

**AH-60**

**Effects of Sleep on Health-related Quality of Life in Patients with Coronary Heart Disease**

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**Background & Hypothesis:**

Sleep problems have been associated with adverse health outcomes and are common in patients with coronary heart disease (CHD). This study examined the measurement structure of the Pittsburgh Sleep Quality Index (PSQI) and its concurrent and prospective associations with health functioning in physical, social, and emotional domains among CHD patients.

**Methods:**

A total of 167 CHD patients (mean age = 63.3) completed the PSQI and CHD-specific quality of life questionnaire, and 109 of them also completed 3-month follow-ups. Confirmatory factor analysis (CFA) was used to evaluate the one-, two-, and three-factor structure of the PSQI based on previous literature. Structural equation modelling (SEM) was used to examine the relationship between sleep dimensions and health functioning domains. All models were adjusted for demographic covariates.

**Results:**

CFA results revealed that measurement structure with 2 factors, sleep efficiency and perceived sleep quality, best fitted the data,  $\chi^2(8) = 14.01$ ,  $P = 0.082$ ; CFI = 0.98; RMSEA = 0.07. SEM analysis showed that higher sleep quality significantly predicted concurrent emotional ( $\beta = -0.47$ ,  $P < 0.001$ ), physical ( $\beta = -0.44$ ,  $P < 0.001$ ), and social ( $\beta = -0.34$ ,  $P < 0.001$ ) functioning. Higher sleep quality also predicted improved physical ( $\beta = -0.15$ ,  $P = 0.048$ ) and social ( $\beta = -0.17$ ,  $P = 0.034$ ) functioning, but not emotional ( $\beta = -0.07$ ,  $P = 0.349$ ) functioning, 3 months later, while controlling for respective baseline and standard covariates. Sleep efficiency did not predict any of these domains.

**Discussion & Conclusion:**

Improving sleep quality is vital to enhancing physical and social health functioning in cardiac patients.