COVID-19: A Mini-Series Part 1: The Role of Rehabilitation

SUMMARY KEYWORDS

patients, rehab, pandemic, people, discharged, home, rehabilitation, virtual, support, staff, virus, outpatient, approach, acute care, role, helping, part

SPEAKERS

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[preview]

[chime]

00:27

Bernice: Hey Chelsea, one year ago if I told you about the state of things today, would you have believed me?

Chelsea: No, I wouldn't even know what you meant by social distancing. Even at the beginning of 2020. Seeing someone cough wouldn't have made me think twice.

Bernice: On this episode of the rehabINK podcast, we're kick starting our COVID-19 mini-series where we'll be covering various topics with regards to the pandemic.

I'm Bernice, and I'm Chelsea,

and we're two Masters of Physical Therapy Students at the University of Toronto.

Chelsea: Today, we are fortunate to have three experts with us to discuss the role and importance of rehabilitation for patients during the COVID 19 pandemic.

Bernice: From masks, social distancing, and closed borders, the COVID-19 global pandemic has changed our lives in many ways. Since the first outbreak in Wuhan, China in December 2019. There have been over 15 million confirmed cases worldwide. The disease has been reported in at least 188 countries in a span of seven months since the World Health Organization declared a global public health emergency in January 2020. As many of us are aware, the rapid spread of the virus has overloaded the healthcare system in helping many patients fight for survival. However, little is known about the long-term effects of the virus nor the steps required for those who have recovered to reintegrate into the community.

Chelsea: This is why we have invited Dr. Larry Robinson, Siobhan Donaghy, and Jennifer Schaffer from St. John's Rehab Program of Sunnybrook Health Sciences Centre in Toronto to speak with us regarding the role of rehabilitation in response to COVID-19.

[chime]

02:03
Chelsea: Thank you for being here with us to speak about such an important topic. We'll start off with some introductions for our guests. First off, we have Dr. Larry Robinson. Dr. Larry Robinson is a physiatrist and professor and division director for physical medicine and rehabilitation at the University of Toronto. He holds the John and Sally Eaton Chair in rehabilitation sciences and also serves as program chief for rehabilitation at Sunnybrook Health Sciences Center in Toronto. So Dr. Robinson, as a physiatrist, can you briefly tell us about how you approached your role during this pandemic?

Larry: First, thanks very much for having us today. We're really pleased to be here and talk about COVID and the role of rehab in COVID. So yes, I'm a physiatrist and the Program Chief for St. John's Rehab at Sunnybrook Health Sciences Center. And our approach was several-fold. So one is we wanted to make sure we took patients from acute care ~~b~~because we didn't know how big peak of the pandemic we would have. So, we discharged patients that were ready to discharge we took on new patients and open up capacity in the acute care hospital. And then we basically had to prepare for three groups of patients. So, one would be those who needed rehab after getting COVID, those who maybe had some other traditional disability like stroke or amputation or what have you, but also had COVID at the same time, and then third, were those who got a nosocomial COVID infection while they were at St. John's. So, we had to prepare for all three groups of those.

Chelsea: Thank you so much for telling us about that. Second, we'll introduce Siobhan. Siobhan Donaghy is the profe5ssional practice leader for Occupational Therapy, also known as OT, in the St. John's rehab program. She has over 25 years of experience in clinical, teaching and leadership roles. At the University of Toronto, she is a fieldwork instructor and lecturer in the department of occupational science and occupational therapy, as well as a curriculum associate with the Center for Interprofessional Education. Siobhan, with your many years of experience as an OT, could you share a bit about your work during the past couple months?

04:10
Siobhan: Yeah, I'd be happy to. Again, as Dr. Robertson mentioned, it's a pleasure to be here and to talk about the importance of rehab with COVID-19. We really were looking at jumping into unchartered territory with COVID-19. And I think my experiences, both in OT and as a member of many interprofessional teams over the last number of years, was really what I was drawing upon because we really had to look at managing change effectively, knowing that our teams needed some support to move in this direction trying to treat patients that they had never treated before. So really drawing upon effective change leadership was really the approach that I tried to take to this, supporting not only the occupational therapists, but also the broad interprofessional team. And really helping to navigate through some of that change and supporting the clinicians as they moved through the space.

