

Heart Rate, Blood Pressure Linked to Psychiatric Disorders



A study published online by *JAMA Psychiatry* found that higher resting heart rate (RHR) and higher blood pressure (BP) in late adolescence is associated with an increased risk in men for subsequent obsessive-compulsive disorder (OCD), schizophrenia and anxiety disorder, while a lower resting heart rate is linked to an increased risk for substance use and violent criminality.

Previous research has revealed that abnormalities in cardiac autonomic functioning are often observed in patients with a range of psychiatric disorders. Despite these suggestive findings, the results of these studies are inconsistent and very often limited by small, unrepresentative and therefore biased samples. Furthermore, the association between RHR/BP and different psychiatric disorders has not been studied systematically.

Antti Latvala, PhD, of the University of Helsinki, Finland, and colleagues investigated whether differences in cardiac autonomic function in late adolescence were associated with major psychiatric disorders later in life using population-based register data of more than one million Swedish men with a follow-up period of up to 45 years. The RHR and BP of these men, whose average age was 18 years, were measured during military conscription assessment for the Swedish Armed Forces from 1969 to 2010.

The results of the large-scale longitudinal cohort study showed that men with higher RHR and higher BP in late adolescence were more likely to have been diagnosed with OCD, schizophrenia or anxiety disorder later in life. The strongest association was observed with OCD. More specifically, adolescent men with a RHR above 82 beats per minute had a 69% increased risk for OCD, a 21% increased risk for schizophrenia and an 18% increased risk for anxiety disorder compared to men with a RHR below 62 beats per minute. The results were very similar for BP. A lower RHR was linked to substance abuse and violent behaviour later in life.

The findings of the present study are novel, as there are no previous prospective studies lining cardiovascular measures to OCD, schizophrenia and anxiety disorder, and suggest that "altered cardiac autonomic activity may precede or represent an early marker for a range of psychiatric disorders in men."

Source : JAMA Psychiatry

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