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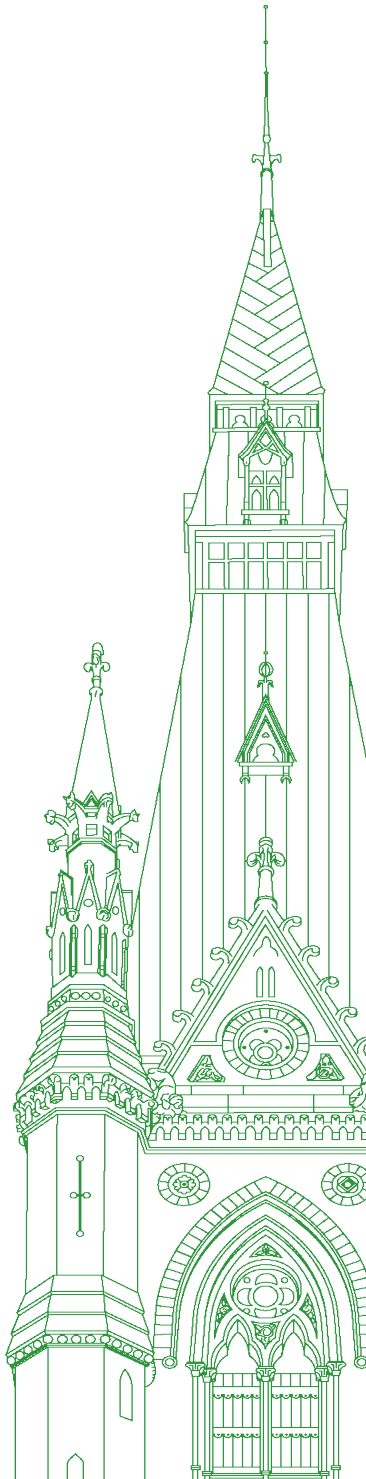

Chair: Mr. Sean Casey

Standing Committee on Health

Wednesday, June 1, 2022

● (1730)

[*English*]

The Chair (Mr. Sean Casey (Charlottetown, Lib.)): I call this meeting to order.

Welcome to meeting number 23 of the House of Commons Standing Committee on Health.

Today we're going to meet for one hour to hear from witnesses for our study on the emergency situation facing Canadians in light of the COVID-19 pandemic.

Before I introduce today's witnesses, I have a few of the standard reminders for meetings.

This meeting is taking place in a hybrid format, pursuant to the House order of November 25, 2021.

For members, please wait until I recognize you by name before speaking, and please mute yourself when you're not speaking.

For the witnesses, if you aren't already aware, you have the choice at the bottom of your screen of either the floor, English or French. For those in the room, you can use the earpiece, of course. Please refrain from taking screenshots or photos of your screen. All of the proceedings today will be made available on the House of Commons website.

To our members, in accordance with our routine motion, I am informing the committee that all witnesses have completed the required connection tests, probably multiple times, in advance of the meeting.

Let me now welcome the witnesses and tell you how much we appreciate the efforts you have made to be with us. We very much look forward to hearing from you, and obviously you look forward to speaking to us. Otherwise, you wouldn't keep coming back and having to deal with the exigencies of democracy in Canada in June.

With that, we have with us here today, Dr. Wai Haung Yu, assistant professor, department of pharmacology and toxicology at the University of Toronto, and independent scientist, brain health and imaging, Centre for Addiction and Mental Health; Dr. Noni MacDonald, professor of pediatrics, infectious diseases, Dalhousie University and the IWK Health Centre; and from the Canadian Pharmacists Association, we have Danielle Paes, chief pharmacist officer.

Again, thank you so much for being with us.

We're now going to hear opening statements of five minutes or less.

Dr. Yu, we're going to start with you.

You have the floor. Welcome.

Dr. Wai Haung Yu (Assistant Professor, Department of Pharmacology and Toxicology, University of Toronto, and Independent Scientist, Brain Health and Imaging, Centre for Addiction and Mental Health, As an Individual): Thank you, Mr. Chair and the honourable members of the committee, for the opportunity to speak with you today.

As the Chair has mentioned my name is Ho Yu, and I'm an independent scientist at the brain health and imaging centre and geriatric mental health research services at the Centre for Addiction and Mental Health, or CAMH. I am also an assistant professor in the department of pharmacology and toxicology at the University of Toronto, and a member of the Canadian Association for Neuroscience, a professional organization with over 1,000 brain scientists across the country.

I am here to discuss the impact of brain health on society and the importance of research.

It's estimated that one in five Canadians experiences depression annually, and two in five young adults experience moderate-to-serious psychosocial stress. Through research, we also know that depression and anxiety are risk factors that impact older adults and contribute to dementias like Alzheimer's. This comes from not only clinical research, but basic or fundamental and translational research that untangles the complexity of the brain. In fact, disabilities from brain disorders represent the largest impediment to productivity. This alone is a major reason to tackle a problem that has only been magnified during the pandemic.

While COVID research is focused on its impact, spread and treatments, we need to consider the long-term biological and psychosocial effects from the pandemic to address the brain health needs of Canadians. Researchers have noted that individuals who are experiencing the greatest anxiety are also those who are most vulnerable to COVID, including young children and older adults.

During the pandemic, Canada invested extensively in research to ensure the safety and well-being of the people. This is an example that when resources are committed to scientific research, it can dramatically improve outcomes.

In March 2020, right before the start of the pandemic, I returned to Canada and came to CAMH, after almost two decades at Columbia University and New York University. I hope that I can represent a reverse brain drain, but this requires the support of stakeholders like you and your colleagues.

At CAMH, I have been able to maintain an innovative program in the lab, training early-career scientists, and working with my colleagues at CAMH to inform the public on brain health and aging.

From the 2021 census results, and globally, we know that one of the fastest-growing populations are the elderly. With colleagues across Canada and the world, our mission is to understand the intricacies of the brain, share our knowledge with society and hopefully abate an oncoming global health crisis of dementia.

