) versus outside homes for older people (OLD-12)</p>
Calculation	<p><u>Numerator:</u></p> <p>OLD-11-12 A: Number of older persons (aged 65 years and over) using antipsychotics, defined as having minimum 1 DDD reimbursed antipsychotics (ATC N05A antipsychotics without magistral preparations, on the basis of deliveries in public pharmacies);</p> <p>OLD-11-12 B: Number of older persons (aged 65 years and over) using antidepressants, defined as having minimum 1 DDD reimbursed antidepressants (ATC N06A antidepressants without magistral preparations, on the basis of deliveries in public pharmacies);</p> <p><u>Denominator:</u> Number of older persons (aged 65 years and over).</p>
Rationale	<p>Older people with dementia may present behavioral and psychological symptoms which make it difficult to care for them. Antipsychotics are often prescribed in this population to reduce the symptoms. However, given the associated risks, antipsychotics should be avoided as much as possible in this population. In patients with dementia, a higher risk of CVA and sudden death has been documented in the use of different classes of antipsychotics. Non-pharmacologic interventions are the recommended first step for problem behaviour in dementia. Antipsychotic drugs should only be used if the behavior of the patient poses a danger to him/herself or to persons in the environment. If the drugs are used, the duration of treatment should be as short as possible, the dosis as low as possible and the continuation of the treatment should be regularly reviewed.¹</p>
Data source	IMA-AIM atlas
Technical definitions	<p>Antipsychotics = ATC-code N05A without magistral preparations, delivered in public pharmacies (Farmanet/Pharmanet). IMA-AIM Atlas criteria: ≥1 DDD</p> <p>Antidepressants = ATC-code N06A without magistral preparations, delivered in public pharmacies (Farmanet/Pharmanet). IMA-AIM Atlas criteria: ≥1 DDD</p> <p>DDD = DPP*number of reimbursed packages (defined daily dose)</p> <p>DPP = number of day doses per package (dose per package)</p>
International comparability	OECD Health Statistics 2017
Limitations	The presented data are based on Farmanet/Pharmanet (public pharmacies) and do not comprise drugs delivered in hospital pharmacies. Also, since April 2015, drugs delivered to patients in homes for older people have to be tarified per



	unit. Since then, an increasing part of drug consumption is not recorded in Farmanet/Pharmanet, but in the GZSS (Gezondheidszorg – Soins de Santé) database. The presented data may therefore underestimate the total consumption.
Dimension	Care for older persons; Appropriateness of Care; Safety of Care
Related indicators	
Reviewers	EI Maati Allaoui (IMA-AIM)

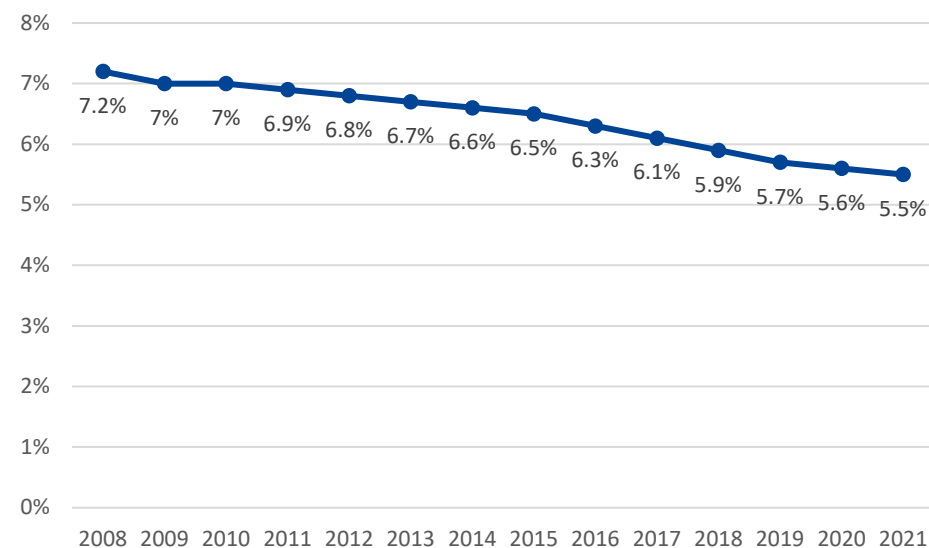
1.1.2 Results

Use of antipsychotics in persons aged 65 years and over

Belgium

In 2021, 5.5% of the population aged 65 years and over used antipsychotic drugs (≥ 1 DDD). Figure 1 illustrates that there has been a continuous downward evolution in this indicator since 2008 (when it reached 7.2%).

