

PUBLIC HEALTH

Value of echocardiographic screening for RHD in Ugandan children

Compared with clinical examination (auscultation) alone, echocardiographic screening can detect up to three times as many cases of rheumatic heart disease (RHD). This finding from a large, population-based study of school-aged children (5–16 years) in Uganda, Africa supports the use of echocardiography for diagnosis of RHD in regions of high prevalence, as recommended in World Health Organization and World Heart Federation guidelines.

Andrea Beaton and coworkers screened 4,869 children from six schools, using a combination of cardiac auscultation and echocardiography with a portable device. Each echocardiogram took just 2 min to perform, meaning that up to 250 children could be screened in 1 day. Abnormal echocardiograms were recorded in 130 participants (2.7%), and 72 of these children were later classified as having definite, probable, or possible RHD (prevalence

14.8 per 1,000). By contrast, use of cardiac auscultation alone resulted in detection of only 23 cases of RHD. The condition was more common in older children (mean age 10.1 years compared with 9.3 years for individuals without RHD; $P=0.002$). The prevalence of RHD increased from <1% in children aged <9 years to >2% in those aged 10–13 years. RHD was also more prevalent in pupils in the lowest socioeconomic tertile than in children in the highest tertile (2.8% vs 1.4%; $P=0.036$).

“We anticipate that echocardiographic screening will prove to be a valuable investment in public health, even in the most resource constrained communities,” concludes Dr Beaton.

Alexandra King

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