Movement for MS

Presented by:

Michael Gevertzman, PT, DPT

Yahaira Rivera-Bobadilla:
Hello everyone! Welcome to our MSAA's live webinar, Movement for MS, with physical therapist and MS specialist Doctor Michael Gevertzman. Thank you for taking the time to join us today. My name is Yahaira Rivera and I'm the director of Mission Delivery and Program Development for MSAA and your host for the program. Before starting our webinar, I would like to share some information about MSAA and review housekeeping items and reminders.

As you may know, MSAA is a national nonprofit organization dedicated to improving lives today through vital services and support. Some of our services include a national helpline, providing English and Spanish services Monday through Friday, 8:30 a.m. to 8 p.m. Eastern Time, an equipment and cooling distribution program with products designed to improve safety and mobility, and help with heat sensitivity. In addition, we also offer educational programs, online tools, publications and digital resources to help you and your family members stay informed. And we also offer support through Community Connection to help you stay connected with other members of the MS community. For more information about our programs and services, please visit our website at mymsaa.org.

And now we're going to share a couple of reminders. You will have the opportunity to submit your questions by using the Q&A chat box. We'll do our best to answer as many questions as possible during the Q&A portion of tonight's webinar. Also, please note that the program is being recorded and will be available as an On-Demand video on our MSAA's Video Library within the next couple of weeks. And finally, at the end of the program, we ask that you please complete a brief survey. Your feedback is extremely important to ensure that our programs are relevant and impactful. A link to this survey will be included in the chat box.

Also, further note, please know that this program is for educational and informational purposes only, and does not constitute formal recommendations. Please speak with your doctor or healthcare provider team for specific questions and concerns.

And now I'm pleased to introduce our speaker for this evening. Doctor Michael Gevertzman is a physical therapist and clinical researcher at the Cleveland Clinic Lou Ruvo Center for Brain Health in Las Vegas, Nevada, where he serves as a senior clinical mentor. He's a board certified neurologic clinical specialist and multiple sclerosis specialist. He graduated with a bachelor degree in science from Rutgers University, and earned his Doctor of Physical Therapy degree from Columbia University. Dr. Gevertzman is passionate about serving his patients and

the community, especially through health and wellness education. Welcome Dr. Gevertzman, thank you so much for being here with us tonight. We look forward to your presentation.

Dr. Michael Gevertzman:
Thank you so much for having me. And honestly, thanks to the MSAA for all of the amazing things that are being done. It's incredible to see the resources that are out there and I really just appreciate all that work. So thanks to you and to everyone else for all that you do.

As mentioned, I'm Doctor Michael Gevertzman.. I'm a physical therapist. Let's advance to the next slide just to talk about who I am for a second. But thank you all for being here and for letting me talk about something that I'm incredibly passionate about. So I am, as mentioned, I'm a physical therapist and clinical specialist at the Cleveland Clinic Lou Ruvo Center for Brain Health in Los Vegas, Nevada. I wear a lot of hats while I'm there, I'm a clinical instructor for Doctor of Physical Therapy students, I'm a peer mentor for other physical therapists in our clinic, and I'm also a clinical researcher. Most of my research is on topics related to multiple sclerosis and Parkinson's disease. I've also been a PhD student of interdisciplinary health sciences for the last few years at University of Nevada, Las Vegas, and for the past two years, I've been a part time instructor at UNLV's Doctor of Physical Therapy program, as well. Next slide please.

So for today's talk, I want to answer three primary questions. The first is what is movement and why is it so important for people living with MS? Now, this may sound pretty simple, but, it's incredibly important, and we'll talk about exactly why, in ways that we might not have thought about before. The second question is, what are some common barriers to movement that people with MS may experience? And through our discussions, hopefully we'll talk about some ways to overcome those barriers. And the third question which we'll spend the most time on, is what are some practical ways to get moving and how might those be adjusted knowing those barriers that may be faced? Next slide please.

So why do I care so much about this topic. Why is it so important to me? I see so many patients in my clinic who, for some reason, have not moved as much as they could have. They were diagnosed with MS and either they became afraid that movement or activity may make things worse. Maybe somebody told them that they shouldn't do so much movement or activity, you know, for whatever reason. And now they're just trying to play catch up because they've deteriorated faster than they should have, not because of the disease progression or a worsening of their symptoms, just because they haven't done it consistently for such a long time.

And so the principle of use it or lose it really does apply. Movement is a skill that needs to be kept up. And the more that we move, the more that we are able to move. And as we say, a body in motion stays in motion. So starting early is incredibly important; getting ahead of things before we have any kind of issues down the line, trying to get ahead of things as much as possible. So I was very excited when the MSAA asked me to talk about this, because I think this may be a way to reach so many people. Usually I have to have these discussions one on one, but maybe we can talk about these things as a group, and we can give gentle encouragement just to keep moving and remind people why it's so important to do so. Next slide please.

So let's start out, let's talk about what movement is. So a very simple definition of movement is a change of place or position or posture. As you can imagine that definition encompasses most parts of life, other than the time that we spend in exactly the same place and not moving at all. Therefore, movement is a critical part of life. It's incredibly important for all areas of our life, and it's an important component of our health and wellness. The word movement may make you

think of people walking, specifically, but movement is really anything that has the body in motion. You'll notice it doesn't have to be a specific exercise regimen or an exercise routine or an exercise plan, which is a lot of people think that that's what these things are when we talk about it, but it doesn't have to be. It's just anything that gets you moving.

I also want to mention, if you advance just a little bit in the slides, I want to mention that there is a difference between movement and physical activity, but there's not much difference. The only real difference is that movement can be performed by somebody else. So a caregiver or trainer can passively move you, such as in a stretch. But when it comes to physical activity, physical activity doesn't actually have to involve movement or motion, such as if we're holding a stretcher, or it we're holding an isometric strength exercise where we're just pushing against something and holding it. For the purposes of our discussion, we're not going to make a distinction. We're going to talk about movement and physical activity hand-in-hand, but just recognize that there is a slight distinction that's made in those terms. Okay. Let's move to the next slide.

What are some of the benefits? The benefits to movements may seem obvious, but let's talk about them one by one. There are obviously physical benefits when it comes to movement. If you're doing any kind of thing that incorporates your muscles or your bones, we're working on strength, we're potentially working on endurance. If you're doing things that challenge your balance system, then we're going to be working on our balance.

