

A Psychosocial Perspective on Sedentary Behavior and Workplace Health: The Role of Physical Activity in Reducing Hypertension Risk among Office Workers

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The purpose of this study, conducted using a cross-sectional analytic design, was to examine the association between physical activity and the incidence of hypertension among office workers. Another objective of the research was to investigate the psychological and social aspects of physical inactivity, such as workplace culture, work-related stress, and barriers to leading an active life. The study was carried out from April to August 2025, involving 420 office workers aged 20 to 65 years old at 18 public and private workplaces. The measurement of physical activity was done using the International Physical Activity Questionnaire, Short Form (IPAQ-SF), while the subjects were grouped into three categories, based on their METs per week, into low, moderate, and high. The presence of hypertension in

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this research was defined as having a systolic blood pressure of 140 mmHg or above, diastolic pressure of 90 mmHg or above, or using antihypertensive drugs. Out of the total 420 employees, 40%, 35%, and 25% were categorized as belonging to low, moderate, and high groups of physical activities respectively. The fact that four in ten were sedentary speaks to the deep chasm between health information and health practices—a chasm which can be maintained through such psychological and social elements as time constraints, fear of criticism, and workplace cultures in which sitting at one's desk equals being productive. The prevalence rate of hypertension among the general population was 35%, while 30% belonged to the category of prehypertension. Among all the employees, prevalence rates of hypertension were 45.2% (sedentary group), 29.9% (moderate group), and 20.0% (active group). However, after adjustment based on parameters like age, gender, body mass index, smoking status, and family history, sedentary employees had 2.78 times higher odds of hypertension (CI: 1.66–4.66) compared to active employees. Working more than 8 hours daily at the workplace was associated with 2.10 times higher odds of hypertension irrespective of physical activity levels. The research makes a contribution to current knowledge in that it offers the first-ever joint analysis of physical activity, prolonged occupational sitting, and the prevalence of hypertension among office workers, and highlights the independent relationship between both low physical activity and prolonged sitting and hypertension after adjusting for key confounding.

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