Understanding Long COVID: Implications for Vocational Rehabilitation Professionals - Session 2 - Psychosocial Issues and the Provision of VR Services

JOHN C. WALSH: At this point, I would ask our next presentation team to please turn their videos on and we can begin Session 2, which deals with psychosocial issues and the provision of vocational rehabilitation services. And our presenters will be Ms. Barbara Dos Santos and Dr. Ken Hergenrather. So I'll turn it over to you folks.

KENNETH HERGENRATHER: Welcome to Session 2, the Psychosocial Issues in the Provision of Rehabilitation Services. I am Dr. Ken Hergenrather. I am the Co-Director of the George Washington University Center for Rehabilitation Counseling Research and Education.

BARBARA DOS SANTOS: And I'm Barbara Dos Santos. I'm a PhD student at the George Washington University, a licensed clinical mental health counselor, and a research specialist for the CRCRE.

KENNETH HERGENRATHER: In this session today, we're going to introduce the psychosocial issues related to COVID. The psychosocial issues are the influences of our social and cultural environments upon our decisions. We will also introduce the socioecological model, which explores the influences of our individual views, our influences of those in the communities in which we engage, our influences among those with relationships we have, and also the influences upon society, which may be regulations and laws.

And what we'd like you to do is to think about a time period, which would have been March of 2020 when COVID-19 became part of our vocabulary, and thinking about that time period from March of 2020 through today. We'll also explore psychosocial issues within the framework of the socioecological model and implications for vocational rehabilitation service providers working with clients diagnosed with long COVID.

BARBARA DOS SANTOS: So we will begin by discussing psychosocial factors and their influences on health. So psychosocial factors are social, cultural, and environmental phenomena and influences that affect mental health and behavior. These psychosocial factors include someone's social environment, their economic status, education, housing, and other factors as well.

When looking at the conceptual model of psychosocial influences on health, there are three areas. First, there is social, which includes experiencing discrimination, family and friend relationships, trauma, and education, among others. The second area is culture, which includes language, stigma, and religious beliefs. Lastly, there is environmental, which includes workplace conditions, natural disasters, and pollution.

The APA defines a psychosocial stressor as a life situation that creates an unusual or intense level of stress that may contribute to the development or aggravation of a mental disorder, illness, or maladaptive behavior. Having a diagnosis of COVID-19 is considered a psychosocial stressor.

On the other hand, positive psychosocial factors have been correlated with resilience and support, and have been shown to reduce stress. Relationships with family and friends and engagement in VR services are examples of such support.

KENNETH HERGENRATHER: And now what we'll do is we'll introduce the socioecological model. And please keep in mind that this involves four levels. We're looking at the individual level, the relationship level, the community level, and societal level. And we're thinking about COVID-19 and we're thinking back to March of 2013. Specifically, let's think about Friday, the 13th of March of 2020, because that's the day that the president proclaims that COVID-19 constitutes a national emergency.

So when we think about the socioecological model, there are these four levels. The individual level. And thinking about the individual level, thinking about COVID-19, were people isolated? Did they have family that they lived with? Did they have access to technology? Did they have access to information? How did they gain information?

Thinking about relationships, relationships with others, were those relationships compromised because of mandates, because businesses were closed, workplaces were closed, people were not able to seek health care or they had to schedule health care, or when they went to hospitals? And were they able to see loved ones that were in hospitals? And what happened if a loved one passed in the hospital?

Thinking about the community, what took place in the workplace? What happened to the workplace? What happened to social groups that we were involved with?

And then let's look at the societal level. So what took place in society? We did know that on the 13th of March, there was a presidential proclamation that COVID constitutes a national emergency. And so we think about mask mandates. We think about vaccines. What did society present as people who did wear masks, people who didn't wear masks? What about the COVID recognizers and the COVID deniers? And so as we think about the socioecological model, we're thinking about and considering the individual, the relationships one has with others, the community engagement one has, and also societal.

So in incorporating these levels, if we look at the individual level, we're looking at attitudes. And so this may be attitude toward COVID-19, what behaviors an individual performs such as could be mask wearing. It could be isolating. It could be wiping down countertops. It could be ordering items online, having them delivered. It may be being isolated at home and not having communication or access to technology.

This also could lead to distress. Could lead to emotion. Also, the knowledge of COVID-19. Where did one access knowledge, access information? There could also be coping mechanisms for COVID-19. And sometimes research has suggested substance use was a way of coping.