Figure 1 – Percentage of the Belgian population aged ≥ 65 years using antipsychotics (≥ 1 DDD): evolution 2008-2021



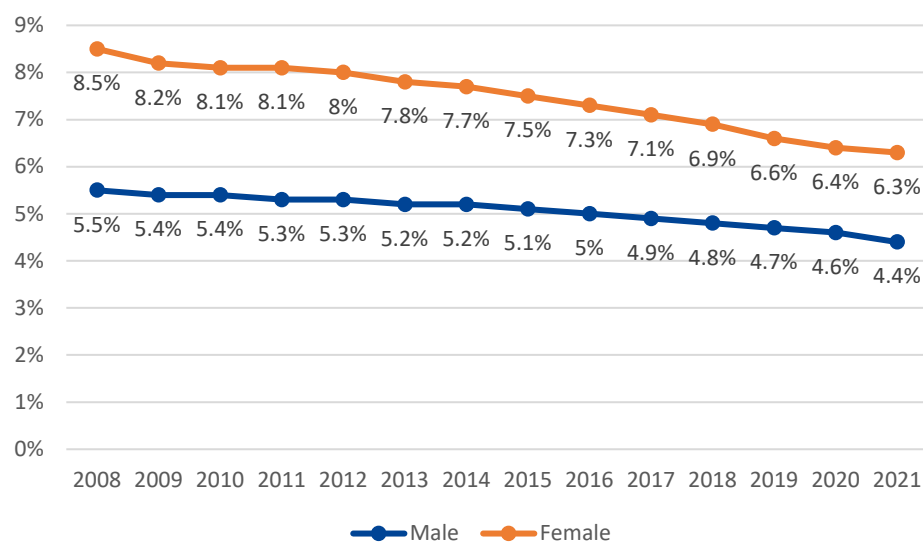
Source: IMA-AIM Atlas



Analysis by demographic characteristics

Women are more likely to be prescribed antipsychotics than men: 7% of woman aged 65 years and over versus 5% of men (see Figure 2).

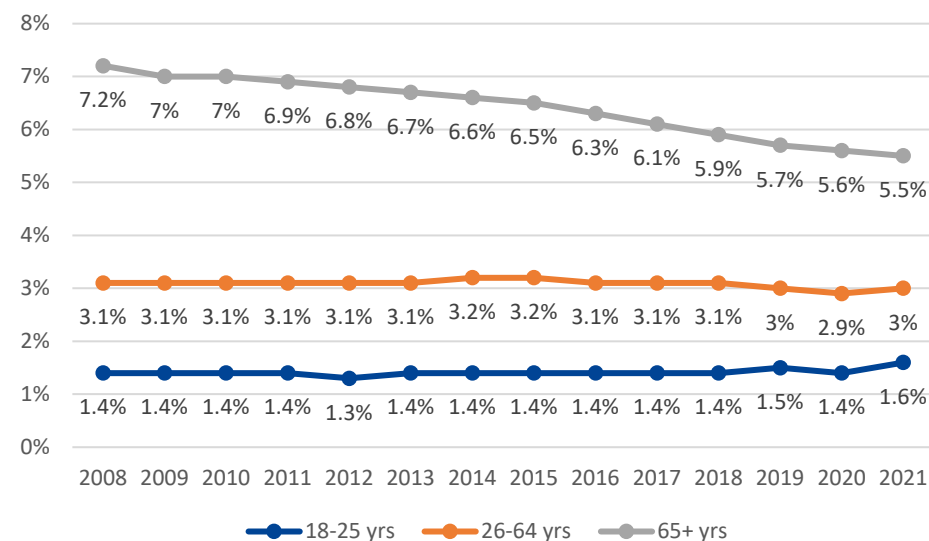
Figure 2 – Percentage of the Belgian population aged ≥ 65 years using antipsychotics (≥ 1 DDD), by gender (2008-2021)



Source: IMA-AIM Atlas

Prescriptions increase with age. In the age group 26-64 years, 3.0% of the population used antipsychotics (≥ 1 DDD) in 2021. In the age group 18-25, 1.6% of the population used antipsychotics in 2021. (see Figure 3).

Figure 3 – Percentage of the Belgian population using antipsychotics (≥ 1 DDD), by age category (2008-2021)



Source: IMA-AIM Atlas

Finally, the problem appears most prominent in homes for older people, where 27.3% of residents aged 65 years and over use antipsychotics, compared to 11.8% of persons living at home and receiving home care and 3.5% of persons not receiving formal long-term care (Figure 4).

An analysis performed in 2023 by Institut Solidaritis (the research and survey institute of the sickness fund Solidaritis)² investigated whether, to some extent, the difference in this consumption of antipsychotics according to residence of the patient, could be explained by a different profile of the patients in those settings. To correct for this possible bias, Institut Solidaritis performed a longitudinal analysis, in which it examined and compared the



situation of a patient cohort at 6 months before their move to a home for older people and at 6 months after their move to the home for older people.

From the analysis of Institut Solidararis, it appears that the use (delivery) of antipsychotics, measured by the number of DDDs, indeed only modestly increases after entering the home for older people (by +8%). When measured by the number of people who get a delivery of minimum 30 DDD in the study period, there is a small increase from a proportion of 10% of the people before the move to the home to 11% after the move to the home (an increase of +14%).

