Antidepressant use among Australians between 2015 to 2023: An updated analysis including the post-pandemic era

Antidepressant use among Australians between 2015 to 2023: An updated analysis including the post-pandemic era.

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Ethics statement: This research was approved by the New South Wales Population and Health Services Research Ethics Committee (Approval number: 2019/ETH01776) and data access for the PBS 10% sample was granted by the Australian Government Services Australia External Request Evaluation Committee (Approval number: MI7542).

ABSTRACT

Background and aims: Our previous research using national dispensing data from 2015–2021 highlighted increasing antidepressant use in Australia, notably among younger people and especially female adolescents in the first year of the COVID-19 pandemic.[1] Here we present contemporary data on antidepressant use in Australia, including the post-pandemic era, to investigate if the previously observed increases are sustained.

Design and methods: We used national dispensing claims for people aged ≥10 years to examine annual trends in prevalent and new antidepressant use (no antidepressants dispensed in the year prior). We conducted stratified analyses by sex and age group. We report outcomes from 2015 to 2023 by calendar year, considering the pre-pandemic period as 2015 to 2019, the COVID-19 pandemic period as 2020 to 2022, and the post-pandemic period as 2023.

Results: In 2023 annual antidepressant prevalence was 187.0 per 1,000 women and 106.4 per 1,000 men, an increase of 17.0% and 14.0% from 2015 and 9.0% and 4.0% from 2019, respectively. Prevalent use among females continued to increase over the observation period across all age groups, except for a decline in the post-pandemic period among those aged 18-24 years. Prevalent antidepressant use in males continued to increase over the observation period among the ages 10-17, 50-64 and 65+, while use stabilised or decreased slightly among other ages (Table 1 and Figure 1).

We observed a peak in new antidepressants use for females and males mid-pandemic in 2021, highest among females (78.9 per 1,000 women) and males (40.9 per 1,000 men) aged 18-24 years. This peak was consistent across all age groups except among people aged 65+ years.

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The rates of new antidepressant use in 2023 among both females and males aged 10-17 years (45.9 per 1,000 girls and 21.6 per 1,000 boys) and females aged 18-24 years (69.7 per 1,000 women) were higher than in 2019. For the other age groups, rates of new antidepressant use in 2023 were slightly lower than in 2019 (Table 2 and Figure 1).

Conclusions: Antidepressant use in Australia continues to increase overall. Rates of new antidepressant use are increasing among people up to 24 years of age, particularly females. New antidepressant use peaked among people aged 10-24 years and females mid-pandemic and remained higher in the post-pandemic than in the pre-pandemic period.

Impact: Women and adolescents are at high risk of treated depression and anxiety, with the historical trend of increasing prevalence continuing in these groups. Individual-level dispensing claims reveal trends in antidepressant use by age and sex, informing mental health services planning and adherence to clinical guidelines as well as shedding light on impact of the COVID-19 pandemic on mental health.

Keywords: Antidepressant use, trends, incidence, prevalence, COVID-19

References:

1 - de Oliveira Costa J, Gillies MB, Schaffer AL, Peiris D, Zoega H, Pearson SA. Changes in antidepressant use in Australia: A nationwide analysis (2015-2021). *Aust N Z J Psychiatry*. 2023 Jan;57(1):49-57. doi: 10.1177/00048674221079740. Epub 2022 Feb 17.

Suggested citation

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Table 1 - Annual prevalent antidepressant use by demographic characteristics and medicine class in Australia, 2015 – 2023 *