We could also look at the socioecological model and the relationship. In regard to the relationship, what did family and friends consider COVID-19 to be? Were there people in those groups who were COVID deniers or recognizers? How did this impact intimate relationships? How did it impact social networks? Were the social networks-- did those continue, or were they halted? Or were they diminished in frequency? Or did it present that this was now being conducted via Zoom instead of face to face?

If we look at the community level, think about community services. How were community services provided? If these were services for persons with disabilities through vocational and rehabilitation services, did the venue change?

In regard to health care providing, how was health care changed? Did you have to schedule for appointments? What did a hospital visit look like? What about school? What happened with children? Were children in school? Were they being taught from home? What about the workplace? What if you were a parent and you had children? How did this change? So here again, the community level and the influences upon these beliefs during COVID-19.

And then the last section is a societal level, thinking about local, state, and federal laws, ordinances regarding mask wearing, looking at public transportation, looking at hospitals and wearing masks. Looking at vaccines and thinking about vaccines and the priority regarding those at risk or age and the rollout of the vaccines.

So if we look at the individual level, we did state a few examples, but let's see what the research suggests. What the research suggests in regard to long COVID, which is also referred to as post-COVID-19, that these daily life impairments during COVID-19 and currently during COVID-19 are associated with probable depression, anxiety, and worry about COVID-19. As we have new strains that are presenting now, that worry is increased and also demonstrating distress.

If we look at higher rates of mental illness for persons with COVID-19, long COVID, we see that the research suggests this is similar to the rates of trauma survivors. And we're thinking about trauma, thinking about the loss of loved ones, a loss of a home, loss of the job. Also with long COVID, there's a combination of mental health symptoms and physical symptoms, and these are correlated. And physical symptoms may be mobility.

And in regard to COVID, we know there are many people who passed. And what the research suggests is for those individuals experiencing bereavement, for every person who passed, nine people experienced bereavement.

And the bereavement was different. It changed. People may not have been able to visit someone who passed who was in the hospital. The rituals for funerals changed. The grieving process had changed. The research suggests that ethnic groups and racial groups were disproportionately affected in processing grief and bereavement.

If we look at the individual level again, what we would like to just share is that also people had experienced discrimination because of a stigma of long COVID. The research suggests that people perceive that someone with long COVID currently has COVID, and so this is a stigma that's being presented.

We also have learned that overall fatigue among people with long COVID is predicted by the anxiety, the apathy, and the depression. We know that some of the effects of long COVID may present as diminished executive functioning, diminished working memory, lower sustained attention.

What we do also know is at the individual level, which is addressing attitudes, behaviors, and beliefs, is that the research suggests that for people with long COVID, they may experience periods of sadness because they long for their body to return to their previous functioning, and also the life that they may have lost. And this regards family, relationships, workplace.

There's also some anxiety about the future, the fear of being reinfected, or what happens if there's a relapse? And also, how that relapse or that reinfection may impact their functioning and be able to-- and how they may have diminished abilities.

BARBARA DOS SANTOS: So now we will look at the relationship level of the social ecological model, which includes family, friends, and social networks. So research has shown that each COVID-19 death in the US resulted in nine relatives experiencing grief and bereavement, which Dr. Hergenrather mentioned on the previous slide.

But we wanted to include it on this slide as well because this doesn't impact just at the individual level, but of course at the relationship level as well. And it is important to note that marginalized racial groups were disproportionately affected by this. Research has also shown that patients have felt dismissed from their service providers if said service providers doubt them and suggest that their symptoms are all in their head or are just due to stress.

Lastly, persons with long COVID report receiving less support when their social support includes COVID-19 deniers. So looking at, how does that impact the relationships that people are having with their family and friends or social supports? And is there an interruption to that? Or what is the meaning behind that for the persons-- for the individuals' relationships?

KENNETH HERGENRATHER: And the next area, the next level is the community level. So the community level consists of community services, health care providers, the school environment, and workplace. And what the research suggests is that within these communities there could be dismissive attitudes.

If there is a child that has long COVID, an adolescent, an adult and they report to their supervisor, to a teacher, to an instructor, to a medical provider, to someone who may be providing them community services that they're presenting concerns, what the research suggests is that there may be dismissive attitudes by these providers. When these dismissive attitudes are presented, the research suggests that the individual with long COVID is less likely to seek services because they've been dismissed.

We also find that COVID conditions may not be consistent across clients. And so what this means is really to look at some of those psychosocial factors that we describe such as the culture and the environment. So understanding the psychosocial environment of the client, the socioeconomic environment is to say, lower income, middle class, upper income looking at the levels. And then also looking at the health and the clinical data of the client that we work with.

