

LONG COVID IN KIDS HARD TO PINPOINT

While doctors in Singapore say they do see the condition in kids, it is ill-defined and children may be unable to articulate how they are feeling



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Primary school pupil Sophie loves dancing, but a month after getting Covid-19 in mid-2022, she suffered from headaches, double vision and issues with balance.

For months, she could not walk without support, let alone dance. She had to skip most of the latter half of her Primary 4 school year. Sophie's mother Julia, who asked for them both to be known only by their first names, had to take leave from her job in the technology industry for four months to care for her child.

It was an anxious time. "Sophie couldn't walk, she lost her balance," recalls the 45-year-old. "I kept thinking, 'How is she going to go through the rest of her life with double vision and not being able to walk?'"

At one point, Julia was told that her daughter's symptoms were psychosomatic, which means that the doctor thought that mental concerns, such as stress, were causing the physical woes.

"I understand where that was coming from, but it was not helpful," Julia says. "Even if it was psychosomatic, we still needed to know how to address it."

After numerous diagnostic tests, including magnetic resonance imaging, blood work and eye examinations, doctors decided that Sophie was suffering post-acute sequelae of Covid-19. This is also known as long Covid or post-Covid-19 condition.

People with long Covid may suffer physical, cognitive and mental health impairments after a Covid-19 infection. Sufferers have

described a number of symptoms, including persistent coughing or asthma-like symptoms; chest pain; heart palpitations; prolonged fatigue; anxiety; sleep disturbances; brain fog and immune disorders.

In November 2022, Sophie started a therapeutic regimen that included virtual-reality (VR) sessions at the National University Hospital (NUH) to help her with her balance. After four months, her mobility and balance improved.

From March 2023, she was able to walk without support. Now in Primary 6, she will soon turn 12 and is back to dancing.

Julia says: "She is back to 100 per cent. I'm afraid to even utter the words because I'm afraid that I will jinx it."

LONG COVID ILL-DEFINED

Doctors in Singapore say they are seeing cases of long Covid in children here. However, they add, it is difficult to identify the condition.

First, long Covid is ill-defined. It is being recognised via a broad range of symptoms that develop after Covid-19 infection, which cannot be explained by any other medical reason.

Second, children may be unable to articulate how they are feeling. Symptoms such as a persistent cough are easier to recognise, but others, such as fatigue or difficulty concentrating, may be misunderstood by parents.

Dr Shivani Paliwal, a paediatrician in private practice and head of IMC Children Clinic, recalls the case of a six-year-old who complained of fatigue three to four weeks after a Covid-19 infection.

This could have been easily overlooked, but she ordered a blood test, which showed that the child had high levels of creatine phosphokinase, indicating some stress and muscle injury. Rest was recommended.

Dr Paliwal is also seeing more cases of concurrent upper respiratory tract infections (URTIs) alongside or soon after Covid-19 infection. It is difficult for doctors to tell whether the child's symptoms are because of Covid-19 infection or the other URTIs.

Dr Dawn Teo, an otorhinolaryngologist at Mount Elizabeth Novena Hospital, sees patients with long Covid symptoms, such as persistent nasal obstruction,



Sophie playing virtual-reality games as part of her therapy with Mr Derek Tan and Ms Jessica Law, both senior physiotherapists in the Department of Rehabilitation at National University Hospital, in November 2022. PHOTO: COURTESY OF JULIA



Some children with long Covid may experience fatigue but find it difficult to express how they feel. PHOTO: ISTOCKPHOTO

runny nose, cough and tiredness. The patient's parents also report snoring, heavy breathing and disrupted sleep at night, which are associated with nasal congestion.

In the past year, she has seen more patients with these symptoms, but says it is difficult to estimate how many actually have long Covid. Fifteen to 20 per cent of such patients have a history of a recent URTI plus a positive Covid-19 test.

Dr Liew Woei Kang, consultant paediatrician at the Paediatric Allergy Immunology Rheumatology

Centre, says: "We evaluate many patients with chronic cough. Many parents think it is due to long Covid, but often it is due to recurrent infections, allergic rhinitis or asthma. There is a clear break between the cough of the Covid-19 infection and the next respiratory infection."

Dr Liew, whose centre is a subsidiary clinic of Foundation Healthcare Holdings, has seen two cases of long Covid in children in the past year.

In response to queries from The Straits Times, the Ministry of

Health confirmed that there is no official tally of long Covid cases in Singapore. This had been stated in the reply to a Parliamentary Question in 2022.

Anecdotal numbers seem to be down.

Dr Mark Ng Chung Wai of SingHealth Polyclinics says he has not seen any patient with long Covid concerns in the past year. The senior consultant and clinical lead for the Infection Prevention and Infectious Disease Committee Workgroup at the polyclinics says he did see such patients from early to mid-2022. He referred them to the long Covid clinic run by the National Centre for Infectious Diseases (NCID).

Associate Professor Barnaby Young, head of the Singapore Infectious Disease Clinical Research Network, says the long Covid clinic at NCID was less busy in 2023, with about half the referrals received in 2022.

Long Covid has become less common as the pandemic has progressed, he adds, thanks to pre-existing immunity from vaccinations and earlier infections.

Post-Covid Rehabilitation Clinic services are also run at NUH and Ng Teng Fong General Hospital.

