Infectious Questions Ep. 21: Preparing for COVID-19 in Long Term

Shivoan: Welcome to Infectious Questions, a public health podcast produced by the National Collaborating Centre for Infectious Diseases. I am Shivoan Balakumar.

On the sixth episode of our series on COVID-19, we'll take a deeper look into how Canadian long-term care facilities and nursing homes are preparing for this novel coronavirus. You'll get to listen to our phone conversation with Dr. David Strang, a former Medical Director of the Long-term Care Program at the Winnipeg Regional Health Authority and a co-founding member of the Long-term Care Medical Directors' Association of Canada. Here is NCCID's Harpa Isfeld-Kiely with Dr. Strang.

Harpa: Dr. Strang, there's a wide recognition that COVID-19 has more severe outcomes for the elderly and those with comorbidities. In light of those risks, can you tell us about the key challenges long-term care faces in managing COVID-19 and potential spread of infection in this population?

David: Yeah, the long-term care population is at very high risk for this pandemic. They're kind of sitting ducks. They're not only grouped in institutional care where transmission of infectious diseases is always higher when people live in close quarters, but they're also elderly. Mean age in long-term care is well over 80, so they're at higher risk of getting infectious diseases from that point of view.

With this virus, the mortality is much higher with the elderly than any other group, so once a person in long-term care gets it they're at higher risk of dying from it. And then the whole issue of the dependency and cognitive impairment that are very common in long-term care — that's the main reason we have long-term care — also makes people at high risk for contracting the illness in the first place and then having severe outcomes due to it.

So, that's the one challenge — just a vulnerable population, the high risk. Once it gets into a nursing home, it's going to be a high risk of spread widely amongst the residents and staff. Even the visitor population, I mean many visitors are children or grandchildren, so they're not particularly vulnerable, but the spouses of long-term care residents are also elderly and may be at high risk.

But, one other issue with staff is that in long-term care there are relatively low staff ratios. If a few staff members become ill, that could have a significant effect on just trying to keep the staffing up. The other issue with low staff ratios is that it's likely that we'll be keeping more ill people or even dying people in the nursing home rather than sending them to

hospital. If there's widespread severe illness throughout the community, the hospitals may be overwhelmed, so there may be more fairly ill people in long-term care receiving supportive and palliative care. So again, that's a challenge to the low staff ratios.

Nursing homes, sometimes people think that nursing homes are hospitals, and they're not. They're homes with some nurses and doctors. So, they don't have the equipment, the depth of staffing and support services that a hospital would have, so it is quite a challenge if you have several or many sick people in the nursing home at the same time and only one or two nurses that provide all the nursing care along with all the healthcare aides. That's another big challenge is the staffing issues.

Another challenge is to try and prevent onset of illness in a nursing home. Then, once there's one affected person, to try and prevent spread you would like to have infection control precautions amongst all the residents as well as staff. But with the residents, there's many long-term care residents that have cognitive impairment and aren't able to comply or remember any kind of precautions, so it's another burden put on staff just trying to keep track of where people are and trying to keep affected people not contaminating other residents.

Compounding all of that is that I think all provinces now have reduced visitors to long-term care, so I think visitors are only allowed if the person is dying or severely ill. Routine visits, daily visits for company and support are not allowed. If the family member has been providing direct care — which is quite common to supplement what the staff does — there may be some exceptions with that. But again, there's fewer family members around to do this or that for the person, so again, that falls back on the overworked staff.

Not having visitors is also a risk to the person. There is evidence that not having visitors may increase the risk of delirium or dehydration and things like that. So, there's plenty of challenges in long-term care with this pending epidemic.

One other curious or interesting point when talking about vulnerable people, many of physicians, certainly not all but many, are later in their careers shall we say. A fair proportion of the physicians that provide care in long-term care may be older themselves and may be at higher risk of contracting the illness. People are looking at options such as doing routine care remotely or virtual rounds, some things like that to reduce the risk to physicians.

Unfortunately, you can't do that for healthcare aides. They have to be there with hands on, and same with nurses doing assessments and

providing medication. But, for physicians anyway, they might reduce the risk by providing care remotely.

Harpa: What steps are Canadian long-term care facilities taking to prepare for COVID-19? And, what are the needs in long-term care?

David: So long-term care, like every other sector of the healthcare, or every other area of healthcare, is making comprehension preparations. For long-term care, the key focus is trying to prevent the illness from coming into the home in the first place. We mentioned the restriction of visitors to people who are ill or life-threatening illness, end-of-life care. In some cases with more screening, a family member who provides a significant amount of direct care might be allowed in.

Going along with that, like other healthcare institutions, there's probably reduced number of entrances to the building with a screener at the door to screen both staff and the visitors that do come for travel history and exposure and symptoms. Staff that have been exposed or are symptomatic, or visitors, would be asked to self isolate like any other healthcare institution.

For the workers in a home, once there is a case the recommendations are to use both contact and droplet precautions. The other preparations and steps to take are to keep up close liaison with public health. We're a bit familiar with that in the long-term care sector because of the annual influenza epidemic. This has got some similarities with those. Obviously, it's a different virus and more severe, but it's the same concept every year with influenza, so we have protocols for that, how to monitor for and declare outbreaks. So now, we just apply the new definitions for COVID, but it's the same context in public health that we have.