Funding support is critical for the success of these health programs, and research is part of that integrated and comprehensive process. When we discuss translational and clinical research, we must also consider the fundamental basic science behind that. Canada has had a successful history of researchers, from fundamental science to application. Drs. Donna Strickland, Wilder Penfield, Maud Menten and Pieter Cullis are only some of the many transformational Canadian scientists. This requires funding support, so that we can maintain and continue to excel in the technology industry and maintain the tradition of science excellence in Canada.

At CAN we hope that this committee recognizes the importance of this research funding. In recent years, and especially during the pandemic, funding growth has slowed, including from the major tri-agencies, which are CIHR, NSERC and SSHRC. Couple that with inflation, and we are starting to lose pace in terms of research potential. Canada has slipped to sixth among the G7 nations in terms of R and D spending to GDP.

Research investment is not only important for brain health, but it's an economic multiplier, providing not just short-term economic growth, but high-value employment and long-term financial and societal dividends from these discoveries. We also train highly qualified professionals, not just the next generation of scientists, but entrepreneurs, policy-makers and medical professionals, ensuring the medical and technological success for generations to come.

COVID hit all of Canada hard, and that includes science. Labs face hyperinflation due to supply chain issues, rising wages, especially for those early-career scientists, and higher costs for newer technology to compete and innovate.

We ask that when the government consider funding priorities, tri-council investment in research be highly valued, including a 25% short-term stimulus, and commitment to sustained annual growth of about 10% to research programs to benefit society economically and medically.

I believe that Canada research is viable. We have a difficult task ahead of us when it comes to brain health and disorders, and we must also learn from the past, both errors and successes, to ensure that scientific research is robust in this country. We look to this committee and all MPs to sustain research investments through tri-council to support generations to come.

Thank you.

● (1735)

The Chair: Thank you, Dr. Yu.

Dr. MacDonald, you have the floor for the next five minutes. Welcome.

Dr. Noni MacDonald (Professor of Pediatrics (Infectious Diseases), Dalhousie University and IWK Health Centre, As an Individual): Thank you.

I'm pleased to be able to speak to the committee looking at the COVID-19 pandemic and the issues that have been raised. A number of them are very important.

One of the big issues that was raised was equity. There was inequity in the impact of the disease based on age. There was inequity in terms of vaccine access and acceptance. There was inequity in adherence to public health non-pharmaceutical measures. Also, we certainly saw a huge stretching of the health care systems across the country, some more seriously than others because of differences in the rates of the disease and the rates of vaccine acceptance across the country.

The WHO has recognized that one of the major problems we saw during this pandemic was the infodemic, the misinformation and disinformation, and it has had a huge impact on equity in terms of acceptance of public health measures and acceptance of vaccines. This has literally cost Canada millions and millions and millions of dollars.

We've done fairly well overall. If you look at Canada and COVID, compared to the U.S. we have about one-third the death rate per million. We are also better than the United Kingdom. We are around the rates for Israel, but we're not as good as Norway and a number of other countries.

I chaired at committee at the Royal Society of Canada, which issued report that looked at COVID vaccine acceptance. The framework was put forward and the executive summary was presented to you.

Vaccine acceptance is very complex. There are four domains that are in the framework as well as four themes, but in the domains, the usual ones we've always talked about are where people are in their place, their culture, their social societies and their organizations, but we've added the health care system, because it really mattered where the health care system was in terms of their practices and their policies, and in terms of the politics of what was going on during that time.

We also recognized immunization. It's the green box in the framework. The ability to access accurate and reliable knowledge was not the same across Canada and very clearly showed that we have a deficit in the ability of many in our population to think critically to be able to understand when somebody's trying to con them with misinformation and incorrect recommendations.

In the Royal Society of Canada report, there are a number of recommendations for the federal, provincial and territorial governments. In particular, I want to emphasize numbers 8, 10, 11 and 13.

Number 8 speaks directly to federal, provincial, territorial and indigenous governments, in asking that they “ensure that all aspects of all parts of the vaccination process”—and, I would reiterate, not just for COVID vaccines but for routine immunization, because not doing this costs us money as well—from approval of the vaccination programs to adherence to the “fundamentals that engender the development of trust”, are really understood. There's a table that goes with this in the full report.

Number 10 states “That all jurisdictions put laws in place that support the development and implementation of a National Immunization Framework that includes equitable access to vaccines” across our country, and this equitable access is for all—vulnerable minority groups, Blacks, indigenous people, persons of colour, children, the elderly, everyone—and that we adhere to the fundamentals that are important for that to happen, and that we support routine immunization across “all ages” and also support “immunization research”.

Number 11 states “That government departments, including departments of Health and Education” at the provincial and territorial levels, supported by the federal government, “work together to optimize immunization acceptance strategies.” This includes ensuring that we get critical-thinking education in our schools and, I would say, from grade 1 all the way through to high school and on to post-secondary education. Not doing this means that we are going to continue to be so susceptible to the infodemic, whether it's about health, climate change or even what provincial government party or federal government party is going to come in. There is so much misinformation out there.

The last one I wanted to emphasize is number 13, which is that federal, provincial, territorial and indigenous governments “aggressively support upgrading [the] electronic health information systems across [the] country to ensure” that all have “patient centred and fully integrated” health information systems.

● (1740)

Without this, we made a mess of trying to roll out and know who should get immunizations, who was at highest risk, because we simply didn't have that information. That's unacceptable in 2022, because we know how to do that.

Lastly, I want to say one other thing about our health care workers and those in public health. They have suffered significantly from what's called “moral injury”. They had to bear witness...and failed to be able to act in the way they wanted to act, because there was a failure to support them, to do what needed to be done to give the patients the care they wanted, whether they were patients in hospital or people in the community. That is just wrong.

To fix moral injury, it is not about giving them a wellness break and saying they are just burned out. No, it's about our institutions stepping up to support them, to give them what they need to be able to do the jobs they have been trained to do.

Thank you.

The Chair: Thank you, Dr. MacDonald.

Next, from the Canadian Pharmacists Association, we have Danielle Paes.

You have the floor.

Dr. Danielle Paes (Chief Pharmacist Officer, Canadian Pharmacists Association): Thank you, Mr. Chair.

Good evening and thank you for the opportunity to bring a pharmacist's perspective to this important work.

