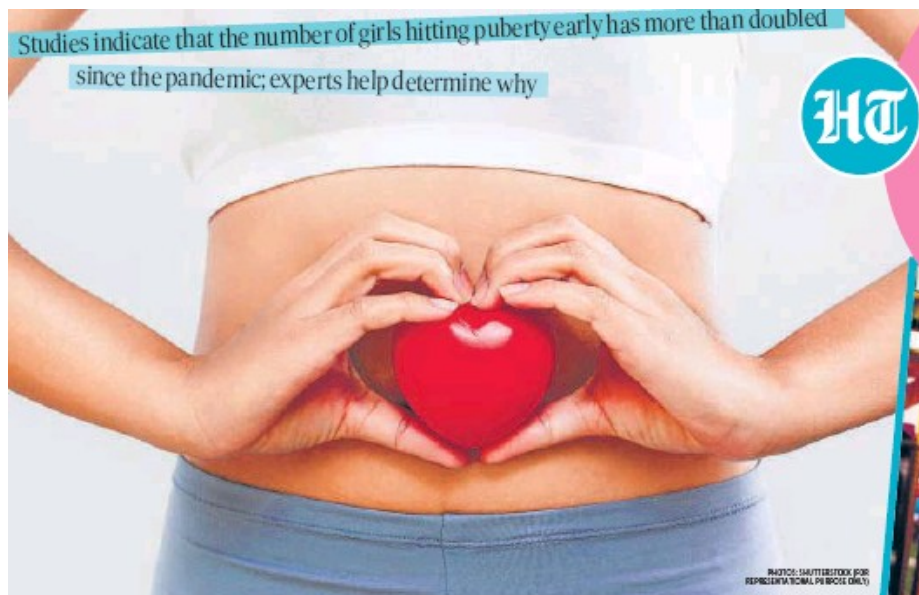


## COVID-19 AND EARLY PUBERTY: IS THERE A LINK?

Puberty early has more than doubled Studies indicate that the number of girls hitting since the pandemic; experts help determine why

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It's been almost three years since Covid-19 first struck the world, but the ripple effects of the pandemic are still being slowly uncovered. In the latest string of studies, researchers have observed a steady rise in the number of children, especially girls, hitting puberty earlier than usual (eight years of age). In India, for instance, a team of doctors at Hirabai Cowasji Jehangir Medical Research Institute, Jehangir Hospital in Pune, found a 3.6-time increase in early puberty cases during the lockdown, according to results published in the Journal of Paediatric Endocrinology and Metabolism recently.



Larger-scale studies have been reported from around the world. Researchers at the University of Bonn, Germany, observed that the number of girls diagnosed with early puberty at a medical centre remained constant between 2015 and 2019, at fewer than 10 cases a year. However, this number more than doubled to 23 in 2020, when the Covid-19 outbreak took hold, rising further still to 30 in 2021, according to results presented at the European Society for Paediatric Endocrinology 2022. Similar findings have also been reported from Turkey and Italy.

“We would see girls hitting puberty between 12 and 14 years of age. Now, I am seeing girls as young as 8 or 9 years developing pubertal features,” says Dr Uma Vaidyanathan, senior consultant, Obstetrics and Gynaecology, at a hospital in Shalimar Bagh, Delhi.

### THE BASICS

Puberty is the process of physical change in which a child's body matures into an adult's, making them capable of sexual reproduction. Dr Neema Sharma, director, Obstetrics and Gynaecology at a hospital in Vasant Kunj, Delhi, explains, “It's a phase when the development of secondary sexual characteristics, such as breast development and development of pubic and axillary hair among girls, takes place.”

Precocious puberty, on the other hand, is when a child's body begins changing into that of an adult too soon. "When puberty begins before age 8 in girls and before 9 in boys, it is considered precocious. While a child is bound to hit puberty as they age, precocious puberty is abnormal and needs attention," Dr Sharma informs.

**HOW IS THE PANDEMIC PLAYING A ROLE?** Notably, the age of puberty had been gradually dropping in India and the world over the past 20 years, even before Covid-19. What seems to have changed, however, is the incidence of these cases, with many doctors observing that the cases have "doubled and tripled".

While experts are yet to be certain of a reason, the larger consensus is that factors such as a sedentary lifestyle, increased screen time and weight gain during the pandemic might have a role to play. "Changes in central nervous mediators and an increase in catecholamines (a drug that acts as a neurotransmitter) might have contributed to the trigger," says Dr Divya Kumar, senior consultant, Obstetrics and Gynaecology at a hospital in Faridabad, adding, "Moreover, staying indoors has certainly exposed these children to specific contaminants, which work as endocrine disruptors and could have had an effect."

Dr Vaidyanathan adds, "The pandemic meant more prolonged use of electronic devices, a more sedentary lifestyle and excessive weight gain, which are all known to be associated with the early onset of puberty."

#### **THE IMPACT**

Precocious puberty can impact a child's physical as well as mental health, if adequate attention and care are not provided.

Short stature, behavioural problems triggered by hormonal changes, a possible early start to sexual activity without being fully aware of the consequences, stress, depressive tendencies, low self-esteem and poor body image can be observed among these kids. Apart from ensuring the child leads a healthy lifestyle, parents can play a significant role in helping them deal with the changes their bodies are undergoing. "As parents, be

**POSSIBLE REASONS FOR EARLY PUBERTY IN GIRLS ARE SEDENTARY LIFESTYLE, WEIGHT GAIN AND INCREASED SCREEN TIME DURING THE PANDEMIC. A BALANCED DIET, EXERCISE CAN HELP DEAL WITH THE CHANGES**

open and communicate with the child regarding the expected changes, without being judgmental. Also, stay in touch with the doctor. Remember, the majority of children tide over early puberty and lead perfectly normal lives when guided well and supported by parents," says Dr Vaidyanathan.