The other key step is to consider who if anyone should transfer from the nursing home to the acute care system if and when they become ill. That's always a question in long-term care. How much care can you provide in the nursing home? It brings in the whole complex issue of goals of care and advanced care planning, how much aggressiveness of care a person wants or would want. It involves their substitute decision maker to make decisions about these questions. Whenever possible, we do try to manage people in nursing homes.

With the epidemic, depending on how severe the burden is in the acute care centre, there may even be a higher imperative to keep people in the nursing home and provide care, even if they're seriously ill, in the nursing home if possible. Some jurisdictions have supportive systems in place. Most nursing homes don't have the capacity to provide intravenous medication. So, some jurisdictions have ways for, like I say, the paramedics or someone else to come and provide short-term

intravenous therapy to allow the person to stay in the nursing home rather than go to the hospital. All of those systems will have to be amped up or, if not present, considered or perhaps developed in places that don't have them.

Harpa: How do preparations differ for COVID-19 compared to what's in place for the management of other infectious diseases like seasonal influenza in long-term care?

David: Well, the COVID-19 pandemic has some similarities with our annual influenza pandemic, or I guess it's epidemic because influenza is not new. With influenza, we have vaccines and medications, so that's the major difference. Obviously, people are trying to develop medications and vaccines for COVID-19, but we don't have them yet. That would be the major difference.

Other differences are that COVID-19 has a higher case fatality rate and appears to be more infectious even than influenza, which is already pretty infectious. The management after that is relatively similar. It's this whole social distancing and protective precaution, hand washing for actual cases. Healthcare workers would wear gloves and gowns. For aerosol type procedures, we have to go to the higher protective levels of the special N95 mask.

The main difference is that COVID is new, no drugs or vaccines, and it's worse, a higher mortality. The social distancing measures for COVID are more stringent than the worst influenza we've had in, well, since 1918 I think.

Harpa: Thank you. Do different considerations apply to assisted living, seniors' residences and nursing homes?

David: Yeah, assisted living and seniors' residences, apartment blocks with varying levels of staff, the exact services provided differ from province to province. Even in what we call the residences, there's a difference from province to province, so it's hard to generalize. But, there certainly is homecare or personal care provided in a lot of them, whether it's organized through homecare or through the site itself, like a nursing home.

That being said, the protocols for homecare workers going into a suite or somebody's house in the community are similar to what a healthcare aide or a nurse in a long-term care facility would have. So, if there's somebody with COVID-19 in the house, whether it's the patient they're treating or not, they wear a protective gown and mask and gloves and do their hand washing. Then, if there's any procedure that makes aerosol droplet transmission possible, they would have to wear the N95 and a face shield.

The homecare for the most part is necessary care. If it's kind of optional, then we don't provide it. Basically, all the homecare that's provided is pretty well necessary anyway, so it's not as though we can stop providing homecare for people. The process then is to do all the screening, make sure we know who's affected or symptomatic or not. If anybody's got confirmed or suspected COVID, then we would use the protective equipment and precautions.

The other things that have been put in place are a restriction of the congregate activities that happen in assisted living. Many of those places have congregate meal programs where people come down to a dining room, so a lot of those, or all of them, have been suspended and people are eating their meals in their rooms. Then, activity programs that happen in groups are also suspended for the duration.

Harpa: Where is there need for coordination with other healthcare providers and public health? Who needs to be working with long-term care service providers?

David: A small nursing home may only have 50 or 100 staff altogether, and that's for 24/7 total care of 100 people that depend on you. So, if you get a dozen or two dozen staff either on isolation or symptomatic with COVID, you're already in a crisis of being able to have people there to look after these dependent vulnerable people.

So, health regions and agencies are going to have to be the backup for the staffing crisis in long-term care as well as in the acute care hospitals. I already mentioned that we have working relationships with public health from influenza, so the relationships are similar. The specific criteria are different in specific ways. Then, I already mentioned about the relationship with the emergency room and systems to try and avoid transfer to ER. I've kind of mentioned palliative care, but people will have to be providing palliative care in nursing homes. They would already, but it may be a different kind of palliative care and they may need more support for that as well.

Harpa: What messages to residents and their caregivers or family are long-term medical and administrative leaders providing to prepare or reassure people about COVID-19?

David: In acute care and in long-term care, the main message is there's a lot of preparation going on and coordination. People are trying hard to affect the curve and do the social distancing to flatten the curve so that healthcare is not overwhelmed. But, when things heat up, the preparations are in place and coordination to provide backup for places that are having trouble.

And, that would be the same message for the workers in healthcare as well as the family members, especially when they're not allowed to visit and see how their family member is doing. A combination of follow the recommendations and try and flatten the curve, but at the same time to provide some reassurance that we're working hard to keep things under control and manage as the process unfolds.

So, like every other part of healthcare, long-term care is just trying to prepare for a largely unpredictable future. We know there's going to be lots of cases. We don't know how many and we don't know where they will occur first, and we'll just have to have all of our ducks in a row so that when things do happen we're prepared and know what to do next.

Shivoan: That was Harpa Isfeld-Kiely's phone conversation with Dr. David Strang. If you have other public health questions on the 2019 novel coronavirus, please reach out to us.

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