My name is Dr. Danielle Paes. I am the chief pharmacist officer at the Canadian Pharmacists Association. Today I am joining you from the traditional and unceded territory of the Three Fires confederacy of first nations, the Odawa, Ojibway and the Potawatomi.

I'd like to focus my remarks on the impact COVID-19 has had on patient access to primary care and how this has changed pharmacy practice in Canada.

When the pandemic began, access to regular community health services for patients became very limited. Lockdowns meant that many clinics closed and wait times grew tremendously. Because pharmacies are designated as essential services, we stayed open. It was a scary time for us as we didn't know how the virus was transmitted or how to keep our staff safe.

Adding to this, with everything shut down, patients were coming into pharmacies in droves trying to renew all their prescriptions at once. Our set-up isn't designed to withstand that kind of demand and so it caused huge pressures on drug supply. With most of our medications manufactured outside of Canada, we didn't know if there would be a long-term impact on the supply chain and so we essentially spent the first few months trying to manage and protect access to medication.

At the same time, because we were among the few health care services seeing patients in person, we became a primary source for reliable COVID-19 information. It's only recently that we've started to truly understand the toll that those early days have had on our pharmacy workforce.

Fast-forward a bit, and as the committee will know, pharmacy teams have played a huge role in COVID-19 testing and vaccinations. In fact, we've administered over 17 million COVID-19 vaccine doses, and some provinces are now relying completely on pharmacies to administer these vaccines moving forward.

While the pandemic has dominated much of our attention, the opioid crisis continues to rage on. Thanks to a federal exemption provided under the Controlled Drugs and Substances Act, pharmacists have been able to close some of the gaps in care for patients who use opioids and controlled substances.

Before the pandemic, if a patient came into the pharmacy on a Friday evening for a dose of methadone, the prescription had expired and their doctor's office was closed, a pharmacist could not dispense that drug. The patient would have been sent to an emergency department or, worse—as we've heard—they would have turned to street drugs and risked an overdose.

In the current environment, especially as we're facing shortages of primary providers, access to additional services and care from pharmacists is proving to be extremely valuable to people living in Canada. Unfortunately, our scope and ability to offer equitable care across the country is limited. This is particularly true in our remote and rural communities and our northern territories.

Point-of-care testing, prescribing and the ability to adapt drug therapy are some areas of pharmacy practice that are vastly inconsistent from one jurisdiction to another. For example, in Quebec, pharmacists were the first in the world to be given the authority to prescribe Paxlovid to treat COVID-19. A few other provinces are now moving in the same direction but regulatory obstacles have prevented many patients who would benefit from this life-saving therapy from getting it quickly.

Limited access to basic care during the pandemic has been the reality for most people living in Canada. Nearly 15% of people went into the pandemic without a regular health care provider and about half had a hard time getting the care they needed in that first year. The reduced access to care throughout the pandemic and the backlogs we're now seeing across the country have also led to delays in diagnosing and treating chronic diseases, which will have long-term impacts on our health care system.

Pharmacists are already equipped with the skills, knowledge and expertise to take on further roles in primary care and should continue to be part of the solution, but to do so, we need adequate public funding. Other obstacles include lack of access to patients' medical histories, onerous administrative tasks, and barriers to providing virtual pharmacy services.

In closing, I'd also like to recognize the invaluable role that pharmacy technicians, pharmacy assistants and other pharmacy support staff have played as part of our efforts to address the urgent needs of people in Canada. They have put their lives at risk on the front lines and their critical contributions cannot be underestimated.

The pandemic has taken a devastating toll on all of us, but it has also been the catalyst that enabled pharmacists to care for our communities more effectively. We now need supports to maintain these positive changes to health care in Canada.

Thank you to the committee for the opportunity to share this with you.

● (1745)

The Chair: Thank you, Dr. Paes.

Now, we're going to begin with the rounds of questions, starting with Dr. Ellis for six minutes.

Go ahead, please.

Mr. Stephen Ellis (Cumberland—Colchester, CPC): Thank you, Mr. Chair.

I certainly want to echo the chair's comments to all three of you for being here, and your unbelievable patience. If I were on the other side of the call, I don't know what I might have done. I probably would have left, but that's just me. I'm not a very patient person. Thank you very much for your great understanding.

Dr. MacDonald, you talked a bit about the concept of vaccine hesitancy.

Could you characterize your thoughts on how Canada did, as a country, with respect to vaccine hesitancy?

Dr. Noni MacDonald: I can answer that wearing several different hats, my provincial hat, my Public Health Agency of Canada consultant hat, and also my WHO consultant hat.

Relatively speaking, Canada, depending on which province you were in, did brilliantly well or did not. We had quite a range across our country. Again, I think a big chunk of this was due to misinformation and disinformation. As well, we learned that what politicians say makes a huge difference. We had not appreciated before the COVID pandemic how much political impact there is on what people decide to do.

I helped draft the 2014 WHO report on vaccine hesitancy, and we didn't even talk about politics and the impact of that, nor did we talk about misinformation and disinformation, because it wasn't a big factor.

So, yes, there are big differences across the country, and there are, therefore, differences in vaccine acceptance, which led to differences in mortality rate per hundred thousand. It mattered where you lived.

Mr. Stephen Ellis: Right.

Certainly we realize that even at the federal level, there's significant input via political interference. Again, stigmatizing, dividing and name-calling, etc., certainly were not in the playbook of vaccine hesitancy and moving that forward, which is exceedingly unfortunate. I realize that you would certainly agree with that.

I guess one of the things I always think are important are lessons learned and how we could do better in the future. Getting politicians not to talk is pretty hard, as you can tell.

Some hon. members: Oh, oh!

Dr. Noni MacDonald: There are two things I would raise in regard to that.

Number one is that the whole emphasis that I tried to put forward is that we really need to be teaching people how to do critical thinking, so they can understand when people are speaking to them whether or not they are using the techniques that we know sell misinformation and disinformation. You can be taught this. We know it. There's evidence to show that it works. When you do it, people are much less prone to misinformation and disinformation, even if it's coming from a politician.

This is the critical thing that needs to happen, and it needs to happen in our schools. We need to then move it on beyond that. Kids influence what their parents learn too, and it's a way of getting to parents. We need a national program that's going to address misinformation and disinformation.