	Prevalent use in females (per 1,000 population)									Prevalent use in males (per 1,000 population)								
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2015	2016	2017	2018	2019	2020	2021	2022	2023
Overall	159.3	162.5	164.2	167.8	171.1	177.5	186.0	187.3	187.0	93.3	95.4	96.7	99.5	102.1	104.8	108.2	108.0	106.4
Age range (years)																		
10-17	39.3	41.4	43.7	47.5	50.1	58.9	68.5	71.8	73.3	24.7	26.1	28.1	30.8	33.2	35.8	38.1	39.5	40.2
18-24	107.6	113.0	115.4	119.0	127.5	144.5	163.5	161.9	154.4	57.2	60.3	62.1	63.2	67.2	72.4	76.7	73.0	65.7
25-34	116.2	119.8	120.6	123.9	128.3	135.3	147.3	149.2	147.9	71.7	73.4	74.2	76.7	79.3	83.0	87.3	85.6	82.2
35-44	163.4	164.7	161.8	162.8	163.1	167.2	171.9	171.6	170.5	101.2	103.4	102.9	104.1	105.3	106.0	107.2	105.5	103.4
45-54	193.5	196.3	199.6	203.6	205.9	212.6	218.7	216.8	218.6	114.0	116.3	117.2	120.4	122.9	125.6	127.8	128.1	128.2
55-64	207.4	209.5	209.9	213.2	214.5	216.8	222.9	224.4	226.4	121.8	123.7	125.0	127.8	130.4	131.5	135.1	135.3	136.0
65-74	221.5	223.6	226.6	230.2	232.6	230.9	234.2	238.2	238.2	126.3	127.6	129.9	134.7	137.9	138.1	140.3	144.7	145.3
75-84	250.7	253.8	259.2	264.0	265.1	269.5	273.3	276.8	280.4	159.3	160.8	161.2	163.8	166.1	167.0	170.0	169.5	170.1
85+	235.9	243.6	251.6	260.8	271.3	275.1	281.9	287.0	290.1	163.5	167.8	176.1	181.6	183.9	192.5	198.3	201.5	199.9
Antidepressant type																		
Mirtazapine	11.7	12.2	12.6	13.4	13.7	14.3	14.9	15.2	15.4	10.6	11.3	11.7	12.2	12.9	13.4	14.0	14.1	14.1
Other	1.3	1.2	1.2	1.1	1.0	0.9	0.9	0.8	0.8	0.9	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.5
SNRI	34.3	34.7	34.4	34.3	34.4	34.6	35.7	35.9	35.5	20.2	20.2	19.7	19.6	19.3	19.5	19.7	19.3	18.8
SSRI	83.3	85.5	87.6	89.8	92.2	96.6	102.7	104.4	105.2	46.5	48.0	49.7	51.1	53.1	54.6	56.9	57.3	56.8
Tricyclic	28.7	28.8	28.4	29.3	29.8	31.1	31.8	31.0	30.2	15.0	15.2	14.9	15.8	16.2	16.7	16.9	16.8	16.1

* Denominators for 2017-2021 are revised from our previous publication to reflect updated Australian Bureau of Statistics estimated residential population counts released 12 December 2024.

Table 2 - Annual new antidepressant use by demographic characteristics and medicine class in Australia, 2015 – 2023

	New use in females (per 1,000 population)									New use in males (per 1,000 population)								
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2015	2016	2017	2018	2019	2020	2021	2022	2023
Overall	46.7	47.3	46.7	47.8	48.4	51.4	53.0	49.3	49.2	31.8	31.8	31.9	32.7	33.5	33.7	33.9	31.8	31.0
Age range (years)																		
10-17	21.6	24.5	27.2	31.5	34.0	41.8	46.2	45.5	45.9	12.7	13.3	15.2	17.4	18.6	19.8	21.2	20.9	21.6
18-24	53.5	55.0	54.4	55.4	60.8	71.5	78.9	72.3	69.7	31.1	32.6	33.7	34.3	36.8	39.2	40.9	38.0	33.1
25-34	45.3	46.3	45.4	46.2	47.1	49.4	52.8	47.9	47.6	32.0	32.2	31.9	33.1	33.9	34.7	34.6	32.0	30.8
35-44	49.4	50.8	47.7	49.6	49.5	51.5	51.8	46.8	47.7	36.3	36.4	36.2	36.4	36.8	37.0	36.5	32.9	33.1
45-54	51.2	51.2	51.4	51.9	51.7	54.9	55.0	49.7	51.1	35.0	34.5	33.5	34.4	35.7	34.9	34.1	32.4	33.0
55-64	47.6	46.1	44.1	45.1	43.9	44.9	44.6	41.7	41.5	32.3	31.4	31.1	32.0	32.9	32.3	32.5	30.1	30.1
65-74	49.2	46.9	47.2	47.6	46.2	44.5	45.0	44.2	43.4	32.8	31.8	32.5	33.2	32.6	31.1	31.6	31.2	30.3
75-84	60.3	61.7	61.9	60.2	58.0	57.5	53.8	53.4	51.8	47.9	44.5	44.0	43.7	42.6	41.9	41.9	38.9	36.8
85+	60.9	59.5	58.6	56.8	56.0	53.6	53.6	48.8	47.9	52.5	54.8	52.5	49.8	47.5	49.1	48.4	46.5	44.1
Antidepressant type																		
Mirtazapine	2.2	2.3	2.2	2.3	2.2	2.4	2.5	2.5	2.5	2.6	2.7	2.6	2.6	2.8	2.8	3.0	2.8	2.8
Other	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SNRI	2.9	2.7	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.3	2.0	1.8	1.7	1.6	1.5	1.5	1.4	1.4
SSRI	23.0	23.5	23.7	24.2	25.0	27.1	28.9	27.1	27.3	16.1	16.1	16.8	16.8	17.7	17.7	18.1	17.0	16.6
Tricyclic	18.5	18.7	18.4	19.0	18.9	19.7	19.3	17.5	17.3	10.8	10.9	10.7	11.5	11.4	11.6	11.3	10.5	10.2

* Denominators for 2017-2021 are revised from our previous publication to reflect updated Australian Bureau of Statistics estimated residential population counts released 12 December 2024.

Figure 1: Trends in prevalent and new antidepressant use according to age and sex, 2015-2023.