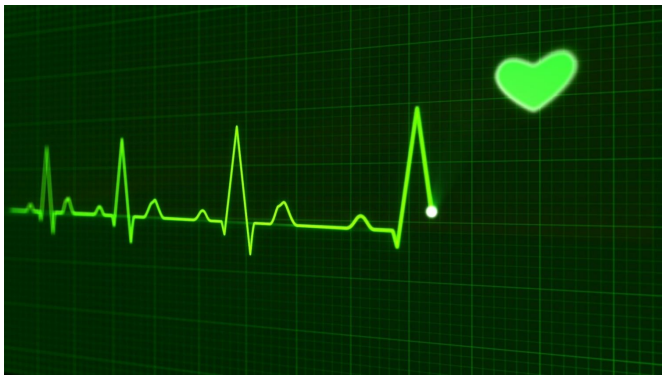
Even minor heart defects are associated with long-term problems in adulthood

29 June 2020



Credit: CC0 Public Domain

Long-term morbidity as well as a lower level of education and employment rate are common among adults who underwent congenital heart surgery during childhood, regardless of the severity of the defect.

A congenital heart defect in childhood increases the risk of chronic diseases, such as arrhythmia and heart failure, in adulthood. The risk of other diseases, including asthma, epilepsy and even psychiatric diseases, is also higher than usual. These adverse effects occur regardless of the severity of the heart defect.

These were the findings in a study published in the *Journal of the American Heart Association* and carried out at the University of Helsinki and the New Children's Hospital.

Heart malformations are the most common congenital structural defects of an individual organ. The study encompasses all patients who underwent congenital heart surgery in Finland aged under 15, from 1966 onwards.

"The findings emphasize the importance of long-term follow-up among this patient group. Furthermore, the study highlights the extensive coverage of Finland's national databases and the excellent opportunities for follow-up studies they provide, not available in many other countries," says Alireza Raissadati, a pediatrician specializing in pediatric cardiology.

According to another study, published in the *Pediatrics* journal, the effects of heart defects also extend to the quality of life. Adults who underwent heart surgery in childhood had a lower level of education and rate of employment than the control subjects; this was the case especially among men.

"It was surprising to see that patients with a simple heart defect also had a poorer socioeconomic status compared with the rest of the population," Raissadati says.

The study compared the level of education, rate of employment, marital status and number of children between adults who had undergone heart surgery in childhood and control subjects during a 60-year period.

More information: Alireza Raissadati et al. Chronic Disease Burden After Congenital Heart Surgery: A 47?Year Population?Based Study With 99% Follow?Up, *Journal of the American Heart Association* (2020). DOI: 10.1161/JAHA.119.015354

Alireza Raissadati et al. Long-term Social Outcomes After Congenital Heart Surgery, *Pediatrics* (2020). DOI: 10.1542/peds.2019-3745

Provided by University of Helsinki