It also can have physiologic implications though. So movement actually helps to stimulate parts of our brain and our body that help with hormone production. It helps with circulation. It helps our body function more effectively and efficiently. This can even impact things such as digestion and sleep hygiene. It can actually help us to sleep better if we are more mobile and more active.

It can also help with comorbidity management. So, managing cardiovascular dysfunction, and GI dysfunctions or gastrointestinal dysfunctions, lung functions, it can help with weight management and blood pressure, diabetes management. And if we're doing anything against any kind of resistance, it can help with our bone health as well, to reduce the risk of osteoporosis. There are also evidence to suggest that physical activity and movement can help with mood, and can help with things such as anxiety and depression. It can also help improve cognition, which is memory and thinking. There's also a lot of really interesting evidence out there suggesting that movement and activity, especially done in certain ways, can help with what we call neuroplasticity, which is essentially the body and the brain's ability to rewire itself.

So the brain, I know, especially in MS, we talk about this all the time, there's a compromise that's happening in the central nervous system, meaning our brain and our spinal cord, where things are getting a little bit wonky, things are getting a little haywire because of the disease. And there's always the question that's asked, how can we do more to help improve our brain, to maybe reform some of those connections that are not doing as well. And so this is one of the best evidence out there that I know of is about movement and physical activity that we can literally rewire the brain if we move in good ways, to be able to make new connections and to strengthen connections that are already there. So the neuroplastic effects, or the ability to make those new connections or strengthen old connections, is really important, especially for people living with multiple sclerosis.

And because of all of this, it also may reduce the rate of neurodegeneration, which means the slow deterioration of the central nervous system, the brain and the spinal cord. It's a normal part of the aging process, and it's a little bit accelerated in multiple sclerosis, but with good physical

activity and movement, we know that we can help to slow that degeneration, or at least that's what the evidence suggests. And finally, when it comes to quality of life, there's great evidence to suggest that good physical activity, good movements can actually help to improve quality of life. And ultimately that's the goal. It's not just about being able to do more. It's not just about being more comfortable. It's really about the quality of life and the way that we're able to enjoy our life. And so the more that we can do to do that, the better. Next slide please.

So if we know that there are great benefits to movement, what are the barriers to that type of activity. So I've listed here some of the most common things that I hear of on a daily basis. But there obviously are more that you probably can think of that you may have experienced as well. We'll take them one by one. So the main thing that I notice is a perceived lack of resources, and that starts with time. The days, if you're anything like me, the days just fly by. No matter how hard you try, it's not going any slower. And so if we have so many things going on and we have a day that's flying by, it's really hard to set aside time for physical activity.

Also, sometimes we think that we don't have space to actually move, right? We could be in a cramped living situation. We may not have a good outdoor space to be able to navigate, or maybe there's other things that stop us from doing so. And so space can be a big problem as well. Same thing with lack of equipment. If we think that we need to have special types of equipment to be active or to do movement, then not having that equipment, not having that resource, may be a lack as well. Sometimes we also need physical support, whether it's hard to do movement on our own, or physical activity on our own, or whether we just get tired and we need that physical support at that point, sometimes we don't have that physical support that we need to be as active as we would like.

And finally, I hear a lot of times, people tell me they're just not motivated. They're just not motivated to do it. There are also some physical challenges as well. There's safety concerns, such as for falls, the environment may not be conducive to a safe environment for movement, weather may be a challenge to navigate, especially if you're in a place that's particularly hot and you're sensitive to that, or a place that’s icy, a place that may be slippery, a place that might have rough terrain that's hard to navigate for you. And then there are some MS specific challenges that we see, like heat intolerance. It's hard to navigate the heat for a lot of people with MS, although I have had some people with MS tell me that they're actually susceptible to cold. Go figure. And so whichever way it affects you, that may be, you know, something to navigate. Strength and motor control deficits, coordination deficit that don't allow you to be as active as you would like.

Fatigue, which is I think the number one thing that we hear from people with that MS, that they are fatigued and they just have nothing in the tank when they want to do that type of activity. And finally, spasticity is something that we talk about all the time, people say is very challenging to navigate and it stops them from being as mobile as they would like. All of these are very real barriers, and I can't expect to fix all of these things with one webinar. Nor can I hope to address them for you in particular. And I think it is important to talk to your healthcare provider. But let's talk about each one individually and see if we can maybe give some suggestions for how to navigate some of these things. Next slide please. Let's take it one by one. All right. Next text box please.

In terms of time - so sometimes having little bite-sized activities throughout the day, or what we like to call activity snacks or exercise snacks or movement snacks, can actually help us sneak movement or activity into our daily life even if it's just for a minute at a time when we notice we aren't doing anything else. It's often really hard to set aside an hour for physical activity, but it's

usually pretty easy to find one minute when we're looking for it. So, it can just be right before you get out of bed doing a little movement, or during a commercial break on TV, right after a meal, between meetings at work. All of these are opportunities for little snacks that you can just snack on throughout the day and get good movement and it does not all have to be at once. It doesn't have to take away from the rest of our day. It can just be snuck in into those little moments that otherwise would have gone to waste.

In terms of space, we actually don't need space to move. We'll talk a little bit later about what movement can look like, but really movement is just getting your body in motion. You can stand up and march in place. You can walk around your chair, if you're if you're mobile in that way. You can wheel, if you're in a wheelchair, in the little space that you do have, we can even have in cramped quarters, any movement, transferring from one place to another, rolling around in bed. All of these things are movement and they are great for you. It does not have to be in this extravagant space like an open gym or a park or anything like that. All of those things are great too.

Same thing when it comes to equipment. A lot of people tell me that they just don't have equipment to be active, and that's really thinking about exercise in particular or really specific types of exercise. But when it comes to movement and when it comes to just physical activity, you don't need any fancy equipment. If you want to get something, there are, you know, exercise bands that are relatively inexpensive and easy to use. There are cans of soup that you can use as weights if you wanted to do that type of exercise. But, you don't actually need to have any special equipment in order to actually move.

In terms of physical support, one of the things that I like to point out is that you can do as much as you can on your own and then take advantage of this physical support that you do have. When you have somebody come by to help or if you do have any kind of support in any way, it can be a mechanism, it can be a piece of equipment, can be anything, when you do have that opportunity, take advantage of it. I think that's really, really important. But whatever you can do on your own, try your best to do. A lot of times that can be little things, but again, it does not have to be extravagant. The more that we do with what we can do, the better off we're going to be.