I would say to all of you, each one of you as a politician, that you want to get that right, because you want your information to be out there being used properly, and “not disinformation”.

● (1750)

Mr. Stephen Ellis: Thanks, Dr. MacDonald.

That folds nicely into the next thing we will begin to look at. Certainly it's likely we would invite you back, if you would have us, so to speak, but we're going to start a children's study. Part of that is the negative effects on children with respect to COVID, and isolation and language acquisition.

Do you have any, perhaps brief comments, on what you have seen in some studies or what you have heard of what's going on?

Dr. Noni MacDonald: Sure.

Again, Canada was kind of a middle of the road. We did not shut our schools as completely as a number of other countries did, but we already have evidence that this still had a negative impact on the development of children, on their reading and writing skills. I think we will not know the full impact of the negative pieces that went with this for probably a decade or two.

The other part is that it was inequitable. There were families who don't speak English or French and don't have access. You can give them a Chromebook, but they don't know how to use it. They cannot read the instructions that are being sent by the teachers. So it was very inequitable how we tried to do virtual teaching.

I realize why it was done. There are some of us who think it was overdone and that kids could have gone back to school with masks much earlier. That's a whole other discussion to have. It was a lesson learned.

I would very much welcome coming back to talk more about what I think needs to be done for kids, and to try to prepare us for the next time something like this happens, but also prepare us to have kids for the next generation who are going to be much better prepared to not be swung by misinformation and disinformation. Too many decisions were made on mis and disinformation.

Mr. Stephen Ellis: Dr. MacDonald, it's a bit of a hot-button topic, but we're talking about vaccines and adverse events, and certainly again those are going to be in our “lessons learned”, I think. Given the complex reporting requirements for adverse vaccine events, how do we then begin to unpackage what we know has happened? Again, I think that has to be part of our lessons learned.

Dr. Noni MacDonald: Let me stick to a couple of points, and I need to give full disclosure here. I was a founding member of the Global Advisory Committee on Vaccine Safety with the World Health Organization, so this is something that I've been very involved with for more than 25 years.

There is something we did not do well, and we know that communication is key. We know that negative information sticks three times as much as positive information, so how you present risks and benefits of a vaccine really, really matters. The language matters, how you frame it, how you tell the story. We had too many people who did not understand all the safety components we had in place in Canada and how all the vaccines that were approved here in Canada followed all of those steps. There we none that didn't follow those steps. Their approval required that.

We did not do good communication. People, again, jumped ahead of what the data was. There were inferences drawn that were just wrong. I think we should actually be proud. We picked up adverse events that were exceedingly rare. When you're talking about one in 700,000, that's not a common thing to happen, but when you're giving millions and millions and millions of doses, you're going to see some of those events. I think that was a surprise for the general public and maybe for some of the people who were not involved as much in public health and in immunization, where we fully knew this was going to happen, but our communications were not as they should have been.

When these events happened, I don't think we necessarily addressed them in such a way that people could understand the context and understand what they meant and didn't mean. I think there are many people out there who think that the adenoviral vector vaccines are terrible because you can get thrombosis and thrombocytopenia. They don't know that you get by far a higher rate of those with COVID disease than with the vaccine, for example.

● (1755)

The Chair: Thank you, Dr. Ellis.

Next we're going to go to Dr. Hanley.

Go ahead, please, for six minutes.

Mr. Brendan Hanley (Yukon, Lib.): Thank you, Mr. Chair.

Thank you to all three witnesses.

I also want to give a shout-out to Ms. Paes for the work of pharmacists during the pandemic and the incredible frontline work. You were really part of the last people still operating and serving Canadians, so thank you for that.

I'm also going to concentrate my questions on you, Dr. MacDonald. It's really good to see you. You gave a real tour de force in five minutes. I can't believe how much you covered that is left to unpack.

One area in which we know we have lost ground is getting adults their third dose or, in some cases, their fourth dose. That is leaving us more vulnerable. We don't know what's coming by way of recommendations, but knowing what you do about hesitancy, what do you think we need to do to promote or convince a behaviour change to encourage Canadians to get their third dose and the doses that will be recommended in future?

Dr. Noni MacDonald: I wish we could give you some magic silver dust that we could sprinkle across the country. There isn't any magic silver dust.

What we do know is that there need to be multiple strategies. We need to look very specifically at what the issues are in the communities where we're not having the uptake we need. We need to look at what their barriers are, their enablers and what we can do to make that happen.

I'm sorry that I can't be more precise. I give lectures that are an hour long that only touch the tip of the iceberg of the question you just asked.

There are a couple of things that we know make a difference. I wish we could get more people singing from the same song sheet, because we know it matters. That's why I pulled up the politicians in our health care system.

The other thing was—and Dr. Paes really said it—we didn't necessarily make this easy for people to get immunized. We didn't give them the opportunities to come in at 9 o'clock on a Saturday night or a Sunday night. We made it hard, and that undermined it.

The other thing—and everybody here better nod their heads—is that we all want COVID done. We are tired of it, and the general public is tired of it, but that has not made it go away. We're likely going to see problems to come.

I know we've done well, if we look overall, compared to the U.S., for example. However, we shouldn't be holding them up as a comparator, because they haven't done well. We've done quite well at doing two doses. We seriously need to do well with those 60 and up, with three doses; and at 70 and up, we need to do well with four doses, and for those who have underlying problems. Again, if we had a fully integrated patient-centred health information system, we would know who all of those people are, and so would the pharmacist when they walked in. Then, we would be able to really target all of those groups to get exactly what they need.

At the current time, we can't tell you who's missing. We can tell you who got immunized for COVID, but we can't tell you who's missing because we don't have that kind of information system.

Over.

Some hon. members: Oh, oh!

Dr. Noni MacDonald: I'm sorry; I could talk for hours on this.

Mr. Brendan Hanley: I'm not over yet.

The Chair: You still have two minutes.

Mr. Brendan Hanley: Okay, that's great.

I'm going to try to squeeze two more questions in.

Dr. Noni MacDonald: Great.

Mr. Brendan Hanley: This is fantastic.