One thing that comes across in the research is the relationship between the mental health and physical health status of individuals who are diagnosed with long COVID. And in pursuing treatments, looking at the integration of evidence-based treatments for mental illness and substance use. And also here again, integrating physical health.

So there's an integration of mental health and physical health that may present as somewhat diminished among persons diagnosed with long COVID. And so that's continued to be explored in the research.

Another aspect was the discrimination that people may experience, and this is the discrimination base that long COVID diagnosis could be perceived by others that an individual does have COVID currently. And then also, if someone has been diagnosed with long COVID, there has been research suggesting that people may perceive that a person with long COVID will infect others with COVID.

BARBARA DOS SANTOS: And then lastly we have the societal level, which includes federal legislation and agencies such as the Americans with Disabilities Act, vaccine orders, mask mandates, and state VR services. And so really looking at how these societal implications have impacted those who are living with COVID or have been diagnosed with long COVID, or even the social supports and the networks of those who have been diagnosed with COVID.

KENNETH HERGENRATHER: And so what we want to just remind everyone of in this session is that the individual who is living during COVID-19, that there may be influences at the individual level such as someone's beliefs about COVID-19, about long COVID, about where they get their knowledge from, how they access the knowledge and information, the relationship with others such as the relationships of their social supports, their family. What are the perceptions of those individuals toward COVID, toward long COVID?

Looking at the community, how were services impacted by someone who has a diagnosis of long COVID? And what we mean by that is when someone does present with long COVID and presents their concerns, how are those received by care providers? This could be medical care providers. It could be workplace supervisors. It could be the providers of services.

And then also thinking about societal level and looking how those mandates may have impacted an individual or may still impact an individual. Looking at the new strains of COVID, and what about the mask mandates? Will there be a mask mandate on public transportation? Are there recommendations being made in regard to mask mandates or vaccines? And so thinking about how our beliefs at the individual level, within our relationships with others, within the services and the communities we work with and are served by and the societal level can influence the services we seek and our interactions with others.

In regard to vocational rehabilitation services, vocational rehabilitation services are grounded in federal legislation. And these provide vocational support such as job preparation, post-secondary education, advocacy skills to achieve gainful employment. And these are to persons with disabilities who meet the criteria as stated and the Americans with Disabilities Act. Public VR services are provided by state agencies in the states, and may also be provided by state or community agencies such as nonprofit agencies, faith-based for-profit agencies, or by workforce.

In considering implications for vocational rehabilitation services for consumers, clients who are diagnosed with long COVID, some important things to consider is that recognizing long COVID is a multisystem, and that this means that it can impact mental health, physical health, and thinking about how people cope with the diagnosis of long COVID. And people also with long COVID may have a greater risk for mental health disorders, thinking about some of the socioecological model influences and the psychosocial factors that can influence distress among an individual.

And then also, keeping in mind that mental health symptoms and physical symptoms are presented to be likely correlated. But also understanding that when patients talk about their presenting concerns, they may not be apparent in the moment, and to not dismiss the client's presenting concerns that are not apparent in the moment, but to acknowledge those.

When working with clients diagnosed with long COVID, what we could do in the community is to provide training addressing the knowledge and awareness of long COVID. And this would be provided to staff, to VR service providers, to supervisors, and to administrators. If we consider the socioecological model and influences upon behaviors, we know that knowledge is one of those influences. So if we can provide the community, our workplace with training that addresses knowledge about long COVID, here we can benefit not only our workplace, but also the clients and consumers that we serve.

Again, psychoeducation in the workplace may also reduce the frequency of negative experiences not only by our consumers, but also by coworkers in the workplaces, and also coworkers who may have family members who have long COVID. And this can also help reduce

structural inequalities to employees and to clients who may be seen as a risk because of long COVID.

BARBARA DOS SANTOS: And here are some additional suggestions for VR service providers based off of the research and the social ecological model. So some of these suggestions include providing services and assessing for risk using a trauma-informed care approach. Another suggestion is providing psychoeducation for clients, VR service providers, vendors, and staff.

Also to explore social support systems and the influence and meaning of these social support systems. And very importantly, to listen nonjudgmentally and believe clients' stated concerns.

It's also important to invest in the development and evaluation of interventions for persons with long COVID that explore the interaction and intersection between mental health, cognition, and psychological well-being. And this is to really ensure that a holistic approach is being taken when addressing these impacts.

