What is the Risk for Metabolic Syndrome in Police Officers?

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The report by Jayakrishnan and colleagues^[1] in this Journal is noteworthy since it provides an assessment of the presence of the metabolic syndrome and related cardiovascular risk factors in one of the largest, if not the largest, cohort of police officers to date. Two aspects of this research especially warrant comment.

First, despite the large cohort of offices assessed in the aforementioned study, it remains unclear whether police officers have an increased prevalence of metabolic syndrome compared to civilians. Jayakrishnan et al.^[1] did not have a local civilian group with which to compare these officers and the state within which the study was performed, Kerala, has a markedly higher prevalence of cardiovascular disease risk factors than India as a whole.^[2] Consequently, the high risk seen in this group of officers may simply reflect the local populace. However, the authors' comparisons to relevant publications and other Indian police assessments^[3] suggest that Indian police officers may, indeed, have an increased prevalence of some of the component risk factors. In contrast, studies of police officers from other nations suggest that officers may have a lower prevalence. For example, Yoo and colleagues^[4] summed data from several U.S. cohorts and concluded that the prevalence of metabolic syndrome was lower than the national average. Thus, the medical and research communities should be cautious in assuming police officers are at an increased risk for the

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metabolic syndrome.

Second, the findings of Jayakrishnan and colleagues^[1] strongly suggest that metabolic syndrome likely results from inappropriate lifestyle choices and modifiable behaviors. Poor eating habits and physical inactivity are major contributors to both metabolic syndrome and the component risk factors that make up metabolic syndrome. It is noteworthy, and of relevance to police officers, that psychosocial stress may play a role in the development of metabolic syndrome independent of these lifestyle choices.^[5] Thus, members of stressful occupations may be an increased risk.

Of course, as discussed by Jayakrishnan and coworkers,^[1] the management of metabolic syndrome centers around facilitating at-risk subjects making the appropriate lifestyle choices that will reduce both their risk for metabolic syndrome as well as their global risk for cardiovascular diseases. This applies to anyone, whether the subject is a police officer or not. However, due diligence may need to be given to aspects of the subject's occupation, such as work stress, that may also be contributing to this risk.

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