The first is for you, Noni. With your WHO hat on, regarding global vaccines, I just read a headline that the South African company has no market for vaccine production. There's no demand. We know that on vaccine hesitancy, where we're trying to get vaccine to some of the less well-resourced countries, it's probably an even greater challenge than it is here.

Are there any quick comments on that?

Dr. Noni MacDonald: I have a couple of quick points that I hope with make this more understandable. It's complex.

One of the problems in South Africa is that over 80% of people have had COVID. They do not see the value of having the vaccine, even though we know that in having had COVID, particularly omicron, you are not protected should we get another variant that looks like delta. Having had COVID, you still need to be immunized with at least one dose, and preferably two. That's number one. They're having trouble doing that.

Number two is that their population demographics are very different from our population demographics. Almost 50% of their population is under the age of 20. They did not see the mortality that we saw, because they don't have those people. I do a lot of work in sub-Saharan Africa in the other thing that I do with an organization called MicroResearch.

I know, from working with those countries, that it's different. Their diseases are different. Their health care system is not a system in many places. The other problem is that when the vaccines arrived, all too often they had very short expiry dates, so they had to give them to anybody who showed up. They were not able to follow the recommendations to give them to the highest risk people, where you were going to see the most benefit.

Because of that, the general public did not see the benefit. We saw that benefit in Canada. We saw how it decreased mortality. But they didn't get to do that.

I can add the other caveat, which is why your question is really important. We do know—and this is not being negative about sub-Saharan Africa—that because they had so much COVID disease going on, mutation was really easy. They had a lot of people who shed virus for a long period of time, because they had untreated, undiagnosed HIV.

In fact, some people said one thing we really need to do in sub-Saharan Africa is increase HIV diagnosis and treatment, so we will have less shedding of the COVID virus and less opportunity for it to mutate. That would benefit all of us.

● (1800)

The Chair: Thank you, Dr. MacDonald and Dr. Hanley.

[*Translation*]

I now give the floor to Mr. Garon for six minutes.

Mr. Jean-Denis Garon (Mirabel, BQ): Thank you very much, Mr. Chair.

I would like to take this opportunity to thank all the witnesses for their very comprehensive and interesting presentations. I am very grateful to them.

I have a very simple question for Dr. MacDonald. It is perhaps a little naive. I wonder about it very often; I assure you it’s true.

Have we reached the endemic stage of the pandemic in Quebec and Canada? After each wave, we are told that we have. If we haven’t, do we have any criteria to figure it out? Are there objective criteria?

[*English*]

Dr. Noni MacDonald: I've been asked this many times and it's not simple.

We would love it if it became endemic, didn't mutate further, and moved to being a “meek and mild” virus. It hasn't quite gotten to meek and mild. We still have people dying from omicron. We still have people being hospitalized with omicron.

If I'm being optimistic, I could hope that, within a year, it will be endemic. It will be a mild to moderate virus that's maybe a bit worse than influenza, with more hospitalizations and deaths than we see with influenza, but not in a huge way. That means not having a big, new variant come along. No one out there can predict that. If a delta variant and an omicron variant come together, it would be wicked. Delta has killed so many more people than omicron has, and omicron is so much more infectious. If you got those two mutations to come together, we'd be in big trouble all over again. I'm sorry to be a pessimist. I want to be an optimist.

[*Translation*]

Mr. Jean-Denis Garon: Dr. MacDonald, if you had taught me, I might have wanted to become a doctor.

Let’s say the virus becomes endemic. The debate about preventive measures, masks and so on, always comes up. We hear one thing and its opposite.

What does becoming endemic imply for the future of these prevention measures?

Supposing that the situation is fine in a year to a year and a half’s time, does that mean that one day we will give up these prevention measures forever?

[*English*]

Dr. Noni MacDonald: I want to be a real infectious disease physician, now.

Listen, mask-wearing is not that hard, folks. In a number of countries in the world, even pre-COVID, people were wearing masks all the time. Masks really decrease respiratory viral infection transmission—influenza, parainfluenza, RSV and COVID. If we could get people to wear their masks in the wintertime, we could decrease hospitalizations for influenza, RSV and so on. That would include COVID, as well. I also hope we will give both COVID and influenza vaccines to the designated populations at the highest risk every year, if it's endemic, so we can decrease the thing.

Let me give you one small example that I bet most of you don't know. Do you know that, for stroke prevention...? Because there's a high rate of strokes a week after you get influenza, and a high rate of heart attacks a week after you get influenza, just getting the influenza vaccine is almost as impressive in preventing strokes and heart attacks as taking antihypertensive drugs every day. Think about that.

● (1805)

[*Translation*]

Mr. Jean-Denis Garon: We will certainly think about it. I promise you that.

There are some days I’m not really sure whether decisions about preventive measures, lockdowns, reopening, so on and so forth, are made by public health authorities or by politicians.

Just this week in the House, we were debating a motion where members of the House of Commons, most of whom are not doctors—obviously, that does not apply to some colleagues here—wanted to decide whether or not to lift preventive measures. Some provinces have lifted these measures. The federal government did not lift them all.

Do you think we've hit a certain level of confusion because we've politicized the issue of preventive measures too much?

[*English*]

Dr. Noni MacDonald: That's exactly my point. That's why I'm saying we've never seen politics intrude so much in health policy decision-making as we've seen throughout COVID. Do you know what? Most politicians don't have the science background to sift through that information and make evidence-based decisions. They make decisions they think will make their constituents happy. That's often not the right decision.

[*Translation*]

Mr. Jean-Denis Garon: Dr. MacDonald, I've been advised that I have about one minute of speaking time left.

Among young people, there seems to be a new interest in studying vaccines. Some think that vaccines protect us, while others think they don't. Some people think they protect us against one variant, but not the other. And then some people think they protect us for three months, while others think they protect us for six months or nine months, for example.

If you were to speak directly to young Quebecers and Canadians about the importance of vaccines and their effectiveness, what would you tell them?

[*English*]

Dr. Noni MacDonald: We think these vaccines are actually going to last longer than what we had originally anticipated.

We do know that on the fourth doses that have been given to those over 70, it was not to boost them above the level they were at before, but to get them back up to that higher level. The data so far for younger people is that it's working very well provided that you got immunized. It doesn't work so well if you didn't get immunized.

