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SA's corporate executives aren't sleeping enough – a serious risk to their cardiometabolic health

A new study published in *Preventive Medicine* journal found that four years of consistently inadequate sleep in corporate executives was associated with adverse cardiometabolic health.

Led by Paula Pienaar, a PhD candidate at the University of Cape Town (UCT) and Vrije Universiteit Amsterdam in the Netherlands, the study analysed annual health risk assessment data of more than 1 500 senior managers and executive directors of South African companies collected over a four-year period.

“Corporate executives are exposed to a particularly competitive, high-pressured work environment. Under constant pressure to perform, sleep is one area of their lives that is often compromised. This is somewhat ironic since daytime fatigue resulting from poor sleep strongly influences employees' work quality and productivity.

“We now know that sleeping less than the recommended seven to nine hours increases risk for lifestyle diseases, including obesity, cardiovascular disease and the metabolic condition known as type 2 diabetes. These diseases are collectively known as cardiometabolic diseases,” said Pienaar.

Having worked in the occupational health environment for many years, Pienaar identified the distinct paucity of sleep health data in the corporate setting, particularly in South Africa. This motivated her to investigate the long-term sleep-cardiometabolic health relationship among business leaders. Her ultimate vision is to help establish sleep health as one of the pillars of workplace health programmes aiming to mitigate and manage disease in a highly demanding work environment.

To better understand the long-term relationship between sleep duration and risk for lifestyle diseases in corporate executives, the study analysed how self-reported sleep duration might impact risk factors for cardiometabolic diseases over a four-year period. Specifically, clinical measurements were obtained during annual corporate health risk assessments, including body mass index (BMI), waist circumference, blood pressure, fasting blood glucose and lipid measures. These health indicators were also used to calculate a global cardiometabolic disease risk score, such that a higher score indicated a less favourable cardiometabolic disease profile.

The study also accounted for a host of potential confounding factors such as hours worked per week, daily commuting time, absenteeism, presenteeism, depression, anxiety, stress, physical activity, smoking and alcohol consumption.

The paper found that one in four executives had central obesity, one in five had raised blood glucose levels, and 42% had elevated blood pressure. Based on these findings, said Pienaar, the need to better understand their risk for lifestyle-related diseases is indeed warranted.

“Moreover, with an average sleep duration of seven hours and statistics revealing that at least one in five of these executives reported less than seven hours of sleep, it was clear that investigating the impact of their sleep on health outcomes could address the current gaps existing in the field of corporate sleep research and provide the opportunity to make a significant contribution to workplace health promotion programmes in South Africa and abroad,” she said.

The main findings of the study revealed that consistently reporting shorter sleep durations over a four-year period was associated with two important risk factors for cardiometabolic disease – BMI (a marker of obesity) and waist circumference (a measure of central obesity). Intriguingly, this relationship differed between men and women.

“For male corporate executives, shorter sleep was consistently associated with a higher risk for obesity (as evidenced by higher BMI and waist circumference values) as well as higher global cardiometabolic disease risk scores. While female executives reporting a shorter sleep duration appeared to be more vulnerable to obesity (higher BMI), this association disappeared when lifestyle factors were taken into account. This suggested that lifestyle factors such as physical activity, smoking and alcohol consumption may exert a more significant impact on obesity risk among female corporates compared to sleep duration alone,” said Pienaar.

When taking a closer look into the work life of corporate executives who participated in the study, Pienaar said that it became apparent that extended working hours (defined as more than 60 hours per week) emerged as the key occupational factor connecting insufficient sleep duration to an elevated risk of cardiometabolic disease.

“It is plausible that the corporate work culture, particularly the attitude towards sleep health, exerts pressure on many executives to feel compelled to work long hours to demonstrate commitment and dedication. This, in turn, results in compromised sleep duration,” she said.

Consequently, Pienaar advocates for organisations to foster discussions promoting a healthier workplace culture and attitude toward sleep.

“Our study has several practical implications for promoting the long-term health of corporate employees. For example, in employee health risk assessments, it is recommended that a more robust evaluation of sleep habits be incorporated to identify those at risk for poor sleep quality, short sleep duration and common sleep disorders, while workplace health promotion programmes are advised to include education around the risks of displacing sleep opportunity with work hours,” said Pienaar.

She further said: “Our findings emphasise the significance of adequate sleep in preventing future cardiometabolic disease, ultimately maintaining the health and well-being of corporate executives. In a demanding work environment, ensuring that employees have the

opportunity for sufficient and high-quality sleep is crucial for both individual health and workplace productivity.”

[Access the study.](#)

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