KENNETH HERGENRATHER: So what we'd like to talk about in this slide is thinking about vocational rehabilitation services for persons with disabilities diagnosed with long COVID. And when we're working with persons with long COVID, just to consider the psychosocial factors within the socioecological model.

And when we work with our clients, we can begin by asking, what parts of long COVID is or are their most prominent concerns? And so some of these may be cognitive impairment. Maybe brain fog. Could be executive functioning deficits. It could be a functional, physical functioning decline. Could be problems with concentration and attention. It could also be the relationships with others. There may be a stigma among those support groups about having COVID-19.

Thinking also about the physical function in regard to respiratory functioning, short-term memory loss, stigma. And then when these are identified or the item is identified, to explore how these may impact the ability of the client, the consumer, to obtain and maintain competitive and integrated employment. And by identifying these, then working with the client to create strategies to address these.

We'd like to thank you for joining us for this session, addressing the psychosocial factors and the impact on the provision of vocational rehabilitation services. And our references are listed.

SPEAKER 4: We have-- I think we only have a few minutes, but there's only a few questions. So the first one was asked by Alex Dean. If anxiety, apathy, and depression are predictors of the person's endorsement of experiencing overall fatigue, are researchers looking at one common pathogenesis for this group of symptoms? Is it correlated highest with one organ system or another in the case of individuals with post-COVID? And I'm not sure if that's for you, Dr. Hergenrather, or Barbara, or for our CDC partners.

KENNETH HERGENRATHER: Well, I would have to tell you, I would have to get back with you on that because I do not have the information regarding the medical diagnosis and the

correlations. I could look at the diagnoses and how these are correlated and how collectively these do align with that. I refer to our medical experts if they could provide some insight.

SPEAKER 4: Dr. Koh? Dr. Saydah?

JENNIFER RITTENHOUSE: Yeah, sorry, I was just trying to look at the question again, but it's about, I think, mental health diagnoses and long COVID. We know that people with long COVID can be experiencing those, whether it is a consequence of long COVID or because of their situation and the other symptoms that they're having. And so there are connections. I don't know that I have the specific answer to the specific question, though.

SPEAKER 4: Another question that came in had to do with, can a person recover from having long COVID? And if so, what is the average length or time it might take?

SHARON SAYDAH: A lot of people do recover from their acute symptoms within four weeks. There are a number of people who have ongoing symptoms from that four to 12 weeks. And then there is a large percent-- or not a large percent, but a number of folks who have ongoing symptoms after 12 weeks.

And that continues to decrease as you go out further, so that decreases at six months and at a year. But we do have reports of people who have ongoing symptoms and long COVID up to two years after their initial infection, so a lot of these symptoms can persist for a while.

SPEAKER 4: OK. We have another question here. It says, the challenges of diagnosing long COVID and determining the causes of these symptoms seem significant. Is it really more of a syndrome?

JENNIFER RITTENHOUSE: I will-- I'll certainly agree with the comment and/or question there, that diagnosing long COVID is a challenge because currently we have no one single diagnostic test that will say whether someone's symptoms are a result of having had COVID. There is ongoing work and there is a lot of interest in biomarkers. There are a lot of studies looking at different things that can be measured in blood and other bodily fluids to try to hone in on something that might be able to say with more confidence whether what someone is experiencing is long COVID. But no, that is-- I'll just have to agree with the common aspect that it is a challenge.

SPEAKER 5: One last question before break. What treatment plan or medications are used to treat fatigue from long COVID?

JENNIFER RITTENHOUSE: So what I'll point to for that question is to AAPM&R's guidance statement, consensus guidance statement. They have one specifically dedicated to fatigue. And so again, there's not one specific treatment that is aimed at long COVID fatigue. It's going to be kind of tailored to an individual patient, and so I would reference that guidance statement for treatment and management of fatigue related to long COVID.

SPEAKER 5: Thank you.

JOHN C. WALSH: Thank you so much. So I really want to thank both of our presentation teams for Part 1 of our mini conference. The other piece I wanted to point out is another member of the CDC team, Dr. Pragna Patel, who's actually participating in today's session, also providing me information in regards to the question connected to vitamin D and long COVID.

No studies have found an association of vitamin D and long COVID, but there have been a few studies to date, and more research is needed. Vitamin D does seem to have a role with other viral infections that cause inflammation. An example, HIV and infrality, which may be an important consideration for folks that are elderly or persons with disabilities. So Dr. Patel had sent me a fact sheet, and we'll certainly make those available as well on the landing page.