

Prescribing hypnotic medicines: a focus on zopiclone

KEY PRACTICE POINTS:

- Zopiclone is the most frequently prescribed hypnotic medicine, and one of the highest prescribed medicines in New Zealand overall
- This report contains data on dispensing of zopiclone to patients seen by you, or your practice, using the latest 12 months of available data
- Nationally:
 - Dispensing of zopiclone starts to increase from around age 30 years
 - Many patients dispensed zopiclone receive large numbers of tablets, including younger patients:
 - ▣ 20% of patients receive enough tablets for approximately one every second night, or more
 - ▣ Of this group, one-quarter are aged 55 years or under
- Non-pharmacological approaches are the preferred first-line treatment for insomnia
- Hypnotic medicines, including zopiclone and benzodiazepines, can provide short-term benefit but are associated with a range of adverse effects including falls, motor vehicle accidents and a possible link with dementia

Zopiclone is New Zealand's most frequently prescribed hypnotic medicine

Hypnotic medicines are prescribed for a variety of conditions; zopiclone and shorter-acting benzodiazepines, such as temazepam, are the predominant hypnotics used for managing insomnia. Zopiclone is the most widely used hypnotic medicine in New Zealand and has consistently been one of the highest prescribed medicines in general; it was the 14th most prescribed medicine in 2017, with 570,000 dispensings.¹

The high rate of prescribing of zopiclone in New Zealand likely arises from it originally being promoted as a safer alternative to benzodiazepines. However, zopiclone affects the same neurotransmitter systems as benzodiazepines and is associated with many of the same adverse effects, such as falls and fractures and cognitive effects the day after use.² Previous investigations had highlighted a potential association between zopiclone use and dementia,³ however, these findings are debated in the wider literature and the conclusions are potentially susceptible to confounding. Subsequent analysis in middle-aged and older patients with chronic insomnia has not confirmed this link, demonstrating no increased risk of dementia or long-term cognitive decline.⁴ Nevertheless, caution is still advised when prescribing zopiclone, particularly for longer durations of use, due to the risk of addiction, tolerance and withdrawal symptoms.⁴

In order to help clinicians reflect on their prescribing of hypnotic medicines for patients with difficulty sleeping, this report focuses on zopiclone dispensing, since it is the most widely prescribed hypnotic and indicated only for the treatment of insomnia.

Use non-pharmacological approaches first for treating insomnia

Despite their high rate of use, hypnotic medicines are not the preferred treatment approach for patients with insomnia.⁵ Non-pharmacological approaches, such as sleep hygiene techniques or restricting time in bed, result in improvements which are as good, or better than, hypnotic medicines.⁵ Although hypnotic medicines may produce quicker improvements in sleep in the first few weeks of use, the balance of benefits to risks may not be favourable for some patients.^{6,7} Patients can become dependent on taking hypnotic medicines in order to sleep; this can happen over a short time period, with some studies reporting rebound insomnia and withdrawal symptoms such as agitation and anxiety after two to three weeks of use.⁸

Hypnotic medicines should only be considered for patients with severe symptoms or an acute need, such as difficulty sleeping following a traumatic event. Ideally, if hypnotic medicines are prescribed they should be used for short periods, e.g. ten days or less, and used alongside non-pharmacological approaches to improve sleep (see: "Safe prescribing of hypnotic medicines").⁹

Prescribing is not just in older people

Most general practitioners in New Zealand are likely to have patients in their practice who have been taking hypnotic medicines long-term. These patients are typically thought of as being older, e.g. aged over 65 years, and may have initially been prescribed hypnotic medicines by another doctor or at another practice many years ago.

However, dispensing data show that many younger people in New Zealand are prescribed zopiclone. Dispensing across different age groups has remained relatively steady over the last five years (Figure 1). These data indicate that people start to seek help for sleeping from age late 20s onwards. The highest rates of dispensing are for older patients, who are also those at the greatest risk of harm from adverse effects such as falls. If younger patients become dependent on using hypnotic medicines for sleep, they face a large cumulative risk from ongoing use as they get older.

The latest 12 months of available data (July, 2017–June, 2018) show that people of European/Other ethnicity have the highest rates of dispensing (Figure 2).

A large proportion of patients receive high volumes of zopiclone

Hypnotic medicines should ideally be prescribed in short courses, e.g. ten days or less, used only as needed, and initiated with an exit plan in place from the beginning to prevent ongoing use.

Dispensing data from the last 12 months show that many patients are prescribed zopiclone for more than four weeks: 60% received more than 30 tablets in the 12 month period, and 20% received 180 tablets or more; enough for at least one tablet every second night (Figure 3).

High use also occurs in younger people

Although long-term use of hypnotic medicines is often thought of as a problem occurring in older people, Figure 4 shows that younger people are also prescribed high volumes of zopiclone. Of patients who received more than 180 tablets of zopiclone in the last 12 months, 26% were aged 55 years or under, and 12% aged 45 years or under.