Bernice: Thank you for sharing that Siobhan. If Chelsea and I have learned anything from the past year at the University of Toronto, it's definitely the importance of interprofessionalism amongst healthcare teams. So, Siobhan also works with Jennifer Shaffer who is the Professional Practice Leader for physiotherapy—we'll also be referring to that as PT—at St. John's Rehab. She's also a lecturer in the Department of Physical Therapy at the University of Toronto. So, Jennifer, as the Professional Practice Leader, could you tell us a bit more about what you've been doing at St. John's during the pandemic?

05:38
Jennifer: Thanks again for having us. As part of the leadership team at St. John's, my role was to help support not only the physiotherapy staff, but all staff in helping to manage various aspects of the pandemic. We did a lot of dispelling fears and making sure that our patients got the best care possible and the care that they deserved to get during the pandemic.

05:57
Bernice: Thank you, everyone, for sharing a bit about yourselves and your work. The inspiration for this podcast theme was actually the presentation done by Dr. Robinson and Siobhan for the World Health Organization regarding the role of rehab in COVID-19. We're really curious as to how you came across this opportunity.

Larry: Yeah, it's a good question. So I'm actually formerly American—I'm a dual citizen—and fairly visible in the American PM&R: Physical Medicine & Rehab scene. And one of my colleagues, Walter Frontera. He was aware of this podcast coming up. And he mentioned this to me and then also, I think, Siobhan, it was through the Rehab Sciences Institute. Angela Colantonio who got us involved as well. And Angela introduced us to the to the WHO webinar.

Bernice: Yeah, that's really great. Glad you're able to do that. It definitely helped to shine a light on the recovery process after surviving COVID-19, which I don't think many people think too much about because right now all of the attention is on find a cure or vaccines for the virus, but not really what to do for the long-term effects of after recovering. So, I'm glad we have you to talk about this for our podcast. We'll start by orienting and providing some context for our listeners. So, when you first see someone for assessment and treatment planning, what have you observed in terms of common presentations for people with COVID-19?

07:22
Siobhan: I think what we learned early on in the process of admitting patients with COVID-19 was that they tended to present similarly to those that we've had in the past that are quite deconditioned medically. So, they were coming in with very poor physical endurance, very poor exercise tolerance, would need a fair bit of support to sit up at the edge of the bed or to even walk to the washroom. And so really, we noticed quite a bit of physical endurance as being the biggest challenge. But in addition to that, we noticed that there were also cognitive issues with some of our clients, as well as a lot of psychosocial issues because of the prolonged isolation that they experienced when they were in acute care. So really a wide gamut of issues which were not unfamiliar for us to address in our context in

rehab, but certainly was a learning process as we went through, trying to see what were the main issues and the themes that we were seeing with all of our clients.

Jennifer: On a positive note we also did see were patients who were very, very motivated to get better and get home because they had been in hospital for so long.

08:30

Bernice: Absolutely. It's definitely a wide range of symptoms that we've been seeing not only physically but mentally as well. So, for the patients that you typically see what types of rehabilitation do they normally require?

Jennifer: So from a physical aspect again, they were severely deconditioned. So even such simple things walking to the bathroom. Those were very basic methods of rehab for these patients and often a couple walks to the bathroom a day would be enough. As they got stronger, we would do more bed exercises with the patients. Because they were in isolation, we didn't have access to the gyms that we normally would have but our therapists became very innovative and did a lot of activities in the patient's rooms. And just basically, everyone had their own tailored approach to, to get the most out of what that patient needed. But again, just basic exercises: sit to stand, squats, standing exercises. Siobhan, you can probably speak to the more functional aspect.

