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# Children with Congenital Heart Defects Sit too Much WHO recommendations are barely followed

Berlin, June 09, 2020 - Sport despite congenital heart defects? This is vital. A new study of the Competence Network for Congenital Heart Defects has shown:

Doctors give overly cautious advice.



Heart children need more exercise. Photo: © iStockphoto.com, FatCamera

One hour a day. That is the minimum amount of physical activity recommended by the WHO. But most children and adolescents in Germany get far less. According to the KiGGS Motor Module Study, only around 13 percent of 6- to 17-year-olds are active for one hour a day. This is the comparison group that the research team led by pediatric cardiologist Christian Apitz at Ulm University Hospital, together with sports scientist Claudia Niessner from the Karlsruhe Institute of Technology and pediatric cardiologist Jannos Siaplaouras, used for the world's most comprehensive study on physical activity among children with congenital heart disease to date.





## Children with Congenital Heart Defects Do too Little Sport

The S-BAHn (Sport in Congenital Heart Defects) study at the Competence Network for Congenital Heart Defects was sponsored by the Association of German Children's Heart Centers. The result: only nine percent of children and adolescents affected by congenital heart defects do one hour of exercise a day. Among children with severe congenital heart defects, the figure was just eight percent. "That is another three to four percent lower than in the same-age heart-healthy KiGGS comparison group," states Claudia Niessner. For this purpose, the scientists analyzed the complete data sets of 1,198 National Registry participants aged between 6 and 17 years with mild, moderate and complex congenital heart defects and compared these with the data of 3,385 participants of the same age range from the KiGGS Motor Module Study. As part of the nationwide S-BAHn study, approximately 1,700 underage heart patients and their parents answered questions about physical activity, medical care and exercise recommendations from their treating physicians.

## **Doctors Give Overly Cautious Advice**

The research team was surprised by the high number of study participants who reported limiting their physical activity on medical advice. This was the case for half of children and adolescents with complex congenital heart defects and on in three with moderate congenital heart defects. Among patients with simple congenital heart defects, this was the case in one in eight. The scientists see an urgent need for action here: "We knew from other studies that parents and caregivers in particular tend to keep young heart patients in a protective bubble. The fact that similar behavior can also be observed among attending physicians fills us with concern. This is a gap in advice that urgently needs to be closed," says Christian Apitz.

### **Expand Exercise Programs, Intensify Education**

For children and adolescents with congenital heart defects, daily physical activity is particularly important. Exercise has been shown to improve well-being in all people, strengthen nerves, muscles and the immune system, and promote concentration also counteracts the increased risk of life-threatening secondary diseases in patients with congenital heart defects. The researchers therefore unanimously recommend expanding the range of exercise options especially for children and adolescents with severe congenital heart defects. In addition, increased education by the treating physicians is important, the researchers said.







"Doctors must be able to devote sufficient time for the individual patients. Today's daily hospital routine hardly allows that. They should regularly discuss the patients' physical activity and encourage them individually to exercise regularly," cautions study first author Jannos Siaplaouras.

#### **Reader Service:**

Do you or your child have a congenital heart defect? By registering in the National Registry for Congenital Heart Defects, you support medical progress. Here you will also receive important information on current research projects and support offers. Learn more at: <a href="https://www.herzregister.de">www.herzregister.de</a>. Membership is free and revocable at any time. <a href="https://www.kompetenznetz-ahf.de/patienten/service-fuer-patienten/am-register-teilnehmen/">https://www.kompetenznetz-ahf.de/patienten/service-fuer-patienten/am-register-teilnehmen/</a>

#### For Your Research:

The results of the S-BAHN study were published in Frontiers in pediatrics. <a href="https://pubmed.ncbi.nlm.nih.gov/32426306/">https://pubmed.ncbi.nlm.nih.gov/32426306/</a>

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The National Registry for Congenital Heart Defects on Facebook <a href="https://www.facebook.com/herzregister/?ref=bookmarks">https://www.facebook.com/herzregister/?ref=bookmarks</a>