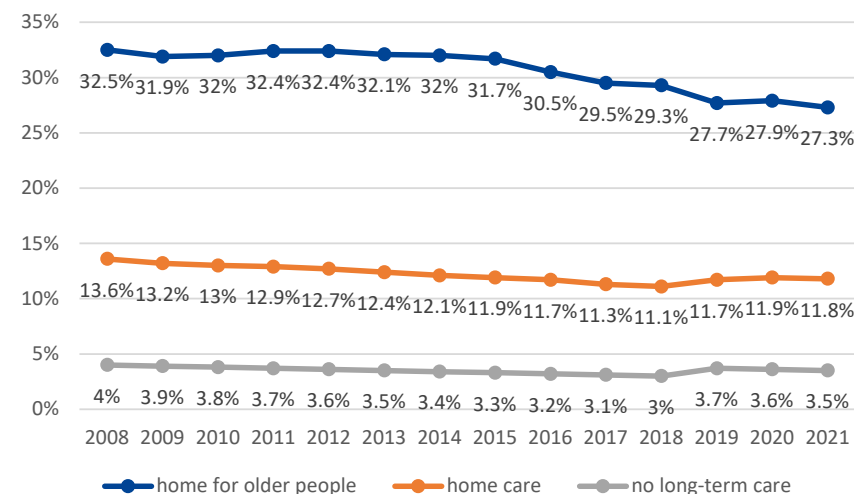
- Based on a previous study carried out by Institut Solidararis in 2013, this increase (of 14%) appears much less pronounced than in the year 2010, in which there was an increase of 34% in number of persons getting a delivery of minimum 30 DDD of antipsychotics, from before to after entering the home.
- Of the 10% of people who took antipsychotics before moving to the home, 43% of them stopped using antipsychotics, and 57% of them continued taking antipsychotics after the move. On top of those continuing antipsychotics treatment (which constitute about half of the people taking antipsychotics after the move), many (the other half) will start using antipsychotics only after the move to the home.

This study of Institut Solidararis shows that the proportion of users of antipsychotics in the population that is moving to the home for older people (shortly before or after the move; 10-11%) comes close to the proportion of users of antipsychotics in the population which receives home care (at home) in the IMA-AIM data (11.8% in Figure 4). The study of Institut Solidararis furthermore shows that there is no drastic increase in the proportion of people taking antipsychotics from close before to close (up to 6 months) after the move to the home for older people.

However, the high proportion of antipsychotics users, of 27.3% in 2021 in homes for older people in the national IMA-AIM data, remains unexplained as it is considerably higher than the proportion of 11% observed in the cohort of Institut Solidararis (6 months after the move to the home). It is not clear how this difference could be explained. There are some differences between the

data sources however. A first difference is that the study from Institut Solidararis only counts those patients with minimum 30 DDD over a 6-month period, whilst IMA-AIM data counts those patients with minimum 1 DDD over a year. This could be one factor explaining the higher percentage in the IMA-AIM data than in the study from Institut Solidararis. Also, the study from Institut Solidararis included patients aged 70+ (compared to 65+ in IMA-AIM data here presented). Another possible explanatory factor can be that the population of the cohort of Institut Solidararis was not representative for the total population in homes for older people. Indeed, the profiles of patients differ between sickness funds. Furthermore Brussels is excluded in the study from Institut Solidararis. Another point could be that the proportion of antipsychotics users further increases the longer the people stay in the home (the study of Institut Solidararis only measured the 6 first months in home for older people). Further analysis is needed to provide deeper insight into this issue.

Figure 4 – Percentage of the Belgian population aged ≥65 years using antipsychotics (≥1 DDD), by use of long-term care (2008-2021)



