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Poor elevated-blood-pressure recognition in the outpatient setting

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Abstract

Question—Among pediatric outpatient care centers, what is the rate of elevated blood pressure recognition?

Design—Retrospective single cohort study.

Setting—Single tertiary-care pediatric outpatient center.

Participants—20 000 patients (2–17 years old).

Intervention—Blood pressure measurement.

Outcomes—Recognition rate of elevated blood pressures.

Main Results—Among those with 3 elevated blood pressure measurements, the median frequency of identification by division/service was 17%.

Conclusions—The identification of patients with elevated blood pressure measurements was low.

Commentary

Over the last several decades, the prevalence of pediatric hypertension has risen three-fold, with 3%–5% of all children currently hypertensive.¹ Hypertension in childhood often is clinically silent. However, children with hypertension are much more likely to have hypertension in adulthood, where the sequelae result in significant morbidity and mortality.² Primary and secondary prevention of hypertension, therefore, is of paramount importance in decreasing the cardiovascular disease risk of both children and adults. This study by Beacher et al notes that pediatric healthcare providers identify themselves as playing a role in the diagnosis and treatment of hypertension in youth. Despite this, more than 80% of elevated blood pressures were unrecognized in this study, leaving a substantial number of children with missed opportunities for early prevention and treatment. Although many of the children with elevated blood pressure in this study likely do not have hypertension, (hypertension is defined by the sustained elevation of blood pressure), it should be noted that they are at significantly increased risk for the development of hypertension. Children with an initial elevated blood pressure that normalizes during the same encounter are 5.9 times more likely to develop hypertension than those with an initial normal blood pressure.³ This important study by Beacher et al highlights the need for better systems to assist providers to accurately identify elevated blood pressure in children, particularly in those without obvious cardiovascular disease risk factors.

References

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