And finally, motivation. Motivation is one of those things that I think when we, when I ask my patients about why they feel like they're not motivated or lazy, it's usually not actually laziness. Usually when I say, you know, what do you mean by laziness? They say, I just don't have time. I'm constantly running to appointments. I have other commitments or I'm exhausted. To me, none of that sounds like laziness. And so I like to address them from a couple of different perspectives. Number one, if it really is just not interesting to you, you're not going to want to do it. We'll talk more about that later too, but make it fun, right? Make it something that you're going to enjoy. It can be an activity that you actually like. And we'll talk about some examples of that. But it can be any activity that you like. It can be going out with friends. It can be just moving around in your kitchen if you like to cook in whatever way that looks like, but just make it fun.

Another thing is to incorporate movement into your day. A lot of times we don't think about activity or exercise or movement until the end of the day. We're exhausted and we just want to go to sleep because it's 10 p.m. and we're going to have to get up early the next day for work. That's not the time to start thinking about activity, but if you structure it into your day, if you know that every time you eat a meal like you're going to do one exercise, or you're going to take a little walk around your home, that's going to be built into your day in a way that you won't have to think about at some point. It will just be a habit, and it won't actually be left until that 10:00 pm

slot. It's another way to snack throughout the day, but it becomes built into your day as part of the structure.

And finally, planning is key. Sometimes just setting an alarm on your phone for a one minute activity break every hour, that can be really critical. But planning is really, you'll see that as a theme throughout this talk, planning is absolutely critical and can really help to make this a possibility. Next slide please, and advance one more to the text box.

So the physical challenges that we want to try to to navigate as well. So in terms of safety via the falls and potential balance concerns in the environment, let's try to use as many tools and choose the right environment as best as we can. We'll talk about some tools that we can use later. But using a walker, using a wheelchair, anything that's going to help us to be able to accomplish our activity goal is going to be helpful. We'll talk a lot more about that in a little while, but it's really important to understand that safety is first, right? Do whatever you can safely to be able to keep moving forward.

And in terms of the environment, planning is key, right? Try to make sure that the environment that you're going to be in, or at least a little environment, a little space in your home, a little place outdoors, is free from things that are going to increase your risk for falling. Not having throw rugs not having clutter, not being in overly crowded spaces, maybe avoiding any slippery locations, having places to rest, and knowing where those are in advance, maybe having somebody with you, to have some physical support if needed, having a contingency plan just in case things don't go as smoothly as you'd like. All of those things are ways to create extra safety and to be able to help you to do more while minimizing your risk for anything that you don't want to happen.

Navigating weather. So if we're talking about things like heat, especially where I am in Las Vegas, I know the summer is pretty rough, gets to about 119º pretty regularly, and so that can be pretty challenging. So as mentioned towards the beginning, make sure that you're using some cooling strategies. The MSAA has some great resources for that. It can be cooling vests or scarves that can help cool your body temperature down. There was actually a recent study that was done on some really interesting things to help cool or to help reduce the overheating during exercise by using certain medications that are over-the-counter. That's a really interesting study that may have some promise as well. We'll see down in the future. But really, right now we know that there are some cooling strategies that you can use. You can have a fan. You can be in an environment, if you can't go outdoors, try to stay indoors with a little bit of a fan or air conditioning. But trying to make sure that you're planning ahead, again, in that way as well, can really help to reduce your risk of overheating. And same thing when it comes to slippery environments. If it's raining that day, it might not be the right time to go outside and to exercise on a slippery day. That may be the time that you actually do your physical activity indoors. But planning is really, really key.

And then with the MS specific challenges like strength and motor control deficits, work on the physical abilities that you can. We'll talk about some strengthening exercises to try, but really try to do as much as you can with what you have and also try to work on it. Right? Try to work on your strength. Try to work on your endurance, try to work on your coordination, your balance. But with whatever you have now, that's something that you can use to do activity. Even if it's, again, those little one minute bites. And I think when we put it in that perspective, it starts to seem a little bit more manageable if it didn't initially.

The heat intolerance we talked about with the cooling strategies. When it comes to fatigue, planning, pacing, and listening to your body. Planning is absolutely key. If you're going to be doing tons of activity at once because that's the only time that you have available, you're probably going to end up with a greater degree of fatigue. So maybe spacing things out into those bites like we talked about. Maybe making sure that you have seated rest breaks along a walk if that's what you're doing or that you have somebody to, if you're wheeling yourself in a wheelchair, making sure that somebody can pick up the slack at the end if you get overly fatigued, you know, if your arms start getting tired or whatnot so that you have a contingency plan in case you do get over fatigued, to make sure that you don't get too fatigued where it's going to wear you out for a couple days. And listening to your body, making sure that if you tried to push one day and it was a little bit too much, or you feel it's starting to get to be too much, listen to your body and take a step back. It's not going to... it's going to be much better for you if you decide to take that step back now and be able to do more tomorrow, versus having you wiped out for a couple days.

And then in terms of spasticity management, this is a great question for your health care providers. I usually suggest talking to your neurology team because there are some medications that can help, there may be some types of medical injections, like Botox injections, that can help as well, that can be pretty successful. But that's a question for your particular neurology team. If spasticity is impacting your ability to move, and if that's not as effective as you would like, or maybe it's something that you're not interested in, then there are some other things that can help as well, like bracing, putting certain braces on to help manage spasticity, a good stretching program, maybe some positioning techniques that can help. You can find some of those things online as well. But really, this should be tailored to you in particular, and so I suggest talking to your rehabilitation professionals about that as well. But there really are so many options out there to be able to navigate these challenges. But it should not be a cookie cutter approach, and you should be working with your healthcare team to make sure that you're taking the best steps for you. Next slide please.

So let's talk about other ways to get moving. There's exercise and there's activity. Right? So, I like to differentiate those two things, too. Exercise is very specific training that you're doing to improve a specific quality such as your aerobic endurance, your strength, your muscular endurance, your flexibility, your balance or your gait, which is the way that you walk. Whereas activity is really just doing daily activities. It can mean moving around in your bed. It can be transitional movements, like getting up from a chair, transferring from one chair to another, or from bed to a chair. It can be doing chores around your house, or it could be doing work at your office. It can be home mobility, navigating inside your house, for a purpose or just for fun, or it can be going around in your community, again, for a purpose or just for fun.