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Persistent cough, fatigue most common symptoms

FROM C1

Dr Lim Jeong Hoon, senior consultant at NUH's Division of Rehabilitation Medicine, Department of Medicine, says these clinics had 190 patient visits in 2023, a drop from 250 in 2022. His data shows that 70 per cent of patients are discharged from the clinic within a year, and 20 to 25 per cent recover within two years.

The outpatient Paediatric Infectious Diseases clinic under NUH has seen 10 to 15 young patients with long Covid to date, according to Dr Chan Si Min, who is the hospital's head and senior consultant at the Division of Paediatric Infectious Diseases, Department of Paediatrics, Khoo Teck Puat - National University Children's Medical Institute.

A survey conducted by researchers from KK Women's and Children's Hospital between Oct 14, 2022, and Jan 15, 2023, found that one in six children and young persons (aged from zero to 18 years) developed long Covid.

The most common symptoms were persistent cough, nasal congestion and fatigue. About half of the patients recovered within six months.

KKH declined to respond to questions about how many cases of long Covid it has managed.

Dr Lim Yang Chern, paediatrician at Thomson Paediatric Centre, Thomson Medical, has seen between 20 and 25 patients a month with post-Covid-19 symptoms since early 2023. Three-quarters of these have symptoms that persist for 12 weeks. Most of these patients are unvaccinated.

While he usually sees children with mild asthma-like symptoms or allergic rhinitis-like symptoms, some have fatigue or other neurological issues.

He saw a primary school pupil around 10 or 11 years old, who became fidgety and was unable to focus on his studies after a Covid-19 infection. The child was assumed to be acting out, but Dr Lim realised that the child truly could not concentrate, despite trying.

He wrote a memo to the school asking teachers to let the child take a bathroom break if he was fidgety. Given rest and appropriate support at home and school, the child's symptoms resolved in four months.

"Parents need to have greater awareness that neurological long Covid does exist," says Dr Lim. "The children with cognitive and psychological sequelae are at risk of being misunderstood."

LIVING WITH LONG COVID

In general, treatment of long Covid is geared towards alleviating symptoms and adjusting daily routines to allow the patient time to rest and heal.

Dr Khong Haojun, family physician and associate consultant at the National Healthcare Group Polyclinics (NHGP), says patients with long Covid present with prolonged cough or fatigue and lethargy that persists for four weeks after recovering from a Covid-19 infection.

"Depending on the symptoms, patients would be offered medications and health interventions, such as advice on a graduated return to exercise and physical activity, or quitting smoking to help relieve symptoms," adds Dr Khong, who is also Advisor for Infectious Diseases & Immunisa-



Paediatricians say parents play a vital role in identifying long Covid in their children and in managing the symptoms.
PHOTO: ISTOCKPHOTO

tion Specialty Advisory Group at NHGP.

Dr Steve Yang, respiratory physician at Mount Elizabeth Hospital, sees about 10 patients a month with respiratory-related long Covid symptoms. These include fatigue, shortness of breath and issues with focus, or brain fog.

Targeted physiotherapy and reduced workloads help such patients, he says. However, he cautions that recovery may be slow and incomplete as symptoms can last for months. "Persistence in lifestyle changes and optimism are important factors that will help in their recovery," he adds.

Paediatricians say parents play a vital role in identifying long Covid in their children and in managing the symptoms. Social support from schools and childcare centres or family and friends is also crucial.

Dr Chan says once organ dysfunction and other medical issues have been excluded, paediatric patients with long Covid at NUH are offered physiotherapy and occupational therapy to help them with activities of daily living.

She may, for example, request the school to allow children to use the lift instead of having to climb stairs to reach their classrooms, and exempt them from physical education and sports. The teachers may need to help them more with schoolwork, or give them more time to complete it.

Dr Chan adds that in Sophie's case, "the dizziness and balance issues are likely neurological symptoms of long Covid. As to why this occurs, the jury is still out, but

After four months, she was much better. I could see improvement in her mobility and balance. My advice to other parents is to let the child truly rest. Don't attempt to go to school or rush to pick up your life again.



JULIA, whose daughter Sophie suffered from long Covid but is no longer experiencing its symptoms, on how parents can help their kids on the road to recovery

proposed mechanisms include inflammation or injury or damage to the nerves or blood vessels."

Vestibular rehabilitation was key to Sophie's recovery, with exercises that helped her manage her dizziness and balance. From November 2022 to February 2023, she went for weekly, and then fortnightly, sessions at NUH.

Her therapy included VR goggles while in a harness for support, and playing games with dynamic movements, such as tennis.

Ms Jessica Law, senior physiotherapist at NUH's Department of Rehabilitation, says: "Virtual reality has been found to be helpful to improve symptoms through optokinetic stimulation, which gradually improves patients' tolerance to triggering stimuli."

The games improved Sophie's postural control and were also fun, encouraging her to continue with the therapy.

Julia says: "After four months, she was much better. I could see improvement in her mobility and balance."

She is also grateful for the school's support in granting Sophie time off to rest. Sophie was allowed to advance to Primary 5 based on her prior performance.

"My advice to other parents is to let the child truly rest. Don't attempt to go to school or rush to pick up your life again," says Julia. "To me, it's a miracle that she has recovered fully."

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