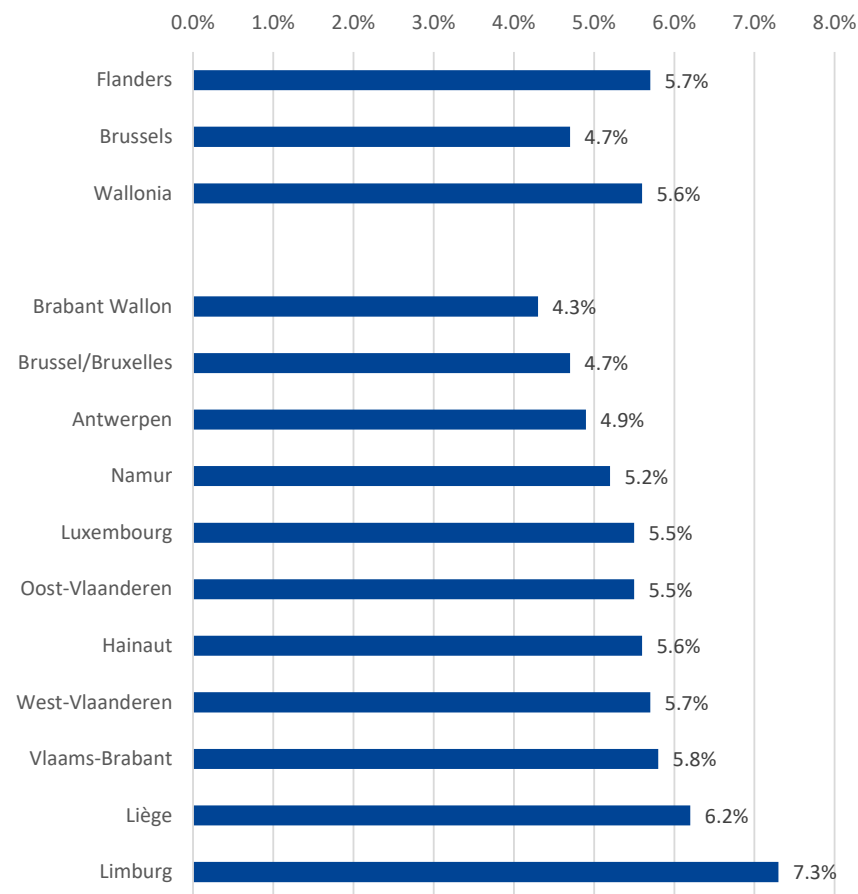
Source: IMA-AIM Atlas



Regional comparison

There is also some regional variation: use of antipsychotics in the population aged 65 years and over is lowest in the province of Brabant Wallon (4.3% of population aged 65 years and over) and highest in the province of Limburg (7.3%) (see Figure 5). Use of antipsychotics in the population aged 65 years and over is lower in Brussels compared to Flanders and Wallonia.

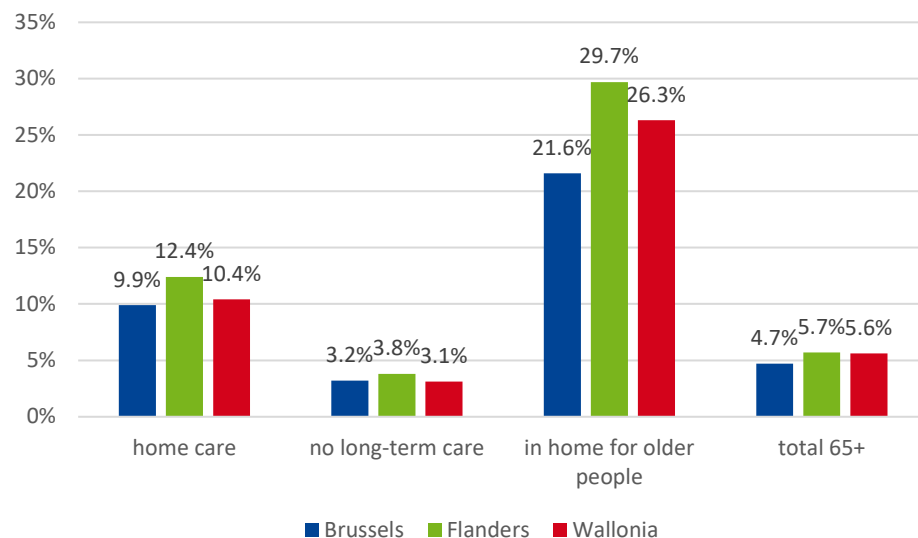
Figure 5 – Percentage of the Belgian population aged ≥65 years using antipsychotics (≥1 DDD), by region and province (2021)



Source: IMA-AIM Atlas



Figure 6 – Percentage of the Belgian population aged ≥65 years using antipsychotics (≥1 DDD), by region and by type of long-term care (2021)

