

Complementary medicine use by community-dwelling older Australians

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Complementary medicines are used by more than half the people in Australia, incurring out-of-pocket health expenses of about \$5.2 billion in 2019.¹ Information about their use by older adults in Australia is more than a decade old.² Given subsequent demographic changes and doubling in sales of vitamins and supplements,¹ we should update our knowledge in this area.

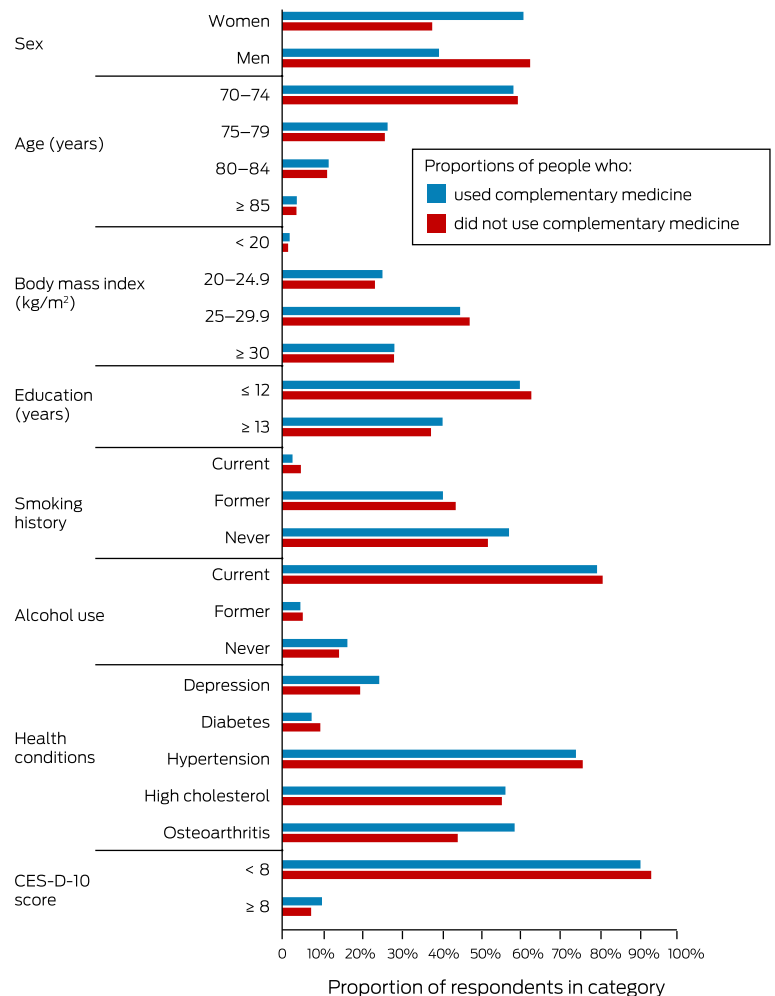
We analysed data from the ASPirin in Reducing Events in the Elderly (ASPREE) Longitudinal Study of Older Persons (ALSOP) to assess self-reported use (every day, occasionally, never) of complementary medicines (fish oil, glucosamine, ginkgo, coenzyme Q₁₀, calcium, zinc, vitamins B, C, D and E, multivitamins, Chinese or herbal) by healthy people over 70 years of age residing in metropolitan or regional Victoria, South Australia, Tasmania, the Australian Capital Territory or southern New South Wales, recruited through their usual general practitioners.³ We summarised data as descriptive statistics; we assessed differences between groups in χ^2 tests (categorical variables). Analyses were conducted in SPSS Statistics 23 (IBM). ALSOP was approved by the Monash University Human Research Ethics Committee (reference, CF11/1100).

During January 2012 – July 2015, 14 757 of 16 703 ASPREE participants returned ALSOP Baseline Medical Questionnaires³ with at least partial responses to the questions on complementary medicines (response rate, 88%); their mean age was 75.2 years (standard deviation, 4.3 years), and 8068 (55%) were women. A total of 10 961 respondents (74.3%) reported using them either daily or occasionally; fish oil (6563 of 14 757 respondents, 44.5%), vitamin D (4995, 33.8%), glucosamine (3940, 26.7%), and calcium supplements (3652, 24.7%) were the most frequently reported items ([Supporting Information](#), table 1).

Complementary medicines were used by larger proportions of women (6637 of 8068, 82.3%) than of men (4324 of 6689, 64.6%; $P < 0.001$), and of people with more than 12 years of education (4418 of 5838, 75.7%) than of people with less education (6542 of 8918, 73.3%; $P = 0.001$). The proportions of complementary medicine users who reported a history of depression (987 of 4053, 24.4%) or osteoarthritis (3060 of 5240, 58.4%) were larger than for non-users (depression, 264 of 1347, 19.6%; $P = 0.002$; osteoarthritis, 705 of 1598, 44.1%; $P < 0.001$); self-reported diabetes was more common among non-users (363 of 3790, 9.6%) than among complementary medicine users (815 of 10 944, 7.4%; $P < 0.001$) ([Box](#); [Supporting Information](#), tables 2 and 3).

Almost three-quarters of people in our sample of community-dwelling older adults in south-eastern Australia used complementary medicines, with fish oil the most common product.

Characteristics of respondents to survey of community-dwelling Australians over 70 years of age on their use of complementary medicine



CES-D-10 = Center for Epidemiologic Studies Short Depression Scale. A cut-off score of 8 is recommended for identifying individuals at risk of depression.⁴ Numbers of respondents in each category are included in the online [Supporting Information](#), tables 1 and 2.

While proprietary complementary medicines are generally regarded as safe, their widespread use by older people, who generally have a greater burden of disease, higher medical expenses, and low or fixed incomes, raises questions about their marketing and promotion.⁵

Our study population represents Australians over 70 who regularly visit general practitioners, and we included participants from geographically and socio-economically diverse backgrounds.³ As we pre-specified a limited number of products, our use estimates may be conservative. In our study, complementary medicine use was defined differently to some earlier studies; for example, the

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Australian Health Survey which asked about complementary medicine use in the previous 24-hour period.⁶ This difference may account for our estimates being slightly higher. Our findings provide the most comprehensive information to date on complementary medicine use by Australians over 70 years of age.

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Supporting Information

Additional Supporting Information is included with the online version of this article.