

COVID-19 is an emerging, rapidly evolving situation.

[Public health information \(CDC\)](#)

[Research information \(NIH\)](#)

[SARS-CoV-2 data \(NCBI\)](#)

[Prevention and treatment information \(HHS\)](#)

FULL TEXT LINKS



Am J Med Genet C Semin Med Genet. 2020 Mar;184(1):47-52. doi: 10.1002/ajmg.c.31779.

Epub 2020 Feb 13.

Congenital heart disease in school children in Lagos, Nigeria: Prevalence and the diagnostic gap

Ekanem N Ekure^{1 2}, Ogochukwu Sokunbi^{1 2}, Nnenna Kalu², Akinsanya Olusegun-Joseph^{3 4}, Oyewole Kushimo⁴, Casmir Amadi^{3 4}, Olayinka Hassan⁴, Desmond Ikebudu⁵, Sophia Onyia², Chinonso Onwudiwe², Victor Nwankwo², Remi Akinwunmi², Fukpode Awusa², Zainab Akere², Olaolu Dele-Salawu², Elizabeth Ajayi², Olagoke Ale^{3 4}, Dorothy Muoneke⁴, Maximillian Muenke⁶, Paul Kruszka⁶, Andrea Beaton⁷, Craig Sable⁸, Adebowale Adeyemo⁶

Affiliations

PMID: 32052942 DOI: [10.1002/ajmg.c.31779](https://doi.org/10.1002/ajmg.c.31779)

Abstract

Congenital heart disease (CHD) in low-and-middle income countries (LMIC) is often characterized by late presentation resulting from inadequate screening and healthcare access in these regions. Accurate estimates of the burden of CHD among school children are often lacking. The objective of this study was to determine the prevalence and distribution of CHD among school children in two communities (urban and semi-urban) in south western Nigeria. Using clinical assessment and portable echocardiography, 4107 school children aged 5 years to 16 years in Lagos, Nigeria, were selected using a multistage sampling procedure and screened for CHD. Diagnosis of CHD was made after echocardiography. Children identified with CHD were referred to a tertiary hospital for appropriate cardiac care. The 4,107 children screened had a mean age of 11.3 ± 2.7 years and 53.7% were females. Twenty seven children had echocardiography-confirmed CHD, representing a prevalence of CHD among school children in Lagos, Nigeria of 6.6 per 1000 children. Acyanotic CHD constituted 96.3% of detected cases. Two children diagnosed with CHD (Tetralogy of Fallot and severe pulmonary valve stenosis respectively) had successful intervention. The prevalence of previously undiagnosed CHD among school children in Lagos Nigeria is substantial and highlights gaps in the health care system and school health programs. Echocardiographic screening of school children provides an opportunity for missed early diagnosis and treatment of CHD and reduces the prevalence of first-diagnosed CHD in adulthood. Therefore, focused clinical examination of school children followed by echocardiography is a strategy that could bridge this diagnostic and treatment gap in CHD.

Keywords: Congenital Heart Disease; Nigeria; echocardiography; prevalence; school children; screening.

© 2020 Wiley Periodicals, Inc.

Related information

[MedGen](#)

LinkOut - more resources

Full Text Sources

[Ovid Technologies, Inc.](#)

[Wiley](#)

Medical

[Genetic Alliance](#)

[MedlinePlus Health Information](#)

Miscellaneous

[NCI CPTAC Assay Portal](#)