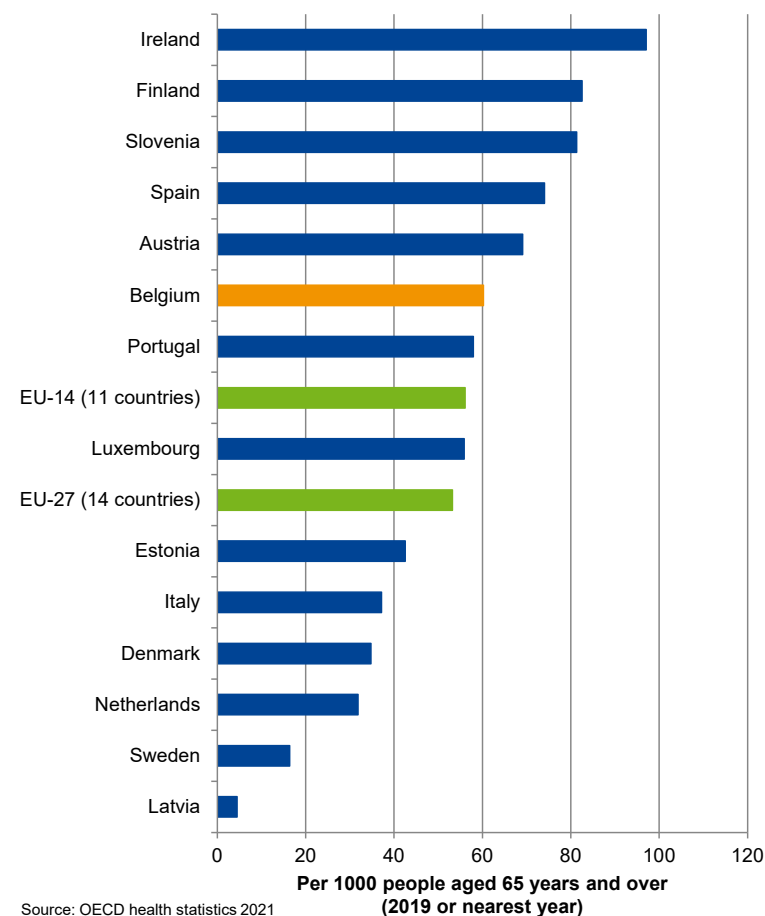


Source: IMA-AIM Atlas

International comparison

Data collected by the OECD on the year 2019 (or nearest year) show that the prescription of antipsychotics to older people varies by more than a factor of two across EU countries (Figure 7). In 2019, Latvia, Sweden and the Netherlands prescribed antipsychotics to fewer than 32 in every thousand people aged 65 years and over. At the other extreme are Ireland, Finland and Slovenia with more than 80 in every thousand people aged 65 years and over being prescribed antipsychotics. Belgium, with 60 people ranks slightly above EU-14 average (of 56) and EU-27 average (of 53). Prescriptions in the female population aged 65 years and over is consistently higher than in the male population (Figure 8).

Figure 7 – People with at least one prescription of antipsychotics in the year, per 1 000 people aged ≥65 years, 2019 (or nearest year) (>0 DDD): OECD data

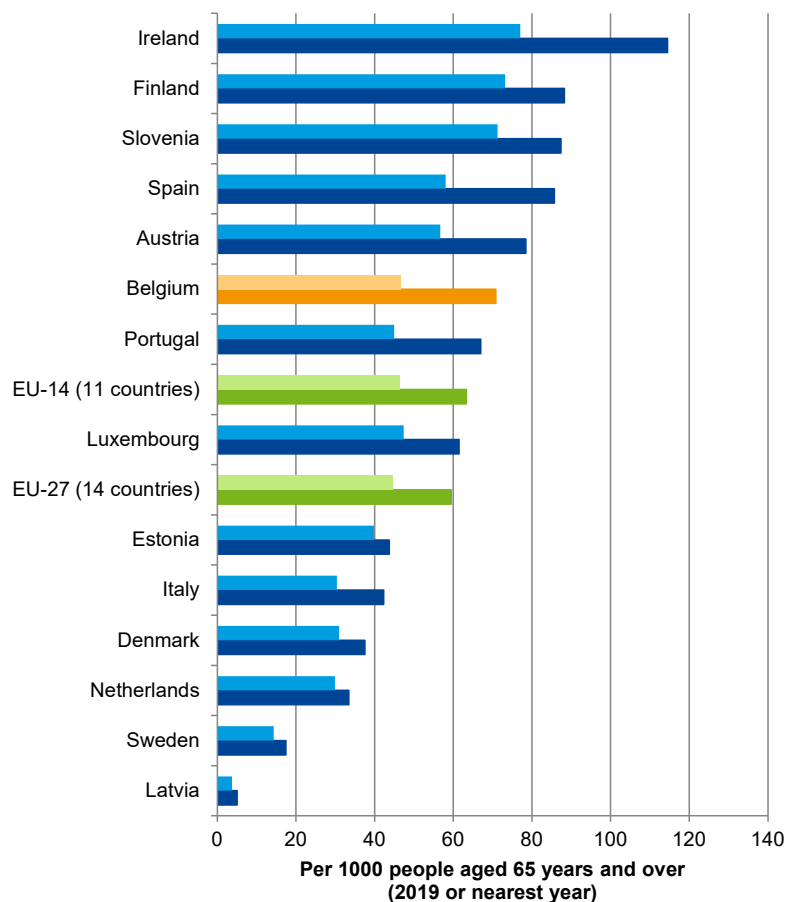


Source: OECD health statistics 2021

Source: OECD Health Statistics 2021 ³



Figure 8 – People with at least one prescription of antipsychotics in the year, per 1 000 people aged ≥65 years, 2019 (or nearest year) (>0 DDD): OECD data – by gender



