

Abstract

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Leukocyte telomere length and marital status among middle-aged adults.

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BACKGROUND: Being unmarried is associated with worse health and increased mortality risk. Telomere length has emerged as a marker for biological ageing but it is unclear how telomere length relates to marital status.

OBJECTIVE: To examine the relationship between telomere length and marital status in a sample of middle-aged adults.

DESIGN AND SUBJECTS: Cross-sectional analysis among 321 adults aged 40-64 years.

METHODS: Telomere length was measured by PCR (T/S ratio). Participants provided information on healthy lifestyle activities including smoking, alcohol use, diet, exercise, obesity as well as social support.

RESULTS: Participants married or living with a partner had a mean T/S ratio of 1.70 and those widowed, divorced, separated or never married had a mean T/S ratio of 1.58 in a model adjusted for age, gender and race/ethnicity ($P < 0.001$). When the analysis was further adjusted for diet, alcohol consumption, exercise, smoking, social support, poverty and obesity, persons married or living with a partner had a higher mean T/S ratio of 1.69 than their unmarried counterparts (1.59) ($P = 0.004$).

CONCLUSIONS: These results indicate that unmarried individuals have shorter telomeres. This relationship between marital status and telomere length is independent of presumed benefits of marriage such as social support and a healthier lifestyle.

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