With exercise, it has two benefits. It can help to train specific parts of our body to enable us to do more, and it is movement in and of itself, most of the time, it is actual movement. Activity can be done with any assistive device to be able to help you do these things. So if you're doing bed mobility, you can use a bed rail. If you're doing transfers, you could use a built in pole or a rail if you have access to that. Or community mobility, you can be using an assistive device or power mobility that we'll talk about later. And same thing with community mobility, you can do that in a park or in a store or in any kind of community center if you have those available to you. And when compared to exercise, activities can be more practical, more functional, and some may find it more enjoyable. And it can have really important impacts on your motor control system, because we know that things that are functional and meaningful to you can have really great benefits to help with your motor control and your motor learning. But it's really important to incorporate both of these into our daily routines. I usually favor activity over exercise just

because it has additional functional benefits, but I do think that both of them have their role, and we should be considering both, even if you may not be an exercise person yet. Next slide please.

So general guidelines, we're going to start with exercise in particular. we'll talk about some general guidelines for these and maybe we'll go through some practical examples. So for aerobic exercise, the American Heart Association guidelines are to do 150 minutes, 2.5 hours, of moderate intensity aerobic exercise every week. If I were to ask you, how hard are you working? You're huffing and puffing a little bit. You'd probably say about seven out of ten, in terms of how hard you're working, ten being the hardest you can work. You'd probably say about a seven out of ten if you're looking for moderate intensity. Now, if you're doing vigorous intensity, working at like a nine out of ten, 75 minutes is probably enough. That's just for your heart health and for your brain health according to the American Heart Association and according to some others. There are specific guidelines for multiple sclerosis that are significantly less than that. And I think that's, you know, that's fine as well. I think it's two times a week for 30 minutes are the Canadian guidelines. But I do think that this is something worth working up to just for the benefits that are spelled out by the literature, by the research, about this type of training that can help with your brain and your body. So I usually say this, to try to shoot for 150 minutes a week, but it's not something that you should expect to be able to just jump right into immediately.

When it comes to strength training, usually it's recommended to do 2 to 3 times a week. Again, moderate intensity exercise or that seven out of ten. Usually I recommend doing about ten repetitions, 2 to 3 sets per exercise. It's not an exact science when it comes to that. There is research that backs up different types of training. I think this is a good place to start. But really it's going to depend on you in particular. That's where the exact science comes in.

Flexibility. you can perform that every day if you're doing some stretching, make sure that it's a comfortable stretch. I usually tell people about 4 or 5 out of 10 in terms of how intense that stretch feels. Some people feel like they need to be at a 10 out of 10 stretch to get the benefits. I don't think that's necessary. You can either do 10 second holds maybe ten times, or you can do 30 second holds, three times. You can do 60 second holds, 2 to 3 times. Whatever feels best for you. And I usually say change it up. And if you feel like one works best, then maybe stick to that for a little bit and then change it up again, see if anything else hits you a little bit. There's no real specific guidelines that I was able to find for balance or gait training, but usually somewhere between 1 to 3 times a week, maybe 2 to 3 times a week, if you're able to do so, may be really helpful to incorporate. And again, it's going to come down to your specific goals. If those are goals that you're really trying to work on, maybe doing a little bit more may be helpful. But those are questions for you to address with your healthcare provider.

I always want to reiterate, the best exercises are the kinds that you enjoy and that are meaningful to you. We'll talk a lot about that in a little bit. But if you are doing exercises and you're trying to figure out, you know, people always ask me what's the best exercise? The answer is always, always, always the kinds that you enjoy the most and the kinds that are meaningful to you. I also like to remind people not to use “no pain, no gain” as a guideline. I know that that's still pretty prevalent among people that I speak to in the MS community, that they think that that has to be the approach. And I want to reiterate, do not use that as a guideline. “No pain, no gain” really does not have a place in your care. I can say that pretty much across the board. Let me know if your healthcare provider tells you differently, but you should be training hard, as much as you can and as smart as you can, but make sure not to use “no pain, no gain” as your guideline. It's not about pain. It's about feeling like you did a good

workout. You did something that was difficult but doable, but not something that's specifically painful. There may be some soreness afterwards, that can be pretty normal, especially for a couple of days, but shouldn't be overly intense. And it shouldn't stop you from doing your daily routine. All right, next slide please.

We'll talk about a couple of specific exercises that you can do. I just wanted to throw these in because I get asked all the time, and some people that may be looking for a place to start, I just wanted to talk about different positions that you can do different exercises in. So, the first ones are in a laying down position. You'll see on the top left, someone's just moving their knees side to side. That's really good to get a little bit more mobility through your spine and your low back. And if we move to the right, we see someone doing a little hip stretch, pulling their knee to their opposite shoulder, it can be really great to loosen up their hips, especially those muscles that tend to get tight and cause a little bit of back pain. Then, if you keep on moving, it's a mobility exercise called “open books,” where it can really help to mobilize the middle of your spine especially, but also your hips, as well, feel great, and it can also help to give you a little bit more flexibility for your postural system. And then finally on that top right side, it's a picture of something called “child's pose,” but done with a little bit of a twist, leaning obliquely to the side. That can be helpful to stretch out your lower back as well, some of those muscles that, again, tend to get pretty tight.

On the on the bottom line, you'll see a couple of strengthening exercises. On the left, you'll see someone doing a bridge, where they're just pushing through their heels and lifting up their bottom off the floor, holding the core nice and tight. This, in my opinion, is a prerequisite to being able to effectively move around in the bed. This exercise can be absolutely critical and can really be a game changer for trying to get around. The middle picture is something called a clamshell, where someone is leaning just exactly on their side, opening up their knees and closing them nice and slowly, really working on their hip muscles. That can be really, really helpful for most functional activities. And then on the bottom right, you'll see a straight leg raise where someone's holding their core nice and tight, keeping their knees straight, squeezing their upper thigh muscle, called their quad, and slowly lifting and slowly lowering. Now that's again a really important muscle that's used for things like standing and also for walking. Next slide please.

Some more examples in seated positions. So on the left hand side those four pictures are actually different stretches and mobility exercises. You'll see again a hip stretch and somebody’s crossing their leg over their knee. And on the right of that you'll see a little hamstring stretch, their knee is straight in there, gently leaning forward in their chair. On the bottom left, you'll see a low back stretch, it's kind of like the child's pose that we saw on the hands and knees, but this one's in a seated position. And then just on the right of that, you'll see a crossed arm twisting motion, that's, again, really good for mobility of the spine.

