

Infectious Questions EP 26: Children and COVID-19 (2019-nCoV, Pt 11)

Shivoan: Welcome to Infectious Questions, a public health podcast produced by the National Collaborating Centre for Infectious Diseases. I'm Shivoan Balakumar. Our series on COVID-19 continues, covering topics and questions of interest among public health practitioners in Canada. If you have any questions to submit, please send them to nccid@umanitoba.ca or find us on our website at NCCID.ca. On our eleventh episode, you'll get a snapshot of the state of information and evidence on COVID-19 among children and adolescence in Canada. We spoke with Dr. Joanne Langley, a pediatric infectious diseases clinician at the IWK health centre at Dalhousie University in Halifax. She's also a vaccine researcher and a member of the Canadian Paediatric Society. Here's NCCID's Margaret Haworth-Brockman with Dr. Joanne Langley.

Margaret: Thanks very much for joining us this afternoon, Joanne. I'd like to begin by asking you to tell us about the state of information and evidence about COVID-19 in children in Canada.

Joanne: COVID-19 has certainly taken over our lives in Canada. And, as the over 45,000 Canadians that have been confirmed diagnoses of COVID-19, only about 5% of those are in children. We understand that the range of disease in children is much less severe. And, of course, it's important to recognize that the 45,000 cases are the ones that came to medical attention because no one is, at the point that we're having this conversation in April, doing widespread community-based surveillance studies. So, one would expect, given the epidemiology so far, that if one looked in a widespread way across the communities, one would find a lot of people that didn't have symptoms and didn't come to medical attention. So, as those 1,240 children that have been diagnosed under 19 years of age in Canada, about 17 of those children did require care in a hospital, and there were a few intensive care unit admissions, just two, but no deaths so far in Canada, thankfully.

Around the world there are probably around 11 studies now that are reporting retrospective case studies, case reports, about 650 children are reported in those 11 studies. And, in those children who've had laboratory-confirmed COVID-19, that's with a PCR test from the nose, about half will have a fever, coughing about half, another third will have a sore throat, 8% - so, 8 out of 100 would have a runny nose, rhinorrhea.

Margaret: Has there been any additional restriction protesting of children that you're aware of?

Joanne: I don't know that there would be restrictions. If children came to care with any illness, they would be treated the same way as in the COVID situation; that is that we have to take care of the child we see in front of us. So, if they have a respiratory illness, I think most of my colleagues across the country would say if a child was presented to an emergency room and were ill in hospitals or acute care centres, test for COVID, influenza and respiratory syncytial virus or an even broader diagnostic panel that would look for a range of viral illnesses. I think in the coming weeks, as we try to understand as a country how to release the restrictions that are currently in place against our social movements, we'll have to understand the epidemiology of COVID in children better.

And, of course, people wondering if they are getting infected, but not having an illness or have an asymptomatic infection or are having such mild illness that parents aren't bringing them for medical attention. Or, are they not getting illness at all because earlier in childhood they were infected with some of the common coronaviruses that we know are a fairly common cause of respiratory tract infection in children. So, coronaviruses have been around since the 1960s, at least that we've known about them in humans. I think they date before that, but it wasn't until 1965 that they were diagnosed in humans. And epidemiology since that time has shown them to be a common cause of respiratory illness in children. Sometimes with co-infections and the range of illnesses, it can be anything from upper respiratory tract to lower respiratory tract illness. But these coronaviruses were known before SARS-CoV-1 and before MERS, both of which have more severe disease.

So, although severe disease in children is less common than it is in adults, it can happen. I think it's important for parents and for care providers to be ready to see the child and take care of the child who is ill and not be dismissive about any respiratory complaints. A very small percentage of children have required respiratory support in intensive care, but that has happened. Sometimes that's been in children with co-morbidity such as lung or cardiac illness or immuno-compromised. But the very possibility of that means we have to keep open minds when assessing children and be ready to provide the appropriate care, should they become ill.

Margaret: Well, thank you, Joanne. You had just mentioned the physical and social distancing that is in place across the country. Do you have any concerns about how children are responding in terms of their mental wellbeing? Any particular worry or evidence for additional concerns regarding adolescence and teens?

Joanne: This is a major societal change in our life and, certainly, if one goes on media, whether it's television or radio or social media, you're going to see quite frightening images and news about the severe end of the spectrum of this pandemic. It's indeed causing a major problem for all of humanity,

but we have to think about how we talk to our children about COVID-19. Our children may – teenagers may get accurate information from say a site like a local province or jurisdictionally public information website that could be very accurate, but they might not interpret it correctly. They might also have access to things that are incorrect through other information sources. So, I think it's important to have conversations with your child or teen about this very stressful event. I direct folks to the Canadian Paediatric Society website where "Caring for Kids" is a section on 'How can I talk to my child about COVID-19' and also link to another document to help children and teens cope with stressful public events.

Those documents go through similar approaches, but in particular, they talk about reassuring your child that doctors, nurses, scientific experts around the world are working hard to keep us safe and healthy that to use that opportunity to correct any misinformation about this germ, this virus, that we should be honest, but positive and indicate that if anyone gets sick we're going to bring them to medical attention. It's also good to have a little bit of an eye over how much screen time they have. So, they are necessarily going to be having more screen time in order to do their schoolwork and perhaps for connecting with their family and so on, but it's good to have an idea of what they're actually doing, particularly in times when you may not be watching them as you're trying to do your own work from home.

Margaret: Thank you. Thinking about both the physical and mental health of children, is there ongoing public health level planning for children and adolescents happening in Canada?

Joanne: I'm sure there is. As part of thinking about our entire society, one has to think about each age group. And, not knowing for sure what the role of children is in the overall society's burden of COVID is a stumbling block and a gap in our knowledge. So, one of the first things I think that will be considered will be trying to understand what role children play in transmissions. You'll probably be aware that not every country has closed schools for every age group. For example, in Sweden, they've closed universities and older high schools, but not elementary age children. So, different approaches across different countries will inform our understanding.

Certainly, we'd all like children to be back in their typical healthy environment, interacting with other children, having opportunities for play and exercise and learning with other kids in their schools and out and about in parks and on their bicycles, seeing their grandparents and extended family. I think this is a priority across all the folks in public health and among pediatricians.

Shivoan: That was Margaret Haworth-Brockman speaking with Dr. Joanne Langley. If you have other public health questions on COVID-19, please submit them to nccid@umanitoba.ca. Production of this podcast has been made possible through a financial contribution from the Public Health Agency of Canada, but the views expressed here do not necessarily represent those of the agency. The host organization at the NCCID is the University of Manitoba. Learn more at nccid.ca.