

# Factors Associated with Self-Reported Sun Exposure in a Multi-Ethnic Community Sample from New Zealand

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## Background

We carried out a cross-sectional analysis to identify factors associated with self-reported sun exposure. The study was a sub-analysis of a trial of vitamin D supplementation to prevent cardiovascular events. Sun exposure was assessed using a questionnaire to investigate the frequency of this activity in the past three months. *Sun exposure hours were estimated from the following question:* “In the last three months, how many hours each day, did you usually spend outdoors in the sun (including work)?” – “on an average weekday” and “on an average weekend day”. The answers were then classified into five categories of weekly sun exposure; <7 hours, 7 hours, 8-14 hours, 15-21 hours and ≥22 hours. Last two groups were considered a high sun exposure group (≥15 hours per week, equivalent to >2 hours per day).

## Results

A total of 5,108 men and women, aged 50 to 84 years were recruited. The prevalence of high sun exposure (≥15 hours/week) and 95% confidence intervals are shown for demographic (Fig-1), and lifestyle variables (Fig-2). Increased sun exposure was significantly higher among males, Māori and younger age groups. For lifestyle, sun exposure was higher for daily drinkers and physically active participants; and reduced in winter and in participants who were obese. Tobacco smoking was not related to sun exposure ( $p>0.05$ ).

Fig-1

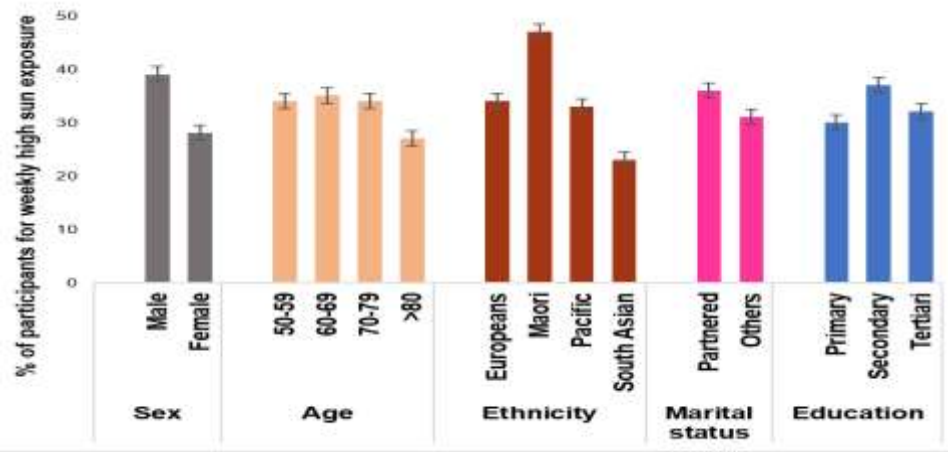
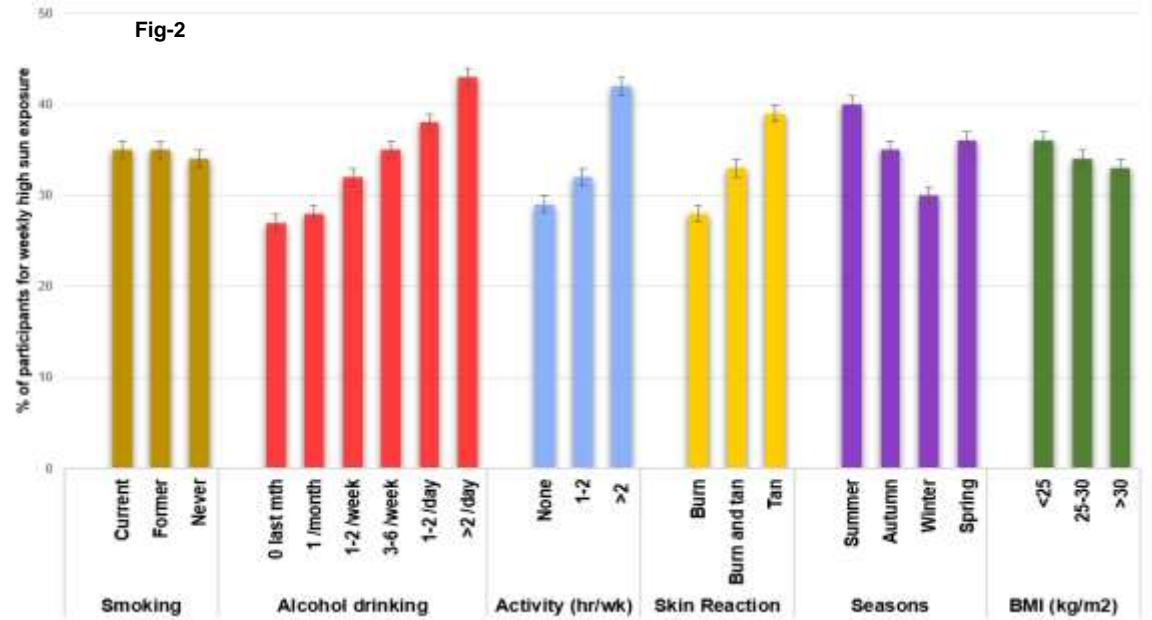


Fig-2



## Key messages

The duration of self-reported sun exposure is statistically associated ( $P<0.05$ ) with several factors in our multi-ethnic community sample. Understanding these factors may provide insights into disease prevention strategies, particularly if these factors include some known harmful factors, such as alcohol drinking, tobacco smoking, obesity, and physical inactivity.