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Prevalence of Hypertension Among Children Nearly Doubled

The global prevalence of high blood pressure among children and adolescents nearly doubled between 2000 and 2020, according to a new meta-analysis published in *The Lancet Child & Adolescent Health*.

In 2000, an estimated 3.2% of children had hypertension. By 2020, that figure had risen to more than 6.2% among those under 19, affecting roughly 114 million young people worldwide. Obesity appears to be a major contributor: nearly 19% of children and adolescents living with obesity had hypertension, compared with fewer than 3% of those at a healthy weight.

The nearly twofold increase in childhood high blood pressure over 20 years should raise alarm bells for healthcare providers and caregivers. Steps such as improving screening and prevention can help control blood pressure in children and reduce future health risks.

The findings are based on a meta-analysis of 96 large studies involving more than 443,000 children across 21 countries. The researchers noted that measurement methods significantly influence prevalence estimates. When hypertension was confirmed across at least three in-office visits, the estimated prevalence was about 4.3%. When out-of-office assessments, such as ambulatory or home blood pressure monitoring, were included, sustained hypertension rose to approximately 6.7%.

The study also found that masked hypertension affects nearly 9.2% of children and adolescents globally, suggesting many cases go undetected during routine visits. Conversely, white-coat hypertension, where blood pressure is elevated only in clinical settings, was estimated at 5.2%, indicating potential misclassification.

Childhood high blood pressure is more common than previously thought, and relying solely on in-office readings likely underestimates the true prevalence. Early detection and improved access to prevention and treatment are critical to protect children at risk.

Children and adolescents with obesity were found to have nearly eight times the risk of developing hypertension. About 19% of those with obesity had high blood pressure, compared with 2.4% of those within a healthy weight range. Obesity-related factors, such as insulin resistance and vascular changes, likely play a key role.

The analysis further suggests that 8.2% of children and adolescents have prehypertension, with prevalence rising to 11.8% during adolescence. Blood pressure typically increases sharply in early adolescence, peaking around age 14, particularly in boys. Children with prehypertension are at increased risk of progressing to full hypertension, underscoring the need for regular screening during these formative years.

There is a need for harmonised diagnostic criteria, broader use of out-of-office monitoring, and context-appropriate surveillance. Education of healthcare providers, families, and policymakers is crucial. Cardiovascular risk begins not in middle age, but in childhood. The task ahead is straightforward: to ensure that no child's elevated blood pressure goes undetected, unrecognised, or untreated.

Source: The Lancet

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