Comparisons between students who regularly take hot bathtub baths and those who do not

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Purpose: Our previous study compared the characteristics of middle-aged persons who regularly take hot bathtub baths with those who do not and found taking hot bathtub baths helped to have good sleep and increase self-rated health. However, few studies have focused on this habit among young people. This study therefore compared the characteristics of young persons who regularly take hot bathtub baths with those who do not and clarify the potential effects of habitual bathtub bathing on their health.

Methods: In this cross-sectional study, a self-reported questionnaire on bathtub bathing habits and general health and lifestyle was distributed to 483 university students between May and June 2013. Respondents were divided into two groups: those who took 3 or more bathtub baths per week (high-frequency group) and those who took 2 or fewer bathtub baths per week (low-frequency group). Differences between the groups were determined for sex, age, living with or apart from one’s family, quality of sleep, sense of fatigue, and self-rated health. Prior to conducting the study, the study protocol was approved by the Institutional Review Board of Daito Bunka University.

Results: We obtained 394 responses (response rate: 81.6%) and analyzed 376 valid responses. Those who answered the question on bathtub bathing habits were divided into a high-frequency group (176 persons, 47%) and a low-frequency group (200 persons, 53%). The high-frequency group (52% men, 43% women, 5% sex was unknown) had a slightly greater proportion of men than in the low-frequency group (p=0.07). The two bathing frequency groups did not significantly differ by age group (p=0.43), and the age distribution in the high-frequency group age was 51% among 18 year olds, 45% among 19 year olds, 39% among 20 year olds, 48% among 21 year olds, and 61% among 22 year olds and older. Significantly more of the high-frequency group lived with their family (70% versus 23% living alone) than the low-frequency group (p<0.001). In terms of quality of sleep, 62% of the high-frequency group and 60% of the low-frequency group reported having good sleep (p=0.43). For sense of fatigue, 27% of the high-frequency group and 23% of the low-frequency group reported they did not experience fatigue (p=0.36), and for self-rated health, 81% of the high frequency group and 76% of the low-frequency group reported they were healthy (p=0.30). While there were no significant differences between the two groups, the findings suggest that those in the high-frequency group experienced good health. Results of logistic regression analysis adjusted for living with or apart from family showed the following odds ratios (95% confidence intervals) in the high-frequency group: good quality of sleep 1.02
(0.63–1.66), no fatigue 1.37 (0.76–2.46), and self-rated health 1.61 (0.90–2.89).

Conclusion: Among university students in this study, men and persons living with their families were highly likely to take hot bathtub baths regularly. While there were no significant differences between the high and low frequency bathers, taking hot bathtub baths may marginally help to reduce fatigue and increase self-rated health.

Competing interests: The authors declare no conflicts of interest.

Keywords: Bathtub bath, Self-rated health, Sleep, Fatigue, Cross-sectional study