[*Translation*]

Mr. Jean-Denis Garon: Thank you.

I have no further questions, Mr. Chair.

The Chair: Thank you, Mr. Garon.

[*English*]

Next we have Mr. Davies, please, for six minutes.

Mr. Don Davies (Vancouver Kingsway, NDP): Thank you.

Thank you to all of the witnesses for your patience.

Dr. MacDonald, the WHO has recently confirmed that there are hundreds of probable cases of severe acute hepatitis in children under investigation worldwide and that these are not caused, it appears, by the usual hepatitis viruses or any other clear source. Is there any reason to suspect that these unexplained cases of severe acute hepatitis in children are linked to COVID-19?

Dr. Noni MacDonald: The data I've looked at from WHO would suggest—I'm going to say this so carefully—that it's not due to COVID. Because of the huge numbers of COVID disease even in children, if this were really related to COVID, we should see it.

I want to turn that 90 degrees to say that some people and some researchers are suggesting that this may be co-infection: infection with perhaps an enteric adenovirus. I don't mean the kind that's in the vaccine, but an adenovirus that you would get in your GI tract. It may then get tipped over because of the circumstances, which might be related to COVID and might be related to other infections that are going on.

It's going to take another year, probably, before we're really going to understand it—I'm hopeful that it will be understood before that—but let me give you a parallel. There's a disease called "Kawasaki disease" that we know has to be related in some way to infection. We've been looking for 30 years to find out what it's all about, and we don't know yet.

Mr. Don Davies: Thank you.

I want to get your thoughts on infection-acquired immunity.

Let's say that last month I got infected with omicron and I recovered. I'd like you to compare the durability and strength of my "immunity", if I can use that word, compared with if I had been vaccinated with an mRNA vaccine in a two-shot regime that concluded last January.

● (1810)

Dr. Noni MacDonald: Okay. If you had never been immunized and you got omicron, you are not as well protected as if you'd had your two doses of vaccine, because we know that for omicron, when we test it, your antibody response to that doesn't take out delta very well if another delta variant comes along. You're narrow in the spectrum.

People who have had omicron and have not been immunized absolutely need to get at least one and possibly two doses of vaccine to get them up there to be really protected. It's very sad and very bad misinformation that people out there said, "Oh, I've been infected, so I'm protected for life and I don't need to do anything." That is just wrong.

Mr. Don Davies: Can I just probe that a bit? The mRNA vaccines that Canadians have been immunized with were formulated against the alpha variant, were they not? So how—

Dr. Noni MacDonald: Yes, but—

Mr. Don Davies: How would those—

Dr. Noni MacDonald: It isn't a yes, no, zero.... We know that it does well against the alpha, the beta and the delta and it does modestly well against the omicron one. Omicron doesn't do well against any of the others. They come from two different phylogenetic trees. The big thing we worry about is that the delta and the omicron are going to come back together, and that will be a mess.

Mr. Don Davies: Right.

I'd like to also get your thoughts on the impact of vaccination on transmission. Is there a significant difference today on a person's ability to transmit COVID-19 whether they are vaccinated or unvaccinated, or in a third category, I guess, which is unvaccinated but COVID exposed and recovered?

Dr. Noni MacDonald: Okay. I need to answer that, though can't be as simple as I'm sure you would like me to be.

The problem is that for the original Wuhan strain, when you were immunized, it actually totally decreased transmission as well; it did not completely eliminate transmission, but dropped it substantially. It did not drop transmission as much as it did against delta and it doesn't drop transmission very much against omicron.

Omicron is also much more contagious. It grows really well in your upper respiratory tract. You make copious amounts of this virus. It may not make you that sick, but you can spread it galore, all right?

Mr. Don Davies: Okay.

Dr. Noni MacDonald: We need some more different vaccines that can help to decrease transmission.

Also, I was answering the question about the masks: Wear your mask. You will decrease—

Mr. Don Davies: Got it.

I'll try to squeeze one more question if I can.

Dr. MacDonald, on March 31, you co-authored an op-ed in The Globe and Mail. You said:

> A lack of vaccine acceptance is a symptom of ongoing mistrust that is our collective colonial lineage.
>
> Acknowledging and supporting Indigenous peoples' right to self-determination—the right to choose—is a critical step in addressing COVID-19 vaccine mistrust. Indigenous peoples have the right to credible and culturally-relevant information in order to make an informed choice. They have the right to question. They have the right to say "no."

Given the direct connection between vaccination and colonialism that you are making, are you concerned that vaccine mandates could reinforce COVID-19 vaccine mistrust among indigenous people?

Dr. Noni MacDonald: I would hope those mandates would be done in collaboration with indigenous physicians and health care providers, so that they can literally—and I'm putting this in quotation marks—"translate" why this is being done and how it fits with indigenous views on health and well-being. I—

Mr. Don Davies: But have they done that? That's my question.

Dr. Noni MacDonald: They have tried and, in a number of places, have been quite successful. In others, we simply don't have enough indigenous health care providers to be able to do what needs to be done.

The Chair: Thank you, Dr. MacDonald.

Thank you, Mr. Davies.

Mr. Don Davies: Thank you, Dr. MacDonald.

The Chair: Next we're going to go to Mr. Lake for five minutes.

Hon. Mike Lake (Edmonton—Wetaskiwin, CPC): This is so fascinating, and I don't know where to go. I almost feel like I need to ask the other two people a question, but I'm going to go down this road a bit.

I'm not a medical expert, like most members of Parliament aren't medical experts. I come from a business background, so I'd like to think that I have some expertise in negotiation and persuasion, and that I think is relevant here.

I wrote an op-ed on vaccine hesitancy in 2019, because I have a son with autism and I would have described myself as vaccine hesitant 20-some years ago because of the Wakefield situation coming out of the U.K. My op-ed in 2019, pre-COVID, was to convince people that vaccines don't cause autism and to address vaccine hesitancy from that standpoint. I had the chance to talk to many experts about this. The approach that I took at the time, as a parent of someone with autism, was to try to understand, show some empathy and ask the types of questions that they might ask of some of the experts I had the chance to quote in my op-ed.