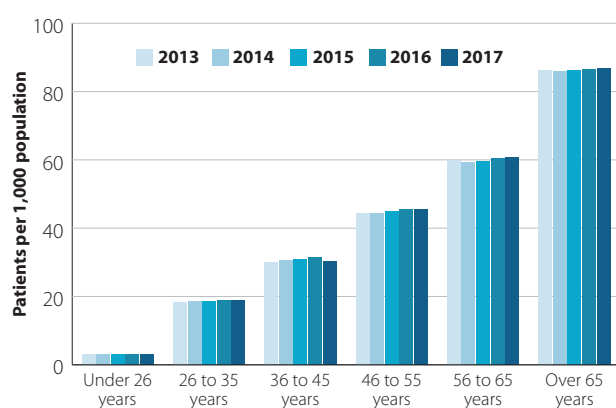


Figure 1: Patients per 1,000 population dispensed at least 20 tablets of zopiclone in a year across different age bands from 2013–2017

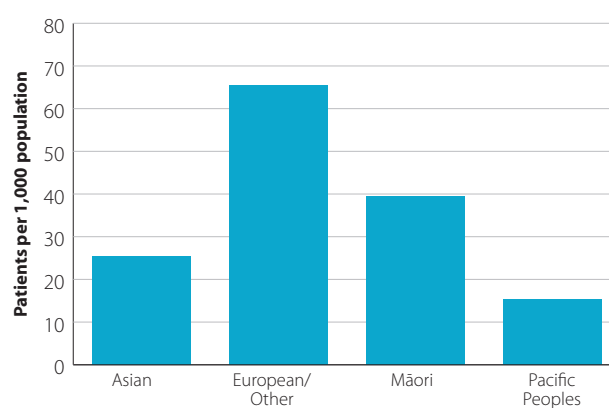


Figure 2: Dispensing rates per 1,000 population of at least 20 tablets of zopiclone from July, 2017 to June, 2018, by ethnicity, for patients aged 18–65 years.

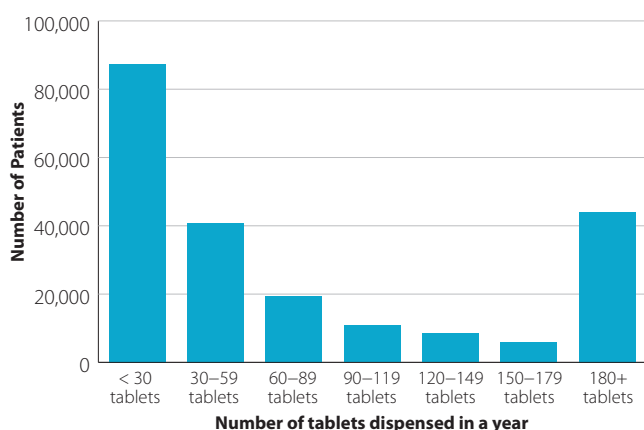


Figure 3: Number of zopiclone tablets dispensed to patients from July, 2017 to June, 2018.

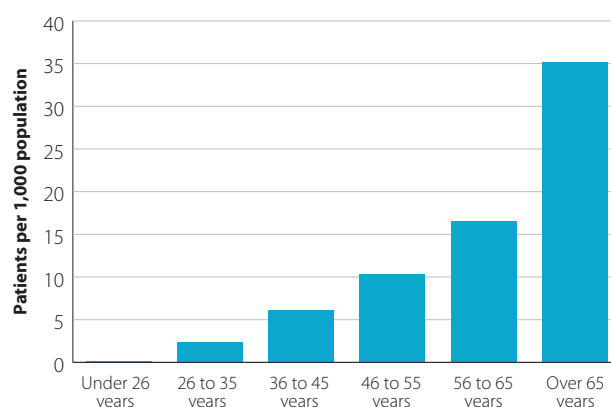



Figure 4: Number of patients per 1,000 population dispensed 180 tablets or more of zopiclone from July, 2017 to June, 2018.

Safe prescribing of hypnotic medicines

Consider these strategies when prescribing hypnotic medicines to avoid the potential for escalating use:^{5,10,11}

- Ensure non-pharmacological approaches are initiated at the same time, such as sleep hygiene or time in bed restriction
- Assess whether patients have factors which contribute to a higher risk of prescribing, such as a history of substance misuse, concurrent mental illness or concurrent use of medicines which add to the risks of adverse effects, such as opioids
- Discuss with patients that evidence shows that hypnotics only provide benefits over and above non-pharmacological approaches for the first few weeks, and that long-term use is associated with adverse outcomes, including motor vehicle accidents, falls and potentially an increased risk of dementia in older age
- Have an exit plan and agreed length of treatment from the beginning: Emphasise to patients that treatment of insomnia with hypnotic medicines is a short-term approach, they are not intended for ongoing use, and they should not be used every night, e.g. have a break after three consecutive nights' use
- Advise patients to try to fall asleep first (using sleep hygiene techniques), and then only take a hypnotic medicine if they remain awake, e.g. after two hours

- Prescribe short courses, e.g. ideally for a maximum of ten days or less; indicate the number of tablets on the prescription rather than "as needed".
- Review the patient's need for pharmacological treatment before issuing repeat prescriptions. The review should cover their use of non-pharmacological approaches and any adjustments that may need to be made, e.g. to sleep hygiene or sleep restriction practices.
- Advise patients to withdraw a hypnotic slowly if they have been using it for longer than a few weeks; suddenly stopping use can cause withdrawal symptoms, leading to reinitiating hypnotic medicines and reluctance about stopping again in the future.

 For further information on:

- Non-pharmacological approaches to insomnia, see: www.bpac.org.nz/2017/insomnia-1.aspx
- Appropriate prescribing of hypnotic medicines, see: www.bpac.org.nz/2017/insomnia-2.aspx
- Prescribing a trial period of a medicine, see: www.bpac.org.nz/BPJ/2015/August/pills.aspx



References:

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If you are a New Zealand prescriber, see your personalised and practice prescribing data on the bpac^{nz} website:
www.bpac.org.nz/report/snippet/zopiclone.aspx