Moving to the right, seven pictures on the top row, you'll see a little seated march where the gentleman in that picture is just lifting his knees up and down. That can be really great for the core and for the hip flexor complex, which is really important for walking and tends to be one of the weaker complexes for people with multiple sclerosis. On the right of that, we'll see somebody doing a toe raise, and then further on the right, you'll see a heel raise working on that ankle strength to be able to clear their toes when walking and also to be able to push off while walking. On the bottom row, you'll see somebody lifting both of their legs at the same time.

That's really great for those quadricep muscles, again, that upper thigh, to really strengthen those muscles. And because they're doing both at the same time, they're actually getting a core

workout too, to be able to stabilize their midsection. Just to the side of that, you'll see somebody squeezing a ball. You can do that with a pillow too, that's usually what I tell my patients to do. You could do a nice little squeeze hold for a couple seconds and then relax to strengthen those inner thighs around the knees.

And then just on the side of that, you'll see the opposite, somebody pushing out against a little resistance band. That's going to be helping to strengthen the outer hip muscles, which are really, really important for most functional movements. And then finally, on the very side, this can be done either in a sturdy wheelchair or a very sturdy chair, we call that a chair push up, where someone is pushing down and lifting their bottom up of the chair. That can be really helpful for people who have difficulty with wounds or pressure sores, somebody who sits quite a bit and has a hard time with their mobility. This could be a way to relieve pressure, but it's also a great strengthening exercise for the upper body, for the arms, for the back, for the core, and also a little bit for the hips as well, depending on how you're doing it. Next slide please.

And finally here are some standing exercises. So on the left, I wanted to put in my absolute favorite exercise for everybody starting out an exercise routine who's able to do it. The sit-to-stand. In this picture I have them doing it with their hands and with a counter in front for safety. But it is, in my opinion, if you can do it, the number one exercise to do. I've seen incredible success with just this exercise where people do it and all of a sudden they can get out of a chair without support. It doesn't happen every time, but I see incredible strength come out of this exercise quite a bit. And it's really functional. Right? We always need to get out of a chair, even if we're doing it with support. And so I really like this as a good way to start, as long as it's something that is safe and appropriate for you.

Down below it, we see a picture of a little mini squat. Someone's holding on to the countertop as well, and doing a little squat, and then coming back up the same way that they would have in the sit-to-stand that you see in the two pictures above it. Now this works a little bit more on what we call eccentric control or slowly lowering, which is really, really, really functional. But it works the same muscle groups as you would see, or similar, when it comes to the sit-to-stand, and also very, very functional. On the right hand side of those 5 pictures, let's look at the top. These are, all of these are really called kitchen sink exercises. We call them that because you can just do them at the kitchen sink or the kitchen counter. I usually suggest having a chair behind as well during all of these, including the squat, just for extra safety. So we have “marching” on that top left, where someone is just lifting and lowering their knees. We have side-hip-kick. or something called hip abduction, in the middle. And then behind we have something called hip extension or back-kick. Those are all working the hips in various capacities, in really functional and important ways.

And then on the bottom we see a hamstring curl, or what I call a butt-kick, where someone is just bending their knee, kicking towards their butt. And then on the bottom right, we have a heel raise. You can't see the top of them, but they're just holding on to the counter and slowly lifting their heels up, slowly coming on down. Working on those calf muscles can be really important for circulation, because the calf actually helps to pump the blood from the legs up back towards the heart. And so, that can be really helpful in general, and especially for people who have cardiovascular risk factors as well, or Raynaud's disease, which are pretty common with people with multiple sclerosis.

So all of these pictures come from a MedBridge platform, which is something that I use with my patients. And I really appreciate that they do really good work educationally, and also for these types of pictures. So thanks to them for this, and they gave me the express permission to use

these pictures for this webinar. So really, really great to be able to use those for some of the more common things that I give out to my patients on a daily basis. Next slide please.

So those were all exercises, but we talked about the fact that there's exercise and there's activity. So let's talk about activity now. When it comes to activity you can just practice functional movements. It doesn't have to be fancy. You can move around in your bed and practice bed mobility, especially, you know, you do one of those exercises for bed mobility, now put it into practice, see if you can a little bit better in bed, get those muscles activated. Lift up your hips and try to scoot a little better. We can work on transfers, after you do a leg exercise, if you're not too fatigued, maybe try a transfer again. See if those muscles are a little bit more stimulated and see if you can teach your muscles that are now getting stronger to then work in the right movements to help you with your function. Lifting mechanics, getting things off the ground. If you've just done some squats and are not too tired from it, make sure you're using good technique, but maybe you can start lifting some things off the ground or off a high surface a little bit better, with a little bit more strength and maybe some better control. And finally just walking, right? These are all activities that if you can do, you can just do them. They're great exercise, they're great activity, and they're really great for your movement system to not only be able to keep what you have, but also hopefully to get better over time. Next slide please.

So here are some examples of activities. And you'll notice that a lot of these look pretty similar but are being done in a little bit of a different way. And all of these examples are things that fit into what we're talking about. So starting at the top left, you'll see an individual shopping using a power scooter or a shopping cart at the end of a power scooter. And on the right side, you'll see another individual using a roller walker as her basket. So both of these individuals are doing the physical activity of shopping, and they're using whatever tool they need to accomplish that goal. They're both doing the same activity in whatever way that they can. Another example of physical activity that's just good movement is at the very top right, you'll see an individual who looks like there's walking around their home, on the phone. And we might just think of that as a standard activity. But that is good movement, right? Just walking around or, you know, getting around the home, it's just good movement that we shouldn't take for granted and that we should really try to focus on. Again, those little snacks, those little bite sized pieces, as much as we can. These aren't exercises. They're just routine daily activities. But their movement and they're excellent for us.

On the bottom row, you'll see, on the bottom left, you'll see a family getting outdoors. Walking around, having a good time in a foresty area. And just on the right of that, you'll see someone who's in a wheelchair experiencing what looks like a national park, both of them getting outdoors, experiencing new environments. And they're being done in whatever way that they can to be able to enjoy the outdoors and also to just get them moving. And then in the bottom right, these are two individuals who are dancing. It's actually part of a really great story that I found on the Cleveland Clinic website. I suggest you all take a look at it if you want some inspiration, but it really highlights another just fun way to get moving, happens to be they're doing this in a rehabilitation gym because it looks like that's what they were working towards being able to do. But dancing is just another fantastic way to move and a fantastic way to get our movement system up and running. Next slide please.