I am very concerned about the way that we've communicated over the last two years with people who are vaccine hesitant. I know when you're talking about politicians...I sense that you're pointing at some politicians within my own political persuasion or sphere. However, we have one prime minister in this country and that Prime Minister referred to people who don't get vaccinated as misogynists, racists, "those people" and a lot of other things.

I think people who have chosen not to get vaccinated did so largely because they thought the vaccine was going to hurt them. I think our approach should be to persuade them, based on evidence, that they should get vaccinated, because they're safer when they get vaccinated and people around them are safer.

What would you maybe do differently in terms of communication, if you could revisit the last two years?

● (1815)

Dr. Noni MacDonald: First of all, we needed much better communication out there. Communication experts know what they're doing, but they have to know the science behind it to know what it is they need to be doing. That's the general communication or the media communication.

I think your comments are really important. You have to listen to what the concerns are. You then need to find out what they know and what they don't know at the individual level. You need to see if you can offer them some information that might be helpful when you're trying to build this kind of trust. You need to find out if they understand and have more questions about what you've told them. When you do this, many of these people can move from being vaccine hesitant or resistant to saying, "Yes, I will accept it", when it's done one-on-one like that.

It's called “mini motivational interviewing”. We've done national studies with this in Canada for routine immunization. It can be very successful. It is not expensive to do. We did not do it well during COVID. We needed many more health care providers who were trained in being able to do this, whether they were pharmacists, frontline nurses or family physicians. We needed many more people out there who could listen well and find out what the obstacles were.

For some of our indigenous populations, it was past history. For some people, it was what their local MP said. For some people, it was what their local MLA said. For some people, it was what their religious leader said. There were all kinds of people out there crowing that they knew what to do and told people what they thought they needed to do, not based on what the evidence was.

Dr. Danielle Paes: If I may be so bold....

Hon. Mike Lake: Absolutely.

Dr. Danielle Paes: I have to say that I see such a strong role for pharmacists in addressing both vaccine hesitancy and misinformation. I was someone who gave COVID-19 vaccines and had this beautiful, protected time with patients, when I could make sure the experience was a positive one, so they felt confident about the informed choice they were making, told their friends, shared their experience, and highlighted pharmacists as reliable sources of valuable and important health information. That's part of it.

In saying that, I think we also need pharmacy services to be funded, so we can continue to provide care. The traditional model we've seen has been pharmacists in more of a dispensary role, but those days are gone. We really do need to access and utilize our medication experts, who are conveniently located within five kilometres of most Canadians. I am obviously biased, but I really feel that pharmacists can be part of the solution, especially as we move forward in talking about the promotion of vaccines and addressing vaccine hesitancy and misinformation—not just in the vaccine space, but drug misinformation, as well.

There's so much opportunity, and I appreciate the conversation and dialogue. I almost feel as if I were sitting in on a CE with Dr. MacDonald, so thank you very much for all the wisdom you shared in your responses.

● (1820)

Hon. Mike Lake: I don't have time for another question, but I want to make a comment on the pharmacists' side.

I'm fortunate to live in a province—Alberta—where pharmacists have been given a more substantial role. l will tell you that it is of huge benefit to the people in Alberta. I'll just throw that out.

Thank you.

The Chair: Thank you, Mr. Lake.

Dr. Noni MacDonald: Bad language about people who don't accept vaccines is totally unhelpful.

The Chair: Thank you, Dr. MacDonald.

Next, we have Dr. Powlowski for five minutes.

Mr. Marcus Powlowski (Thunder Bay—Rainy River, Lib.): I think we're all aware of the impacts and adverse effects that social distancing measures and lockdowns have had on people. Certainly, Dr. MacDonald, as a pediatrician, you have spoken about the adverse effects on education. I think Dr. Yu talked about the effects on the elderly, the effects of depression, and the higher suicide rate. This has created its own large umbrella of other health problems.

I want to ask you, Dr. MacDonald—an infectious disease expert. I know you're a pediatrician, so maybe you don't have as much experience with it, but I want to ask you about the value of treatment options, specifically Paxlovid. As much as possible, we want to avoid further shutdowns and having to use these distancing measures. It would seem to me that we're not doing as much as we could to get people who are high-risk treated with Paxlovid to decrease their rates of hospitalization and ICU admissions.

Do you agree with that, or do you want to comment on that?

Dr. Noni MacDonald: Yes, that would be helpful.

Let me reframe it for you. Is it better to prevent the fire or get to the fire early? It's always better to prevent the fire, if we can. Paxlovid is only trying to put the fire out when it's already burning. Yes, sometimes it works. Yes, it can decrease it. But it's not 100% effective. It doesn't say that, as soon as I pop that pill, I'm not going to get sick and I'm not going to have bad disease. The data are not there. I mean, it helps, but it's better if you didn't get it in the first place.

Mr. Marcus Powlowski: Yes, perhaps it's better. I certainly agree, and the dogma in public health is certainly that prevention is far better than treatment. Perhaps, though, we've gotten as far as we're going to get in terms of vaccinating people. I'm not sure how many more people we can convince.

If that's the case, is that an option, and what more should we be doing to make it available, so people who are high-risk, and doctors, are aware of the benefits of getting it early?

Dr. Noni MacDonald: I think the problem there comes back to what Dr. Paes was saying. It really would be better if it were widely available in pharmacies. It probably never will be, in terms of where it needs to be—that one simply needs to have a positive test that is confirmed. We don't want this taken by people who don't have COVID, but have a runny nose and a cough. It needs to be there as quickly as possible. Yes, it works up to five days, but it's better if it's before five days, when you're giving it.

I think there are many things in the system rollout that make it complicated and difficult, and I'm not sure we'll ever get that smoothed out. We can do better, but it will never be lickety-split out the door.

Mr. Marcus Powlowski: I was going to ask Dr. Paes about this because pharmacies in Quebec are prescribing it. How has that worked? Is there anything in the Quebec regulatory system that has allowed them to do it but prevented other provinces from doing something similar?

Dr. Danielle Paes: Thank you so much for the question.