Siobhan: Yeah, I mean, at the beginning with the assessment piece, we recognized that we had to do things a little bit differently. As Jen mentioned, we couldn't be bringing patients out into main gym areas to assess them. So, we had to modify some of our assessment processes just to even have a better sense of what their impairments were. Trying to modify cognitive assessments without using big complex standardized assessment batteries that had different pieces in them that couldn't be cleaned. So we had to think more creatively as to how we would assess their cognitive status, and how we would do that in a more functional way. So, we really went back to very functional assessments and treatments in the patient's room. Looking, as Jen mentioned, at the physical aspect, and really trying to build their tolerance for activities that were meaningful for them, for the most part, being able to be independent with self-care again, so that they could return home safely. But also looking at the cognitive piece and determining what their level of orientation or memory recall was like and how we could help to move them forward in that regard, as well as addressing the social isolation. We were actually very fortunate to have a number of redeployed therapy assistants who were able to help us on the inpatient units during this period of time. And one of the roles that they took on was helping to address social isolation by doing visits with patients and bringing iPads that could help them to connect with their family at home. So that was part of the rehab process because we know that it's so important for them to have something to look forward to, not only from a cognitive perspective, but from a motivational perspective as well. So that all sort of played out in the type of treatments that we were providing

Larry: A couple of other deficits that we faced, I think, was the lack of two important groups. So, one is the volunteers from St. John's, they tended to be—there's quite a bit of variation—but on average, a bit older, and very vulnerable to potential co infections. And so we had to tell them, you have to take a break and so we had to fill in for the things they provided. And then our clergy services were provided

by the Sisters of St. John's, and again, a bit of an older group vulnerable to infection, and we didn't want to get them sick.

11:44

Bernice: Yeah, I think that's something that we don't really think about the hospital volunteers. We always focused on kind of the main health care professionals, but there are so many moving parts to this. So, asides for the traditional roles that you would take on as rehab professionals. Have you seen any kind of expansion in the roles that you've typically been working on? Or has there been any other professionals involved in the whole process?

Siobhan: Yeah, I think what we really noticed in rehab was that we started to really draw upon our strengths in teamwork. And that whole notion of interprofessionalism really hold held us in great stead during this process. Because of the time it took, and the dedication and the anxiety around, putting a lot of the personal protective equipment on, it didn't really make sense if there was an occupational therapist or physiotherapist already in the room with the patient, and they needed to go to the washroom that we would call the nurse to gown up to glove up and to come in and perform that activity. So the therapists might actually perform that activity. We would help each other out we would say if you're already going into the patient's room, perhaps you could get this piece of information for me. So we were really looking at expanding our scopes, really working as a team and figuring out how we could maximize the time that we spent in that patient room. That I think was one of the biggest things that we saw in terms of role shifting, and really maximizing our roles.

Jennifer: On a broader scope as well, when our outpatient department shut down for a number of weeks, the physiotherapy and occupational therapy assistants from outpatients were redeployed onto inpatients so that they could be extra sets of hands there. And then another totally unrelated part was myself, Siobhan, a bunch of us became screeners for when we were still allowing visitors or guests to the hospital. We would take a few hours a day and help at the front entrance to help screen people coming in.

Larry: Another couple of things, I think that we're quite happy about is some of the shifting roles of the existing professionals. So, one was just we learned so much about distancing, about PPE. You know, our therapy gyms, we would fit five or six people into a space and now we can only have three safely. So, we had to figure out what is the right distance? Do we leave a plinth open; every other plinth? How do we time things so there aren't a lot of people in there at the same time? How do we stay safely cleanse equipment between uses? And I think we figured this out really well. We started using other spaces that we hadn't traditionally used. And probably the biggest change— or one of the biggest changes I've seen has been the buildup of virtual care.

14:18

Chelsea: It's nice to see how in the face of this pandemic, with so many changes going on, that we're all finding ways to adapt to the situation and to do things differently. So, with this in mind, what's been the most unexpected or challenging aspect in the rehab of patients with COVID-19?