I also wanted to point out a couple of other things here too, that are usually looked at as a formal exercise, but they're also just good examples of movement. So even though they are exercise, they're really great movement and physical activity. On the top left, I took that picture from the MSAA aquatic exercise section. I really highly recommend taking a look at it. It gives some great education on the benefits or potential benefits of aquatic exercise. The fact that it

decreases your risk of falling. It can help with your balance, if you have issues with that. There is a thought that if it's kept at the right temperature, usually around 84 degrees, it can help to dissipate some heat. So maybe it can help with heat management during exercise. And so really, really great. You can use the water as resistance. So I highly suggest looking at that. I don't usually suggest aquatic exercise taking the place of overground exercise unless it's necessary, but it's another way to challenge your movement system, reduce some of your risk, get into a new environment, and really keep on moving.

At the top middle, you'll see individuals that looks like it's an adaptive yoga or stretching program. They're probably working on their core at the same time that they're getting good flexibility and working on their postural system. And on the top right, you'll see more of a formal exercise. Someone doing a wall push up to try to strengthen their body as well. On the bottom left, you'll notice it's a track with a bunch of people running around that's obviously, done usually for exercise. But you know, running is an activity and great movement as well. And on the bottom right, to contrast, this individual looks like they're walking in what we call parallel bars. This may not be his usual method of mobility. He may not be, what we call, a functional ambulatory He may not be walking around as his primary way to get around, but just being up and moving and walking whenever you can, can help improve bone health. It can help improve postural muscles and other muscles, it can help improve your vestibular or your balance system to give you a better sense of being upright, it can have incredible benefits for your body. And I think that any time that we can stand and potentially walk, even if it's for a little bit at a time, and even if it's not your primary way of getting around, it can have great benefits for your body. It can have great benefits for your brain, and we shouldn't ignore it just because that's not the primary way that we are mobile. Next slide please.

So in terms of getting moving, one of the most important things to think about is how to make movement and activity fun and engaging for you. It may not always be possible, or easy to pull off at least, but it should be a very important consideration when you're planning on how to get more activity into your life. It's important for a few reasons. Number one, if you enjoy something, you're much more likely to stick to it. If it's boring, you're going to prioritize other things that are more imminent and potentially more important, or seemingly important. But also, if you do something that you enjoy, it actually has physiologic benefits. Your body actually responds better to things that you enjoy, your brain learns better, and you'll actually get more bang for your buck. So making things fun can actually be better in general, in addition to the fact that you'll just be having a better time.

So just to highlight a couple of potential examples for how to make movement more enjoyable. There's a ton. I just jotted down a couple that came off the top of my head. If you have some others, I'd love to hear about it. But, these are really just some things that I've talked about in the past with people. As we mentioned, dancing with a spouse, with or without an assistive device, it doesn't have to look the same for everyone, but just dancing can be a really great way to work on balance, and it can challenge your postural system and it can help with your strength. And it's really just movement. It's movement through space, whatever it looks like. Getting into the pool, like we talked about before, if it's safe to do so, can be really helpful. Just make sure you talk to your healthcare provider about it first. It should, again, I don't think it should be a supplement for overground movement, but I don't think that it should take the place of it unless it's absolutely necessary. But it could be a great way to make things more fun. Some people just really love being in the water, and that's great.

Going out to a park or a restaurant, just getting out of your own space, can be really helpful. You know, sometimes we kind of get stuck in our own space and no matter how comfortable our

home is or our space is, getting out can sometimes get us out of that rut that we can find ourselves in. And just being in new environments, going out can actually not only be a fun way to interact and to be social, which has its own benefits for our brain and for our body, but it can also just be a more fun way to be mobile and to get moving.

Some people really like educational... actually, the scavenger hunt, I forgot, I added that one last minute. I love scavenger hunts. With a group, maybe you meet some people in a MS support group, or maybe your family or friends or neighbors, want to partake in a scavenger hunt, either around the community or even around your home or in a grocery store, where you can do this on a monthly basis and, just make it fun. You know, it takes away from the fact that you're thinking about your movement, you're thinking about your chore, and it really just makes it a great group entertainment and really great way to participate with a lot of people where they have a shared goal, and something to focus on that can really be enjoyable. And then you can also offer prizes too, which really helps to reinforce that motivation.

But then educational. So a lot of times, there are a lot of educational things that can be not only free, but also sometimes they are accessible even to people who are not necessarily ambulatory or walking. So, I remember I was in Boston a couple of years back and they had a bunch of Revolutionary War tours, which, I mean, I'm not a history buff, but if anybody really likes history, that's a really great thing to try out. If you're in the area, because you can be mobile, you can get out, you can learn new things and still be active in the area, and still really contribute to your movement system. It engages the brain, it engages the body, and it can be a lot of fun too, especially if that's your thing. And same thing when it comes to museums.

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Dr. Michael Gevertzman
And then we talked earlier about motivation being a potential issue for a lot of people, and that's totally okay. But sometimes giving ourselves some external motivation can be helpful too. So one of the things that we can do is make a competition, with family or friends or people that you meet again in a support group. Who can be as mobile or active throughout a week as they can be? Who's going to burn more calories over the weekend? Who's going to travel a further distance either in a chair or by walking or with an assistive device? Who's going to be able to do more? And that can be a really fun way to challenge each other, hopefully done in safe ways, to be able to be mobile and to move and to be movement oriented and activity focused.

And then sometimes giving yourself rewards can also be helpful. So, it could be something as simple as giving yourself your favorite chocolate every time you engage in a movement related physical activity. That can be fantastic. Or, if you want to save for something larger, you know, like a trip you've wanted to take, maybe put $3 away every time you do a really healthy movement related activity, that can be something that's really great. If you do something like that, though, make sure that you're doing something tangible, something you can actually feel and do and see and touch, so that it's not just some theoretical money you're putting aside, maybe actually have a piggy bank, or maybe check something off a list, you know, with a countdown or something that actually you can physically do, because that's what's going to reinforce that behavior and make it more helpful.

So, those are just some ways that I have, some discussions that I've had with people over the past couple of years for how to make things a little bit more engaging. No matter what you do, just make sure that you're trying to have a good time. Try not to stress too much about it. Try not to put too much pressure on yourself, and know that you can change up how you're doing things

at any time. But these are just ways to kind of change things up a little bit and throw things in to make it a little bit more engaging and to shake it up when you need to. Next slide.