Source: OECD health statistics 2021 ■ men ■ women

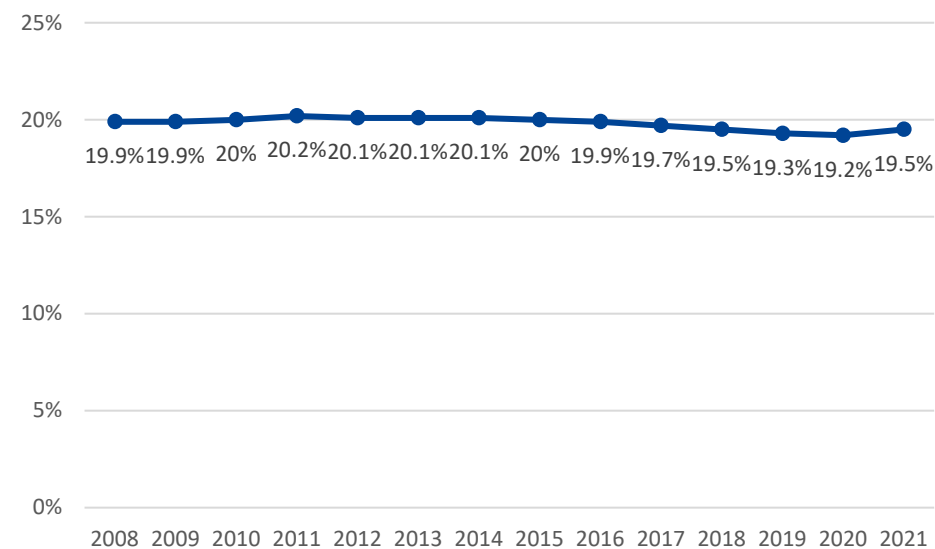
Source: OECD Health Statistics 2021 ³

Use of antidepressants in the population aged 65 years and over

Belgium

In 2021 19.5% of the Belgian population aged 65 years and over used antidepressants. This percentage stayed more or less stable since 2008 (see Figure 9).

Figure 9 – Percentage of the Belgian population aged ≥65 years using antidepressants (≥1 DDD): evolution 2008-2021



Source: IMA-AIM Atlas

Analysis by demographic characteristics

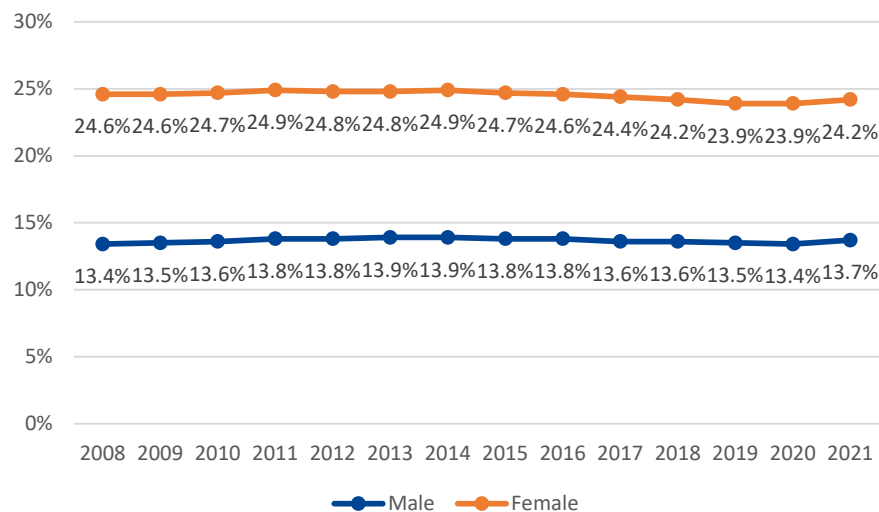
More women use antidepressants than men. In 2021 24.2% of women aged 65 years and over used antidepressants, compared to 13.7% of men aged 65 years and over (see Figure 10). The percentage taking antidepressants



is considerably higher in the older age group (65 years and over) compared to the younger age groups (see Figure 11).

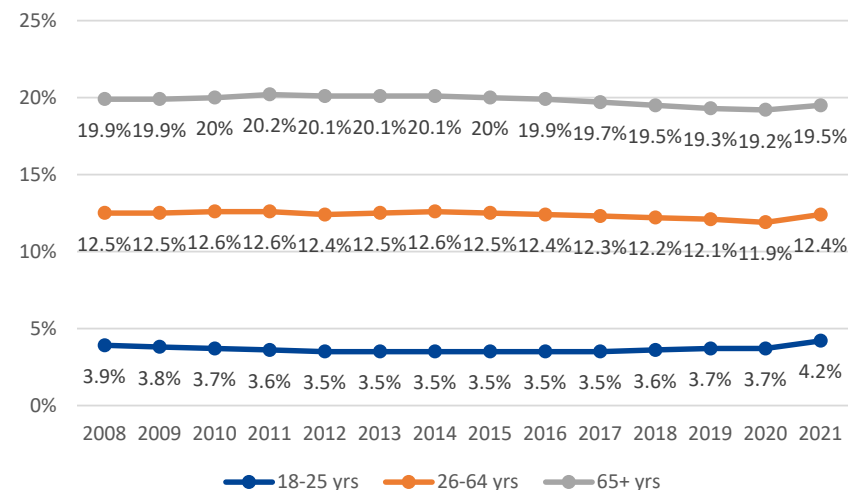
Use of antidepressants in the older age group is highest in homes for older people (48.3% of residents in 2021) (see Figure 12). Use of antidepressants is lower in the group of persons receiving home care (33.5%) and receiving no formal long-term care (16.1%).