Larry: For me, I think it's acceptance of having patients with COVID. The staff were very anxious. They were very anxious about... what if a patient comes over with COVID? You know, would they catch it, would they bring it home to their family? Would their coworkers bring in COVID? What if a patient had COVID and they didn't know about it? Very real and reasonable anxieties. And so, this change management was an immense thing to do. And I think Jen and Siobhan are in the middle of that, as well as our patient care managers. Ultimately, it was a lot of us about education. And the anxiety actually, for the large part went away once patients with COVID came in. Once we had patients with COVID on our COVID unit, I think people got used to how to use the PPE, how to protect themselves, how to isolate, and we were actually okay. And in reality, none of the St. John's staff caught COVID from patients. There were staff with COVID, but they caught it in the community. So, I think what we did ultimately worked, it's just that there was a tremendous amount of anxiety and change management to work through.

Siobhan: Yeah, I would agree. I think dealing with the anxieties of staff and supporting them and providing education and also providing sort of face-to-face opportunities to communicate and work through some of their questions and supporting them through that, I think was very important, perhaps unexpected. I didn't anticipate that that would be our biggest challenge. I think the other challenge that Dr. Robinson alluded to earlier was the fact that we also had to change the way we do therapy with non-COVID patients, or patients who are not necessarily diagnosed with COVID-19. So, we had to change the way we did everything with everyone. We had to realign the way we schedule treatments in our in our gym treatment areas. We had to think of creative ways of doing discharge planning when we can't have families to come in to demonstrate educational principles. So, even in our inpatient units, we had to do things more virtually, we had to do a lot more phone calling, and really had to think creatively as to how to help support our patients through that process. Both those with COVID-19 and those without. Everything that we did had to change to accommodate the new reality of physical distancing, additional cleaning, we had to change some of the equipment that we used that we knew that we couldn't safely disinfect to the level that we knew that we had to at this stage. So, a lot of that also was rather unexpected. But we have sort of taken each challenge on as it's come forward to us.

Jennifer: Just adding to what everyone has said so far, having the face to face conversations when the infection control practitioners would come physically to St. John's and speak to our staff face to face was really the most helpful. It felt much more personal when they actually came into the building to talk to the staff and they could ask questions in real time. And again, Siobhan mentioned doing things differently, like wearing PPE all the time, which was very different than what we're used to in rehab, always having face masks and face shields on, using different equipment that we've been using for years without thinking about whether it—not without thinking about it—but whether it can be cleaned or not. Now we know that these things can't effectively be cleaned. So, we have to find new ways of providing therapy.

17:49
Larry: Yeah, have you ever tried cleaning Velcro?

Siobhan: It's impossible.

Jennifer: But everything has Velcro on it

Larry: Everything has Velcro on it in rehab.

17:59

Bernice: Yeah, I'm really glad you were able to bring this topic up because it's really important, of course for us to care for our patients, but as well as the health care practitioners and just feeling safe going to work as well as feeling safe when you're coming back home. And just going back to the topic about the importance of mental health and the impacts of isolation on patients. We'd like to know what kind of strategies you had found useful in maintaining their mental health and social connections. You mentioned that you use a lot of iPads and video calling with the families. Have there been any other techniques or equipment that you use to facilitate that?

Siobhan: I think from an OT perspective, we see the importance of psychosocial health as part of overall wellness. So, it was certainly something that we were looking for in our assessments with our clients. I think in addition to using the iPads and having those additional visits that we had with our assistants to provide some social connection, we also looked for opportunities where there might be a milestone that a patient was celebrating that we could help to support. So we had a couple of examples where a patient might be turning 80 or 85. And we tried to do a little mini celebration to try and again, just acknowledge that and bring the family in virtually to be able to witness that for the patient, because that would have meant a lot to many of them. It would have been a goal for them, obviously to be at home for those events, but trying to look at those moments where we could support them. And I think also just in terms of mental health for our patients, we recognize that if our staff were not feeling mentally well, that the patients would likely not feel that well, either. So much of what we were doing was supporting their wellness. We were very fortunate, being part of Sunnybrook, to have access to a wide range of wellness resources for staff. And so many of my conversations with therapists were around accessing those resources and keeping the lines of communication open for them, so that when they felt supported, they would also then be able to feel that they could sufficiently support their patients.