So the last bunch of information I wanted to add today was just about tools to help you move. And the reason I want to stress this is because I have this conversation a lot where many people come to me and they say they don't want to use these tools, like assistive devices. And, let's talk about it straight on, because it's a really important conversation. So these are tools that are going to help you to do more and move more and engage more in functional activities. They're canes, walkers, power mobility devices, we'll talk about orthotic devices, we'll talk about all of these things. But I want to address the concerns that I hear that people bring to me, that when they don't want to use these devices. The first one that I hear from my patients is that they don't want to look old or look weak. And I totally get that. That's a very, very real feeling. And I don't want to minimize that in any way. I just want to remind everyone that other people are usually so wrapped up in their own stuff that other people aren't going to be thinking too much about you. If you just think about how much you think about everyone else versus how much you think about yourself, it happens to be that most of the time, those thoughts are usually confined to you. And that's, again, very, very real. And, this doesn't completely alleviate that. But just remember that, most of the time people are so wrapped up in their own stuff, they're not thinking about how you're getting around the grocery store. And so I want you to consider that when you're weighing the cost versus benefits of using these things.

The other thing that's often brought up is that people are concerned that once they start using the device, they won't be able to stop, and that it's going to make them worse because they're relying on it. And I hear this all the time, and it's a really good thought. But actually I think it's the opposite. Especially when people are in the mindset, which is a great mindset to have, of I want to improve my function, so I'm going to do everything I can on my own to improve my function, I think it's a really common thing that I do hear when people are in that mindset. And again, it's a good mindset, but these devices are designed to help you to do more, which is going to help you to do more.

For instance, if you're not going to be able to make a grocery store trip without using a rollator walker, that's the time to use the rollator walker. That's exactly the time to use it. In this example, using the rollator walker is what enables you to get to the grocery store, to engage in that movement and that physical activity, which you're going to get those benefits that we talked about earlier, which is much better than if you had completely avoided that activity because you didn't want to use that rollator, the rollator walker. And so, in terms of that “use it or lose it” principle, if you were going to avoid an activity or have a really hard time and struggle through it, that's exactly the time to use any tool that you can to be able to accomplish that physical activity goal.

Another thing to consider is fatigue. A lot of times if we're not using an assistive device, we're going to fatigue a lot faster. And if that's going to be the case, maybe, you know, if you have three things on your to do list, grocery shopping, spend time with family and do laundry. If you only will be able to do one of those things without assistance, but using an assisted device, you can do all three, that's the time to use all three, that's the time to be able to accomplish all three by using an assistive device. It's really important because you're able to do more. And again, the more that you do, the more that you will be able to do. So, all of that being said, I hope you consider these benefits and weigh them against your concerns. And hopefully, if you can see them as the tools needed to help you get the most bang for your buck throughout the day, hopefully that will influence what we're doing.

All right. So as a disclaimer, as we move to the actual devices, I just found these pictures on the internet. These are not specific brands or anything like that that I would recommend, but, they're just to illustrate a point. So on the top left you'll see these different types of canes. There's a straight point cane. There's quad canes which have the four points on the bottom. Those are usually a little bulkier and people tend more to trip on them. But a straight point cane gives you a little extra support, little extra sensory input that can help you balance a little better.

Same thing with trekking poles that you'll see in the middle on the top over there, but that's usually with two hands and it's usually a little bit better to be more mobile with, especially in different environments. They're great if you're just looking for that little extra help. And they're pretty low key. You can leave them anywhere. People tend to forget them in places, but you can leave them anywhere if needed. And so those are those are great. But the downside is that you can't carry anything that you're carrying a cane with. Right? If you're carrying a cane in your left hand, you can't use that to carry a grocery bag. And also you can't sit down on them if you need a break. It's not, you know, it doesn't really give you that much support.

On the right. The same, we see on the very top right, there's a standard walker with front wheels. I don't usually recommend the ones that don't have wheels for various reasons, but, even this one, you know, they're pretty hard to navigate with. They're not super duper mobile, but they give you a lot more support than a cane would. But again, you can't sit down on them. Then there are a bunch of things on the bottom. Those are different types of rollator walkers. They have the feet, oftentimes they have a basket that you can carry things in, they have four wheels, they're a little bit more mobile, they're usually a little sturdier. And they can be, they can really help, both give you the benefits of the stability while also maintaining your mobility. I usually find that these tend to be very helpful for people who need that little extra support, especially if they need a place to sit down intermittently. And on the right hand side, there's actually one that doubles as a transport chair. So if you're going to need somebody to push you around at some point throughout your trip, that can be a really great option, too. Next slide please.

For wheelchairs and power mobility. So on the left, you'll see a standard wheelchair. There are wheelchairs that are out there that you can propel yourself. There are wheelchairs that are meant to be pushed. And, this is an example of one that looks like it's ready to be pushed, but it's really important to get the right chair for what you need because they're different. in the middle you'll see a scooter, and on the right you'll see a power wheelchair. These are just examples, but there are so many types out there. And again, I think that if you're looking to use power mobility, there's a really great place for it, It's going to help you to do more, but you need to make sure that the device that you're getting is matching your goals and matching your environment. And it's really important to talk to a healthcare provider about that before actually getting something like that. Next slide.

Finally, there's orthotic devices or orthoses, there's a lot of different kinds. In the top row, I just put three different examples of things that help with foot drop, which is a very common thing we see with multiple sclerosis. On the left, it's just something to stop the foot from dropping, in the middle is the same, except it kind of locks up the ankle a little bit more, makes it a little bit more hard to walk, but it does give a little stability at the knee indirectly. And same thing with the one on the top right. On the bottom left, something called the hip flexion assist device, which is really cool. It's like a little spring attached to your hip and your foot. And when you go to step, it actually helps to swing your leg through, which can be really helpful.

In the middle and on the right hand side, there are a couple of different options out there now for what we call functional electric stimulation, or FES devices. They actually help to stimulate your nerves in your legs so that your actual muscle contracts and helps to bring your leg the way that you want it to. So the one in the middle helps to bring your toes up, to bring your ankle up so you don't have that foot drop. And the one on the left looks like it's probably going to be hitting the upper thigh as well to help you bring that leg through. So there are a lot of different options out there. Again, it's really important to talk to your healthcare provider about them. But these are really, really important to be able to think about when it comes to helping to improve your mobility, especially when it comes to walking. Next slide please.