Figure 10 – Percentage of the Belgian population aged ≥65 years using antidepressants (≥1 DDD), by gender (2008-2021)



Source: IMA-AIM Atlas

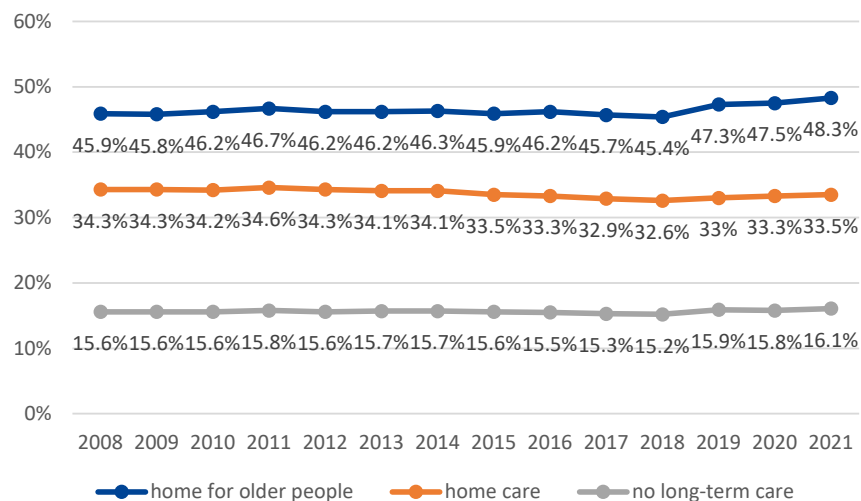
Figure 11 – Percentage of the Belgian population using antidepressants (≥1 DDD), by age category (2008-2021)



Source: IMA-AIM Atlas



Figure 12 – Percentage of the Belgian population aged ≥65 years using antidepressants (≥1 DDD), by use of long-term care (2008-2021)

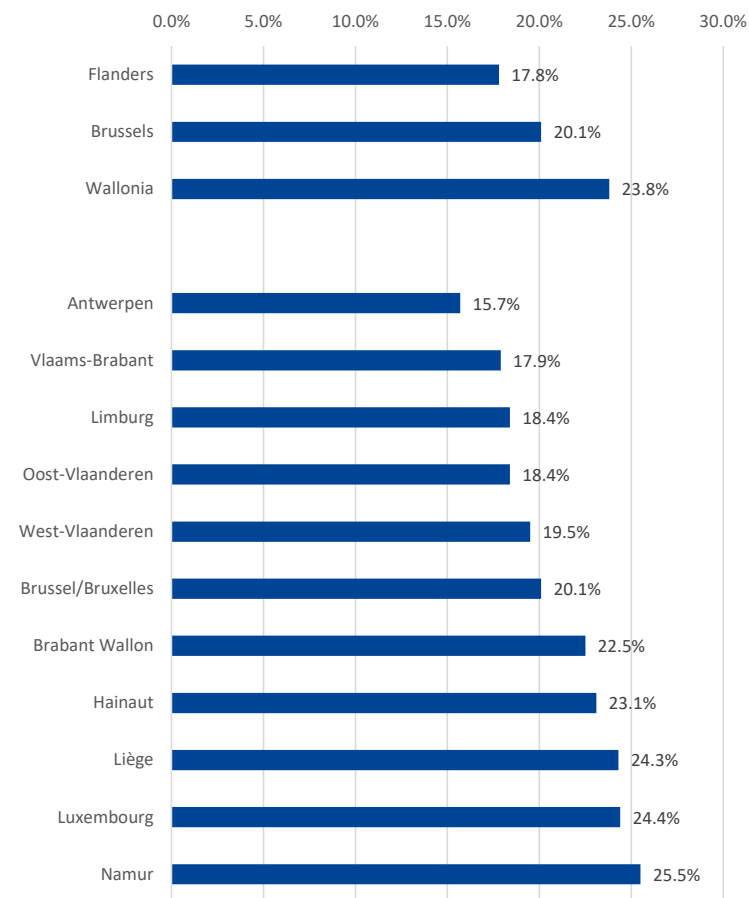


Source: IMA-AIM Atlas

Regional comparison

The use of antidepressants in the population aged 65 years and over is highest in Wallonia (23.8%) and lowest in Flanders (17.8%) (see Figure 13). Antidepressants use in the population aged 65 years and over is highest in the province of Namur (25.5%) and lowest in the province of Antwerpen (15.7%).

