

## **Over 8 Hours of Sleep – Marker of Increased Mortality in Mediterranean Population: Follow-up Population Study**

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**Aim.** To investigate night and total sleep duration in relation to all-cause, cardiovascular, and non-cardiovascular mortality, controlling for recognized predictors of mortality in a population where the practice of siesta is common.

**Methods.** Our community-based sample included 1,842 residents (1,001 women) of a West Jerusalem neighborhood, aged 50 years and over. The study was conducted in the 1985-87 period, with a response rate of 85%. The participants were followed-up for 9-11 years. At the beginning of the study, the participants were asked at what time they usually fell asleep at night and awoke in the morning, and the average duration of their daytime nap if they slept during the day. Cox survival analysis was used to predict time to death for all-cause, cardiovascular, and non-cardiovascular mortality.

**Results.** The overall number of deaths was 403 (205 women), which included 170 deaths from cardiovascular causes (93 women). Men who reported long total sleep duration (>8h) had a substantially elevated risk of all-cause mortality (adjusted hazard ratio, 2.1; 95% confidence interval [CI], 1.2-3.7), and a stronger association with cardiovascular mortality (hazard ratio, 2.9; 95% CI, 1.2-7.1). The population attributable risk associated with more than 8 h of sleep was 12% (95% CI, 4-21%) for total mortality and 17% (95% CI, 4-33%) for cardiovascular causes of death. There was no significant association in women, although those who slept 6-8 h seemed to have the lowest risk.

**Conclusions.** Duration of sleep is an important risk marker of mortality also in populations that practice afternoon siesta.

**Key words:** cardiovascular diseases; circadian rhythm; epidemiology; Mediterranean region; mortality; sleep