Night-shift work is associated with cardiovascular risk among employees of a public university in Brazil

Adriano M Pimenta
Federal University of Minas Gerais, Brazil

Cardiovascular diseases represent a significant public health problem and are responsible for one-third of all deaths in worldwide. Night-shift work has become common around the world, with approximately 22% of the population of industrialized countries performing their work activities during this period. We conducted a cross-sectional study with 211 workers of both genders, aged between 30 and 64 years, working on the health campus of a public university in the state of Minas Gerais, Brazil. The aim was to estimate the association between night-shift work and high cardiovascular risk. Night-shift work was defined as a work shift between 7 pm and 7 am, and high cardiovascular risk was calculated based on the Framingham score. The association between night-shift work and high cardiovascular risk was estimated by the prevalence ratio (PR) and its 95% confidence interval (95% CI) after adjusting for potential confounding factors, calculated by Poisson regression. Night-shift work was performed by 38.4% of the individuals, and high cardiovascular risk was diagnosed in 28% of the sample. In the bivariate analysis, night-shift work, passive and high job strain categories at the demand-control scale, work time > 120 months, schooling > 9 years, family income > 6 minimum wages, level 2 abdominal obesity, and triglyceride levels > 150 mg/dL were associated with high cardiovascular risk. After multivariate analysis, night-shift work remained independently associated with high cardiovascular risk (PR = 1.67; 95% CI = 1.10-2.54). This association should be considered when discussing the promotion of workers’ health regarding changes in the work process.

Biography
Adriano M Pimenta has completed his PhD in Nursing from Federal University of Minas Gerais – UFMG (Brazil) and Post-doctoral studies in Public Health from University of Navarra (Spain). He is Professor of Public Health in Graduate, Master and Doctoral courses from School of Nursing (UFMG). He has published more than 45 papers in reputed journals and has been serving as a Reviewer Board Member of important journals as the British Medical Journal (England).

Notes: