Abstract: 1446

A greater healthy behaviors score is associated with a lower risk of all-cause and cause specific mortality: insight from two prospective multi-ethnic surveys.

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On behalf: The International Lipid Expert Panel (ILEP)

Topic(s):
Risk Factors and Prevention – Epidemiology

Citation:
Background:Mortality from non-communicable diseases (NCDs) is influenced by modifiable risk factors. Simple tools which do not require laboratory tests, (blood pressure (BP) [B], exercise [E], weight [W], alimentation [A] (fruit and vegetable consumption), and tobacco [T] (BEWAT) may estimate the risk of all-cause and cause specific mortality.

Purpose: Therefore, we evaluated the link between BEWAT and mortality in a randomly selected sample of the US population.

Method: Adults aged ≥20 years, enrolled in the Third National Health and Nutrition Examination Survey (NHANES-III, 1988-1994) and continuous NHANES (2005-2010), and followed up to December 31st 2011, were included in the present analysis. Multiple Cox regressions were applied to evaluate the associations between the total BEWAT score and each of its components with all-cause and cause specific mortality.

Results: Overall, 22,968 participants (47.1% men) were included in the present analysis (mean age: 47.4 years). Individuals in the highest BEWAT tertile (T3) had a 25% lower risk of mortality compared with T1 [hazard ratio (HR): 0.75, 95% confidence interval (CI): 0.71-0.79], further corrections slightly diluted the magnitude of link to 22% (HR: 0.78, 95%CI: 0.75-0.81) (Figure). In a fully adjusted model, individuals in T3 also had a 26% lower risk of cardiovascular disease (CVD) mortality compared with those in T1 (HR: 0.74, 95%CI: 0.64-0.83), similar trends were observed across the BEWAT tertiles for cancer mortality risk (participants in T3 had a 31 and 26% lower risk for cancer death in Models 1 and 2, respectively). For sensitivity analyses after excluding smoking from the total BEWAT score, in the fully adjusted model the association between the BEWAT score and cancer death was attenuated but remained significant (HR: 0.80, 95%CI: 0.72-0.89 for T3 vs T1). Furthermore, total BEWAT score (without the BP component) could still predict CVD mortality (T3= HR: 0.71, 95%CI: 0.61-0.82).

Conclusion: A higher BEWAT status is beneficial regarding all-cause and cause specific mortality. Our results highlight the value of modifiable risk factors as a simple and affordable variable for evaluating the risk of mortality.
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