

The Use of Multiple Sleeping Medications is Highly Prevalent



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Introduction

Even nowadays, the use of sleep medicines is widespread, despite extensive evidence of their adverse effects, particularly among the elderly population. This study aims to examine the prevalence of sleep medicines use across different age groups and to assess the frequency of multiple prescriptions issued to individual patients using Finnish nationwide data.

Method

Data on all sleep medicine prescriptions recorded in centralized national Prescription Centre was retrieved for 1.1.2023–31.12.2024. Included sleep medicines were based on the most recent Finnish national care guideline of insomnia. Our dataset covers all sleep medicines used in outpatient care by people aged 18–99.

Results

Altogether 2,536,693 sleep medicine prescriptions were prescribed for 803,237 patients. Among adults aged 18 years and older, 38% reported using sleep medicines, with a higher prevalence among women than men (21% vs. 14%). The most common sleep medicines were melatonin, zopiclone and mirtazapine. 32% of the all prescriptions were prescribed from private sector. The proportion of individuals using sleep medicines ranged from 20% to 40% among those aged 25 to 70 years, after which a marked increase was observed. Among individuals over the age of 80, more than 50% were using sleep medicines. Beginning at age 18, 35% of individuals used at least two different sleep medicines, while 11% used three or more. Melatonin and mirtazapine comprised the most common two-drug combination, with quetiapine added for the most common three-drug combination.

Key findings

Sleep medicine prescriptions in Finland in 2023–2024

- **38 %** of adults aged 18–99 years used sleep medicines
- **35 %** of users were prescribed more than one distinct sleep medicine
- **Melatonin and mirtazapine** were the most commonly used combination