As of April, 4,500 patients in Quebec have received Paxlovid, and about 70% of those prescriptions have been written by pharmacists. A key enabler, I would say, has been virtual prescribing, so that symptomatic patients don't show up at the pharmacy door. The Quebec government has recognized the complexity and the time needed to ensure safe prescribing, and providing pharmacies with the appropriate funding and resources to do this has been instrumental in increasing that access.

Patients are able to have home deliveries for the rapid antigen test. They're able to confirm their diagnosis. They're able to consult with their pharmacist over the telephone. It's a very well-thought-out model, and it's working. We're starting to see that trend in Alberta, Newfoundland and Labrador and Saskatchewan, and as these provinces work within the regulatory relations to enable them to remove these barriers, I think we're going to really be able to improve access. The impact that will have on COVID and getting rid of it and getting us back to normal, I think, will be significant.

● (1825)

The Chair: Thank you, Dr. Paes and Dr. Powlowski.

[*Translation*]

Mr. Garon, you have two and half minutes.

Mr. Jean-Denis Garon: Thank you, Mr. Chair.

Dr. Yu, you talked about the importance of research, funding it, and the quality of researchers, which really caught my attention. Just yesterday, in the House of Commons, the Bloc Québécois tabled a motion proposing an increase in scholarships awarded by the three agencies, meaning the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council of Canada and the Social Sciences and Humanities Research Council of Canada. In our view, this would improve diversity in the pool of researchers, who will one day become university professors, for example.

Do you think we should increase scholarships to enhance the value of the research profession, particularly for people from diverse backgrounds?

[*English*]

Dr. Wai Haung Yu: Thank you very much for the question, Mr. Garon.

I do agree that tri-council funding should be increased, and that shouldn't necessarily be at the expense of other programs like the CRC or the CFI. They are all really important for maintaining and innovating for research in terms of equity, the diversity of research, as well as the diversity of individuals who can....

I think one of the most difficult factors right now, especially for tri-council funding, is what we are going to with the next generation of scientists. I've been around for quite a while, and I'm happy and delighted when I see early career researchers getting their funding. For example, my post-doc just got funding from an agency a couple months ago. These are celebratory events, and they're not happening enough these days.

Let me give you one stat. Because of funding levelling off for research, we really haven't had an increase for early career researchers since 2003. That's going to affect the future of research, which is going to affect the ability to attract talent. Funding like that from the tri-council is essential for making sure that the landscape has that parity and that innovation for the future.

Thank you very much for the question.

[*Translation*]

The Chair: Thank you, Mr. Garon.

[*English*]

Thank you, Dr. Yu.

Mr. Davies, please, for two and a half minutes.

Mr. Don Davies: Thank you, Mr. Chair.

I'd like to go back, if I can, to the issue of infection-acquired immunity. I have seen other data and heard from other immunologists who have stated that using a vaccine that was developed against the alpha variant and boosting it to deal with a virus in circulation that has mutated significantly, particularly on the spike protein, by logic should reduce its efficacy. What would your position be on that, Dr. MacDonald? In other words, if we get a third booster or a fourth booster, are we not just boosting the production of antibodies to deal with a virus that is not particularly in circulation as it once was?

Dr. Noni MacDonald: Yes, but let me explain.

The companies have been looking very hard about putting together a vaccine that would have two pieces in it: one that would have the spike protein that was in the original Wuhan virus, which is in the the vaccine that we've been using on millions and millions of people; and the other one with the omicron variant of that spike protein. They are looking at what would happen if these were given together.

I think that's really the question you're asking, and yes, that would probably—

Mr. Don Davies: If I may interrupt, it actually isn't. You've nailed the nub of the question. That would make sense to me if we were...but we're actually using the vaccine that is purely developed for the alpha spike protein.

I'm just wondering how effective that can be against a spike protein that has gone through such significant mutations.

Dr. Noni MacDonald: It has gone through significant mutations, but there are a lot of places that it hasn't changed. When you respond, it's to all of the different pieces that are on the spike protein. That's why it still works against serious disease, against omicron, if you have been immunized. You're not going to die at the same rate, and you're not going to have hospitalization at the same rate.

● (1830)

Mr. Don Davies: Right, yes. The data seem to back that up.

There is another question that I want to challenge you on a little bit.

The evidence I've received is that if you are infected by omicron, certain immunologists tell me that it does provide protection against previous versions of the virus, that it would actually contain some of the same...I don't know the proper term.

Dr. Noni MacDonald: It has some of it, but it is not good against delta, for example. It's wimpy against delta, okay?

There are two phylogenetic trees that have come off: the omicron branch, blah, blah, blah, and the one that had alpha, beta and delta off of it. They are quite far apart in terms of what they're like. Omicron is not as "good" an antigen, antibody generator as the ones that were off Wuhan and the beginning one. They do better at stimulating neutralizing antibodies against the spike protein.

The problem is that with omicron, its variant a little bit, so the neutralizing antibodies aren't quite as good a fit as they would be for the original one. I'm trying to think if I can give you an analogy. You maybe have both winter boots and dress shoes, and the dress shoes fit tighter than your winter boots, if you don't put your shoes in those boots. It's kind of the same thing: They're sloppy, the fit from the Wuhan variant vaccine with the omicron variant, and because of that, it doesn't protect you as well.

Mr. Don Davies: Right.

Dr. Noni MacDonald: The reason that people don't want to just do an omicron variant vaccine is because we know that's not the last variant we're going to have. We want to try to be protective against that whole family. They're now working on trying to get a COVID-family vaccine that would protect you against the whole family, not just the ones we have been detecting.

The Chair: I have to go buy myself some more shoes.

Mr. Don Davies: Thank you, Dr. MacDonald.

Dr. Noni MacDonald: The big takeaway is that we need more research money, and that means we need to give more money to CIHR and the other tri-councils.

The Chair: Okay, that's a good note on which to finish.

This has been a fascinating discussion.

Some hon. members: Hear, hear!

The Chair: Thanks to everyone. It would be great if we could keep it going for two hours.

Thanks again for the efforts you made to be here. Thank you so much for your presentations and for your answers. It has been extremely informative for all of us. This has been an exceptional session.

Is it the will of the committee to adjourn?

Some hon. members: Agreed.

The Chair: We're adjourned.