

**Do complementary and alternative medicine users also use conventional medicine? A repeated cross-sectional study in Japan from 1995 to 2013**

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10 **Running title:** Complementary and alternative medicine and **conventional medicine** use

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## Abstract

**Introduction:** It is recommended that users of complementary and alternative medicine (CAM) also seek conventional medical care to prevent the loss of access to appropriate medical care.

However, the status of such use is unknown. The aim of this study was to examine the time trends in the proportion of CAM users who also receive conventional medical care for the same symptoms.

**Methods:** This was a repeated cross-sectional study. Of data for 753,978 respondents to the Comprehensive Survey of Living Conditions, which was conducted seven times between 1995 and 2013, data from 17,707 individuals who used acupuncture, moxibustion, anma-massage-shiatsu, or judo therapy were analyzed. Cross-classified multilevel logistic regression models with individuals as level 1 and survey year and cohort as level 2 were used to calculate odds ratios (ORs) and 95% credible intervals (CIs) for combined use of CAM and conventional medical care. Age was entered as an individual-level variable. The period effect after 2003 was entered as a survey year-level variable because the number of eligible persons providing CAM treatments has increased since 2003.

**Results:** Among the 17,707 CAM users, 11,567 (65.3%) were women. When age was entered as an explanatory variable, the results showed that both older men and women tended to receive conventional medical care (women, OR: 1.04, 95% CI: 1.03–1.04; men, OR: 1.03, 95% CI: 1.02–1.04). Additional examination of the possible period effect after 2003 showed a positive (albeit nonsignificant) association (women, OR: 1.36, 95% CI: 0.89–1.99; men, OR: 1.37, 95% CI: 0.94–1.91).

**Conclusions:** As patient age increased, patients combined CAM use with conventional medicine. The findings also suggested that the combined use of CAM and conventional medicine has increased since 2003.