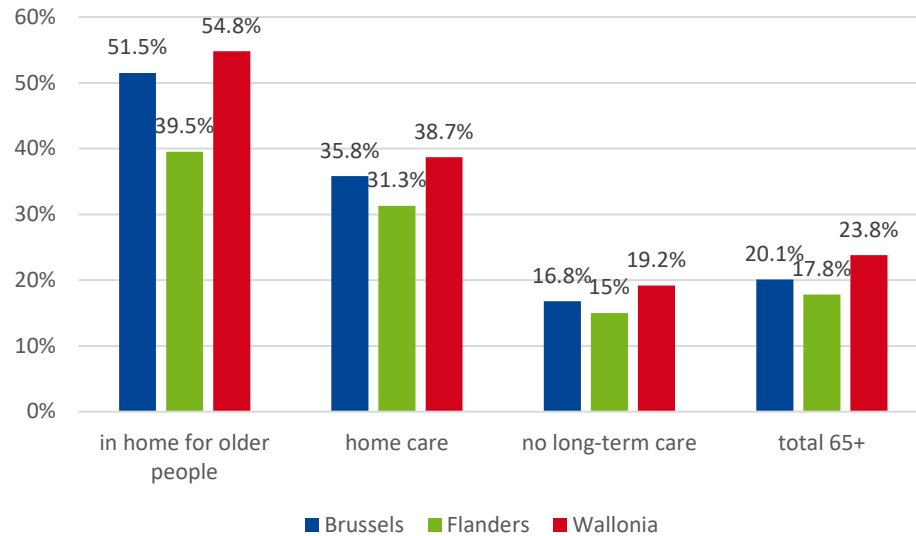
Figure 13 – Percentage of the Belgian population aged ≥65 years using antidepressants (≥1 DDD), by region and province (2021)



Source: IMA-AIM Atlas



Figure 14 – Percentage of the Belgian population aged ≥ 65 years using antidepressants (≥ 1 DDD), by region and by type of long-term care (2021)



Source: IMA-AIM Atlas

International comparison

No international data on use of antidepressants in older people are available.

Key points

Antipsychotics in population aged 65 years and over

- Antipsychotics are often prescribed in people with dementia presenting behavioral and psychological symptoms in order to reduce these symptoms. However, given the associated risks, antipsychotics should be avoided as much as possible in this population. Non-pharmacologic interventions are the recommended first step for problem behaviour in dementia.
- In 2021, 5.5% of the population aged 65 years and over used antipsychotic drugs (≥ 1 DDD). There has been a continuous downward evolution in this indicator since 2008 (where it reached 7.2%).
- More women aged 65 years and over use antipsychotics than men.
- The problem is particularly severe in homes for older people, where 27.3% of residents (aged 65 years and over) use antipsychotics, compared to 11.8% of persons living at home and receiving home care and 3.5% of persons not receiving formal long-term care.
- There is also some regional variation: antipsychotics use is lowest in the province of Brabant Wallon (4.3% of population aged 65 years and over) and highest in the province of Limburg (7.3%).
- OECD data show that Belgium scores close to the EU-14 and EU-27 average for prescription of antipsychotics in older persons. Prescriptions and use in Sweden and Latvia are less than half compared to Belgium.

Antidepressants in population aged 65 years and over

- In 2021 19.5% of the Belgian population aged 65 years and over used antidepressants (≥ 1 DDD). This percentage stayed more or less stable since 2008.



- More women use antidepressants than men. In 2021 24.2% of women aged 65 years and over used antidepressants, compared to 13.7% of men aged 65 years and over.
- Use of antidepressants in the older age group is highest in homes for older people (48.3% of residents takes antidepressants in 2021). Use of antidepressants is lower in the group of persons receiving home care (33.5%) and those not receiving formal long-term care (16.1%).
 - Antidepressants use in the population aged 65 years and over is highest in the province of Namur (25.5%) and lowest in the province of Antwerpen (15.7%).

References

1. BCFI-CBIP. Formularium Ouderenzorg, Dementie [Web page].2017. Available from: <https://bcfi.farmaka.be/nl/formularium/392#main>
2. Willaert D, Maron L, J V. Consommation de médicaments en maison de repos: une analyse longitudinale. Une actualisation de l'étude de 2013. Institut Solidaris; 2023. Available from: https://www.institut-solidaris.be/wp-content/uploads/2023/06/Etude-Solidaris_Consommation-de-medicaments-en-maison-de-repos.pdf
3. OECD. OECD Health Statistics. 2021. Antipsychotic prescribing, by sex (2019 or nearest year) [Web page].2021. Available from: <https://stat.link/xhdurp>