Larry: It was challenging to keep patients separate from each other, though, too, because, you know, we're all social animals. And so, there were groups of patients coming together outside. There were people coming to common areas to watch TV, or people going to the cafeteria and groups just talking. They didn't quite get the seriousness of doing that and what the impact could be. So, it was working with security to say keep them apart when they're outside. We actually got a grant for something from a donor. And we said, let's use it to buy free TV for everyone so they could stay in their rooms because the incentive was to go to common areas with this the big screen TV, but everyone's sitting next to each other and creating a danger of transition. disease. So we got at least for a couple of months free TV in the rooms. But that was the challenge—it still is honestly—to keep people apart from each other. And, as Siobhan said, we are lucky that we have good mental health resources at St. John's. We have two psychiatrists who are based here at St. John's and provide a lot of mental health support.

21:09

Bernice: Yeah, we can definitely see how difficult it is to keep people apart. Just in public in general, I can't imagine hospital where they're in the same room all day. It is really important, but I can see how challenging it must have been to be able to make sure that everyone stays safe.

Chelsea: Yeah, and just seeing how this pandemic, it's not only something that affects our bodily systems, but it's also something that affects our mental health, which is unique because now have to take both into consideration at the same time.

Larry: Yeah, you know, even in normal times, the anxiety and mental health concerns are kind of high amongst rehab patients. They worry about going home, they worry about being a burden to others, they worry about a lot of things. But this just heightens this so many times so many fold over.

21:52
Chelsea: For sure. So, what was your approach to developing a rehab program when so little was known about the disease and the variability in how it affects people?

Siobhan: Well, I think from a therapy perspective, we took the approach that we would take with all of our patients by understanding what their needs were from a thorough assessment. So, we really looked at the full gamut of their skills and their deficits, to try and determine what needed to be focused on and part of that process in rehab involves asking patients what their goals are, and really focusing their treatment program on what their personal goals are. So, really trying to gear our treatment around the assessment that we found, as well as the goals that in collaboration with the client helped to drive what the treatment would look like. And for many of our patients, it was very basic physical endurance, trying to build up activity tolerance, trying to regain some sense of orientation and recall so that they could follow through and be able to take care of themselves when they went home with some supports in place. As well as a lot of discharge planning. And a big piece of that right from the very beginning, was around safely, preparing them for discharge, connecting with families virtually sorting out what equipment or resources they would need, and again, doing all of that virtually. So being very creative around what that would look like, but always focused on what the specific goals of the patient were.

Larry: like one of our first patients, she had to go up a flight of stairs to make it in her house. And so that was, you know, the focus, or at least a big part of the focus.

23:33
Chelsea: Okay, so it sounds like a lot of going back to the basics of asking the patients what their goals are and treating the issues that they present with.

Jennifer: Yeah, the treatment program for the 45-year-old woman looked very different than the treatment plan for the 85-year-old blind gentleman that we had. It was, you know, very, very different.

Larry: Yeah, I think we discharged one week, a 20-year-old and a 90-year-old, same week, with COVID both. So a huge variability and you know what they needed to do to work on to get home.

Bernice: So it wasn't necessarily about the fact that they had COVID. But it was just about focusing on what the patient values and how we're going to get them to that.

Siobhan: Yeah, and I think that came naturally to us because we already take that approach with all of our patients. We don't have, you know, a manual that says this is what every patient needs when they come in. So, we we've always prided ourselves on taking a very individualized approach. And while there are parameters that we work within four different populations and timeframes for discharge, we really tried to focus it on what the goals are, and how we can get them safely home.

24:38

Chelsea: Okay, so it seems like a lot of the planning for the treatment is also dependent on the goal of eventually being discharged. And we also know that sometimes there are some long-term health impacts of COVID-19, which we've touched on earlier. What are some of the rehab services that recovered patients might need to access even after they've been discharged?

Siobhan: So, typically when patients are getting ready for discharge, we as a team, physio, OT, speech, social work would all be involved in helping to prepare them for ongoing therapy if they needed it in the community, as well as any personal supports any nursing care that would be needed in the short term when they go home. And that would be part of our typical discharge planning process, along with additional resources such as equipment, mobility aids, adaptive bathroom equipment, etc. So, in addition to that, though, we found that while we had to do this time was take that extra step to help answer questions from family that had a lot of questions and concerns around the safety of bringing their loved one home. Did they still have COVID? Did they need to be in isolation for a period of time? Were they able to eat in the same room? Were they able to use the same bathroom? So, there were all these questions that were coming from family members that the team had to address in addition to what they would typically address in a typical discharge planning process. But certainly the resources that we would refer them on to we're similar to what we would with most patients resources that would help them to continue to recover when they got home and be able to adapt to their environment when they got home with the supports of their family and other community resources.

Larry: If you think back towards January when we had the first case in Toronto till now, our understanding has changed considerably. And this has impacted what we tell patients when they go home. So, just as an example, when we got our first COVID patient, we were told, okay, we have to assume they're infectious, until we have two negative nasal swabs separated by 24 hours. And then over time, we learned that those swabs, if they're positive, they likely picking up just fragments of virus that are not infectious. So maybe that's not the way to do it. So now it's a time-based decision. So, if you're two weeks out after COVID, and you're improving, you're largely asymptomatic, maybe you have a little cough, but if you're largely improving, then we consider you noninfectious. So that's just a different approach as we understand more about the virus.

Jennifer: I think that was also a game changer with the staff and that knowing that after 14 days, they weren't infectious anymore. It just calms everybody down.

38:09

27:18

Chelsea: So, this is how we know we treat COVID in Canada from a rehab perspective, but COVID-19 has such a global impact on healthcare. Can you comment on the differences between access to such resources in Canada compared to other parts of the world?

Larry: Yes, I know the States and I have read what's going on there and I've been in touch with my colleagues there. And it's a big difference. So, I know I reviewed an article from New York City and they were playing planning to do the same thing as we were planning: that they would take the less sick patients into the rehab hospital, they would do COVID rehab. They were overwhelmed with COVID patients immediately. So, they couldn't use those plans at all. They had an acute COVID ward in their rehab hospital and we're unable to do any of the COVID rehab at all. So that's, that was quite different. And I think many of the hospitals are frankly, still overwhelmed with COVID patients and it's not getting any better. It's getting worse over time. In other parts of Canada, I think their approach has been largely similar. In Montreal, they had COVID rehab. I have a colleague from Calgary, who was involved in outpatient rehab. And I just remember a brief story that they had a patient who was discharged home after COVID. And she had just no cardiorespiratory reserve. They taught her to go up and down the stairs on her bum to make it to the bathroom, because the bathroom was on the second floor. So, a number of these patients will have significant deconditioning that's going to be with them for a little while.

Siobhan: I had the opportunity through my role at U of T to be connected with a number of different communities of practice globally. And one of them was an OT community of practice where we had members from Montreal we had some from Scotland, we had them from Africa and we would all connect on a regular basis to share tips and resources, because we all knew that this was, again, a very unknown phenomena that we were dealing with. And so, this community of practice started to evolve and there were more opportunities to be able to connect with people and share. And I found that very helpful. I think what our experience was, was very similar to what say the UK experience was. And because they entered into COVID a little bit earlier than us in Europe, we were actually able to learn a little bit about what they did and some of the tips and strategies that they used to assess and treat clients, or to-disinfect equipment. That type of thing. Very, very practical tips that we would share. The one thing that I did no notice in my discussions with the colleagues in Africa was that they didn't have the same access necessarily to virtual care because of more rural environments for the didn't have wifi as available. So, they were dealing with COVID in an area where they may not have had the same access to resources that we would here have in Canada. But certainly, what I saw was this willingness of everyone around the world to come together and share what their experiences were and tips for other areas where COVID was still coming. So, that I think was really helpful and those communities of practice, continue to meet and share which I think is wonderful.

30:34

Bernice: Mm hmm. Hearing about how this community formed through other clinicians around the world, that's, that's really amazing, especially during kind of times like these where everyone doesn't know what's happening and everyone's scared, but yeah, just having that kind of team come together.

Larry: You know, one of the things in—certainly in natural disasters like hurricanes or earthquakes, — but also in other sort of natural disasters, like the pandemic, acute care is the initial focus. So, interest saving people getting through the ICU phase. But the rehab needs don't become apparent until several months later. There very well could be a whole bunch of people who survive COVID who make it through the ICU, or maybe just get moderately sick, but who have longer lasting cardiorespiratory reserves or longer lasting deficits that maybe aren't severe enough that they have to be admitted, but they might be in functionally impacted for a long time.

31:24
Bernice: So, you were mentioning the overwhelming of the acute care systems because so much of the focus has been on surviving COVID-19. Because we have all of this happening in the acute care sector, what do you foresee happening in the next months or years when all the patients that have recovered, they're starting to move through the healthcare system and into the community, how do you see that impacting all of our rehab systems?

Larry: So, I think there's going to be multiple impacts and multiple dynamics all happening at the same time. Probably one of the really big impacts to rehab is going to be the development of more and more virtual care. So, we've started to do virtual care. And I think this is going to be with us for a long time. Because patients love it. You know, imagine your patient with a disability, who needs to get dressed, get in the car, take the long journey to your rehab hospital, pay $20 for parking, wait in the waiting room, worry about catching code for other people, then your scene and then you reverse the trip going home versus having your therapist or your physician or whoever come to your house via zoom or via OTN. People really like virtual care. So, I see virtual care as persisting across the healthcare system. Some of the deconditioning that results from all of these people had COVID, I personally don't know how much of that requires personal one-on-one, hands on therapy, versus how much can maybe be done in classes with online resources, personal training and increasing your cardiorespiratory reserves. So that to me is undetermined.

Jennifer: We don't know what the long term effects are going to be with these patients who have recovered COVID So, you know, who knows if a patient, picks up another virus if they'll be able to fight it as well as they could have if they hadn't had COVID. And what the long-term sequelae of that are going to be. So, I guess time will tell, really.

Siobhan: I think what we might see down the road is more need for some of these people to come back in through our outpatient program, if they're having difficulty reintegrating into all of their activities that they would before, because I think when they're initially discharged from inpatient care, we're really very focused on getting them home safely. But what we haven't really looked at is how do they get reintegrated into it going back to work or getting back into to their sports teams or what have you, and do they have the functional ability to do that? Do they have the reserves that they need to be able to take on those activities? So, we may see the need for some of these people to have some form of outpatient rehabilitation. I agree that they will have to have some form of a hybrid in the future, probably where we have virtual offerings and some face-to-face offerings depending on the needs. But there are also some limitations where, from a safety perspective, it's very difficult to say do balance exercises with someone through Zoom because you're not there to catch them if they fall. So, we have to think

creatively around how best to use virtual means. It works really well for our speech pathologists, it works really well for some of the cognitive activities we're working on with our patients, especially if they have a very supportive family on the other end to help be that second set of hands. So, I think moving forward in the future, we're probably going to see a hybrid. We're probably going to see a lot of people wanting virtual methods of care, which will hopefully be able to continue offering them, and still there will be some need for some face-to-face care, and finding that right balance because again, we can only have so many people in the building at any one time that we may not be able to see the volumes that we used to in the past but I think that the concept of virtual care is here to stay and I think a lot of people will find great value in it.

35:21

Bernice: Yeah, I think we've definitely seen a lot more presence online, even for gyms or other types of classes that used to be only in person. So, I think you are right, Siobhan. Do you think this pandemic has helped the implementation of tele-rehab practices, or maybe developing more standardized guidelines for tele-rehab?

Siobhan: Absolutely, I think it really was the impetus for all of this because we really were doing very limited work virtually. I think if we use the term virtual it could also mean telephones. So, in some of our programs, we would have telephone follow ups with our patients to ask them how things were going at home. But that was really the limit to what we were doing from a therapy perspective. And now based on need, we're actually doing this every day on a much more regular basis. So, I think, sometimes things happen for a reason and, and we have used a negative situation and turned it into an opportunity—an opportunity, I think, that will just continue to evolve and improve over time.

Larry: Yeah, if you're a glass half full kind of person and trying to find the good that comes out of the pandemic—I think this is maybe one of the good things—is that we've learned how to do virtual care. And it's not directly part of this conversation, virtual education too. Would Siobhan and I have gone to the WHO to present about something in the normal world? I don't think so. But we've opened up the possibility of webinars and conferences and learning from each other in ways that probably wouldn't have done that without the pandemic.

36:43

Chelsea: Thank you for speaking more about virtual care and how the face of rehab is changing and always adapting. So, our next question is about research and funding. We typically see less funding for rehab research compared to basic science. Have you observed the same trend with COVID-19 research?

Larry: So there have been calls for COVID related research. I know we've applied for some of those grants and have not been successful because I think right now, the focus probably is quite a bit more on the acute care and how do we develop acute treatments. How do we develop a vaccine and so on. I'm hoping that that will change over time, though, as we realize that there are more of the long-term consequences from COVID and we need to figure out a way to treat this large segment of the population. We did get a small grant from a local agency, to look at the changes required to implement

the COVID unit. So, they're doing sort of a qualitative approach, including interview of staff and physicians to see what did it take to bring the change management around to have COVID patients.

Chelsea: Thank you for sharing that. Dr. Robinson.

37:55

Chelsea: Okay, so thank you, everyone, again for sharing your experiences and your personal anecdotes with your time working at St. John's rehab, especially in this pandemic. It's really eye-opening to see how this pandemic has changed the landscape of health care and rehab, especially with the use of technology. So, before we wrap things up, do you have any takeaways or main points that you want our listeners to leave the podcast with?

Larry: I think change management has been one of our biggest challenges. Because, you know, at your age, you're probably thinking we just tell our folks to go out and do this or that and they'll go out and do it. But change management is really complicated. And I think just getting back to what Siobhan said, and Jen also, a lot of it's interacting with staff in general. So, going there, visiting the staff frequently, just getting to know them, hearing their concerns, bringing the experts there, just going to observe yourself and make sure they feel like the leaders are present and part of the community. So, change management is a skill that's definitely required in these pandemic times.

Siobhan: Yeah, and I would just add, just, you know, the importance of teamwork. Because, you know, through this process, I think if we hadn't had such strong teams, it would have been that much more difficult for us to manage. So, really relying on teams to support one another through this process and celebrating successes. So, whenever we had, you know, someone who was being discharged who had had COVID-19 and had progressed really well, there was a little walkthrough down the hallway and people will kind of be cheering them on. A little parade for them. So, having those successes celebrated, I think, was a bit of a morale booster for the teams and helped give them reason to keep going and, you know, to keep working through those days where they were tired of putting on their masks and their face shields. And they knew that there was something really positive at the end of it. So, just remembering to keep supporting each other in our teamwork and to celebrate those successes and lean on each other for support. I think it is really important at a time like this.

Jennifer: And just remember, this is a novel Coronavirus. It's new. Nobody really knows, so the messaging we got early on was very different than what we're doing now. We're all in this together and we all just need to be one team, like Siobhan said.

40:08

Bernice: That's really inspiring everything that you've talked about: really celebrating the successes, no matter how small; the teamwork between everyone; and how, Dr. Robinson, you were mentioned about change management. We were really able to learn a lot through talking to the three of you, and thank you so much for speaking with us. It was definitely a really great learning opportunity for us as students in rehab sciences, as well as I think for other listeners that might not be part of this field, just because it's a pandemic. It affects the lives of everyone around the world. I think it'll be able to reach a lot of different people. So, thank you again.

Siobhan: Thanks for asking us it was a pleasure.

[chime]

40:51
Bernice: For additional information about rehab and COVID-19, the link for the WHO webinar presented by Dr. Robinson and Siobhan can be found in the description.

We would like to thank the University of Toronto for their generous support in funding this mini-series with the COVID-19 Student Engagement Award.

Chelsea: We hope you enjoyed learning about rehabilitation in the context of COVID-19. Catch us on the next episode of our COVID-19 mini-series. In the meanwhile, check out The rehabINK Podcast on Podbean, Spotify, Apple Podcasts, and Google Play Music.

Bernice: If you'd like to read more about rehabilitation research or rehabINK, you can visit our website at www dot rehabinkmag.com. Until next time and stay safe.

[chime]