Figure 1. Proportion of sleep medicine users by age in 2023–2024

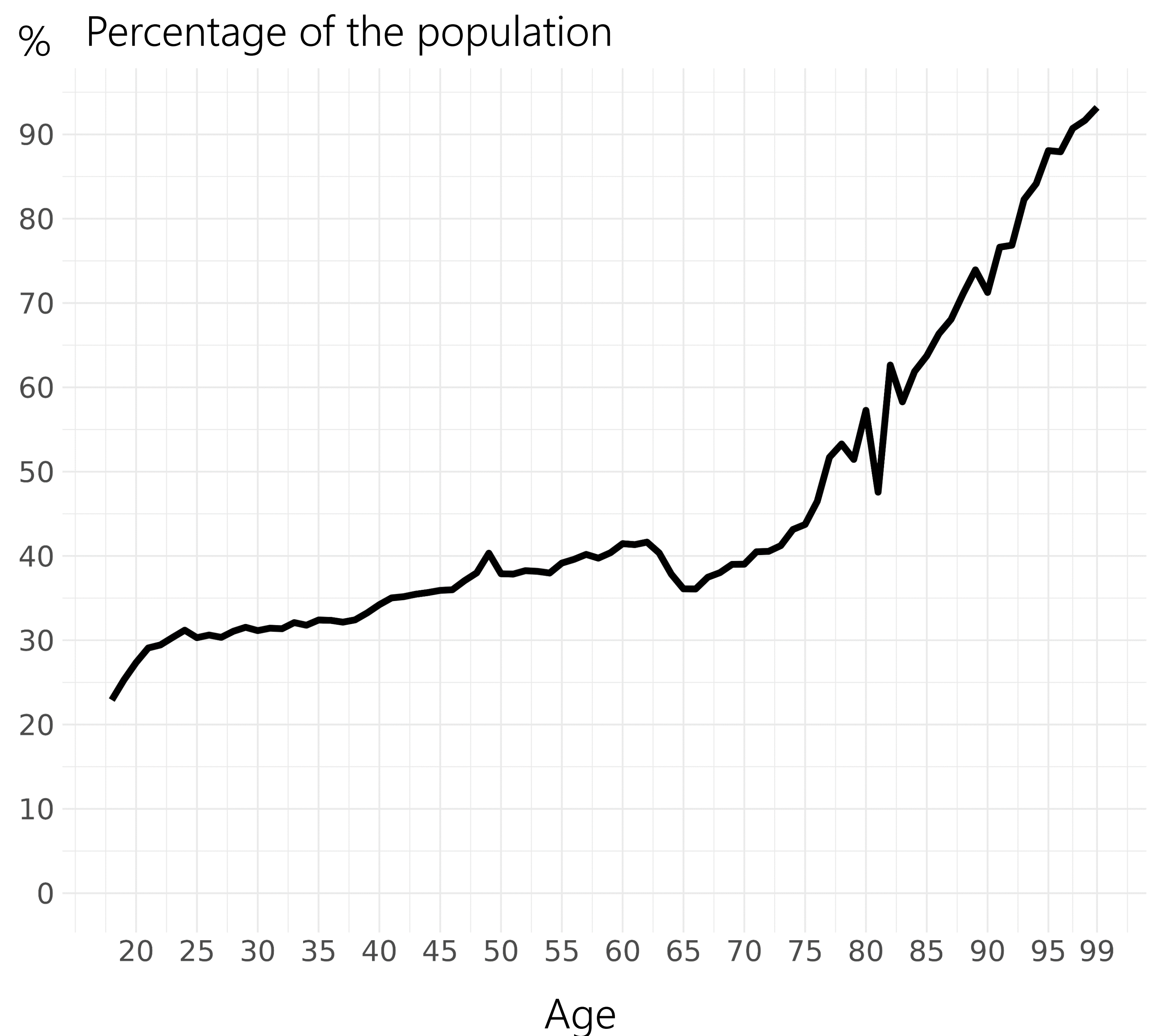
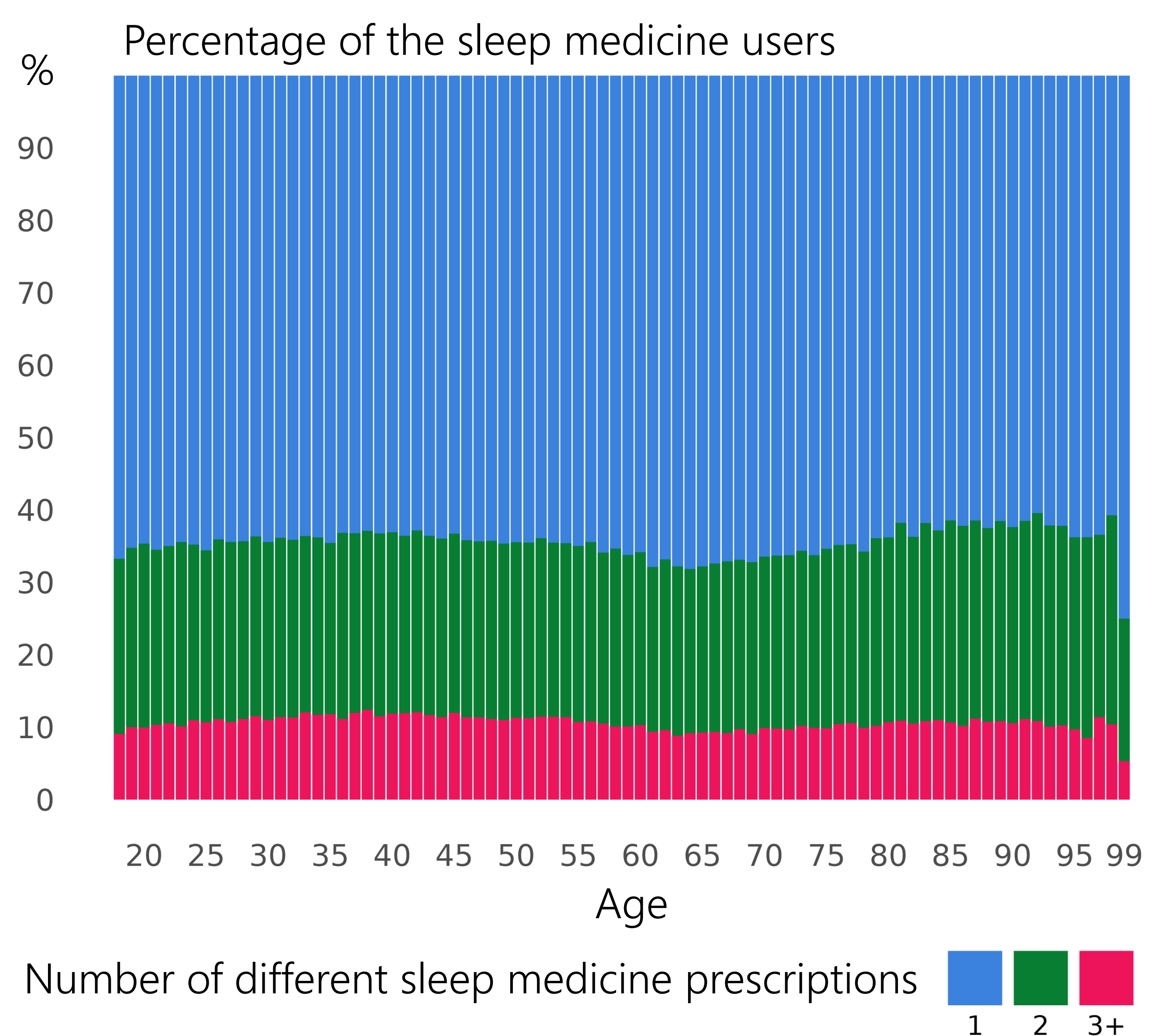


Figure 2. Proportion of sleep medicine users prescribed 1, 2, or 3+ different medicines in 2023–2024.



Conclusions

Sleep medication use is highly prevalent, especially among older adults. Special attention should be paid when multiple sleep medications are used concurrently, as this increases the risk of adverse outcomes, such as cognitive decline, falls, and drug interactions, which in turn may lead to higher healthcare utilization and costs, such as emergency visits and hospitalizations.

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