So lastly, important considerations, especially when it comes to safety. Make sure that if you're going to change up your routine you speak to your healthcare provider. It could seem simple. It could seem like, “I'm just getting in the pool,” but it's really important to talk to your healthcare provider, it can be your your physician, your neurology team, potentially your physical or occupational therapist, but really important to make sure you have somebody who's qualified giving you advice. Also, consider your other medical issues. Don't forget about those. I know we're talking a lot about mobility, but those are very real too - your cardiovascular function, potentially osteoporosis can be a factor in determining what you can and cannot do safely in terms of exercise and activity, and just make sure you're navigating with your appropriate healthcare provider.

In terms of your fall risk, make sure that you're navigating with the appropriate devices. Consider your environment like we talked about earlier. Monitor how you feel. Listen to your body. If you feel that you are doing too much, you're probably doing too much. A good rule of thumb is the two hour rule, but it's kind of only helpful after the fact, where if two hours later you're still wiped, it's probably too much. So next time you have to do a little bit less. And again, we talked about “no pain, no gain” not being the way to go. Recognize the barriers and plan accordingly. Right? So if you know that heat and fatigue are a problem, make sure you plan accordingly with all of the strategies we talked about earlier.

We talked about... Oh! One thing we have to talk about is good activity and exercise hygiene. So making sure that you have good rest, make sure that you have appropriate nutrition and hydration. You know, we we don't try to drive our cars with bad gas and bad oil, or no gas or no oil. And so the same thing goes for our body. We need to make sure that we're putting the right nutrition and the right amount of hydration and good kind of hydration into our body to make sure that it runs as effectively and efficiently as possible. And then pro tip is to include an activity body. I always recommend, not just for the social component, which again has its own benefits, but it's somebody to hold you accountable and also someone to help out in case of, you know, something goes wrong or something that you need. So having an activity buddy to be active with and to be mobile with can be a really good help. Next slide and last slide.

Key takeaways. If you wanted just a couple of quick bullet points to take away from this talk, and I hope that we, you know, maybe you took away something from this talk that can be helpful to you. But movement can take many different forms. It's not just walking, it's not just one specific thing like an exercise. It can take many different forms and it's incredibly important for everyone living with multiple sclerosis. I hope you understand that it's important to use the necessary tools to help you to do more, and that what you do now has a significant impact on what you can do later. It's important to do as much as you can, but be very thoughtful about it. It's not to overdo it and to make sure that, again, you're planning ahead. And make sure that you do something that you enjoy. If you follow these and you take all of these points away, hopefully we'll be able to transition our daily routine to something that's a little bit more active, a little bit more movement

friendly, and something that really helps to give us a little bit more room for physical activity in our day. I appreciate your time, and I'm happy to take any questions that might have come up.

Yahaira Rivera-Bobadilla:
Thank you, Dr. Gevertzman. This presentation was definitely so informative and so engaging. We appreciate all the tips and strategies and information and insights that you shared with us. We received so many questions. So we're going to try in five minutes to tackle as much as possible. Most of the questions were related to balance, muscle spasms, nerve pain. What are your recommendations? Where can they get started with movement and incorporating movement to daily activities?

Dr. Michael Gevertzman:
It's a great question. And that's going to be one of those that you discuss with your healthcare practitioner, because it's going to be very individual to you. I'm actually pretty against the cookie cutter approaches to these things. Spasms can be coming from a lot of different places. It can be coming from your nutrition. It can be coming from spasticity that may be managed medically. I mean, stretching is great, it's a great place to start. You know, especially if you're concerned about other types of movement and exercise. Stretching can be really helpful and it can potentially alleviate some of the cramping or spasticity that you're feeling. But I really suggest talking to a healthcare team to make sure that you're addressing it from all angles, that you're not missing the root cause and maybe getting, again, more bang for your buck as you go through.

Yahaira Rivera-Bobadilla:
Thank you for that. Another question is what type of exercises are beneficial for a person with MS in terms of balance and weakness?

Dr. Michael Gevertzman:
Yes, so weakness I think we discussed a little bit with a lot of the exercises we have on those slides. But balance, usually putting yourself in challenging situations for your balance. I usually suggest if you have access to a physical therapist that maybe work with them because they'll be able to keep you safe while challenging your balance appropriately, and they'll then be able to give you things to do at home when they deem it safe to do so. So, you can actually work on that. An example that I usually give is standing on one foot. That's not really so functional, but it can help to challenge your balance system. But I wouldn't suggest trying that without someone skilled nearby the first couple of times to see where you're at. And then to be able to progress and regress as needed for those exercises, that's the same as any other exercise, right? Make it a little bit more challenging while still keeping yourself safe, or taking it a step back a little bit if it's a little bit too challenging, because it's always important to balance, no pun intended, to be able to balance the difficulty, but still making it doable. So difficult but doable is usually the way that we go about it.

Other things to consider, the fact that balance is not just static balance, we tend to think about it as being in one position, standing on one leg with our feet in weird positions. But there's also a balance that comes about on different surfaces, on different, you know, on an incline, like a curb. It can come dynamically when we go walking or when we're stepping over a curb or stepping over an object or bending down. And so all of these things need to be trained separately, but ideally in functional ways as well. So I usually recommend starting with a physical therapist if you're concerned about balance, if you have one nearby. But I think it's a really great place to get started with just, you know, very basic stuff - standing, if that's what

we're going for, and ways that are potentially going to challenge your balance, maybe letting go of an assistive device or putting your feet together or something like that, as long as it's safe to do so.

Yahaira Rivera-Bobadilla:
Thank you. Our next question is, will using sit down equipment be as useful and effective?

Dr. Michael Gevertzman:
So what was that? Using what kind of equipment?

Yahaira Rivera-Bobadilla:
Sit down equipment.

Dr. Michael Gevertzman:
Yeah. Yeah I think that's great. You know, it's just know whatever tools that you're using, know what you're going to get out of it. So, if you're doing something while standing, you're going to be challenging your balance system. And so you'll be, on the one hand, working on your balance along with everything. And it is functional. But you'll be challenging it, possibly to the point where you won't get the strength aspect as much. Whereas if you're sitting down and you're using, let's say, a machine or doing something while you're sitting down, you won't have to worry about the balance aspect. So you'll be working more on the strengthening aspect. And so, you know, I don't recommend one specific type of exercise or position more than another. You just kind of have to know what you're getting out of it. So if your goal is strength in particular, sitting down may be a really great way to go about it.

Yahaira Rivera-Bobadilla:
Thank you. We have time for two more questions. One of them is, how can I find a physical therapist who is experienced or familiar with multiple sclerosis?

Dr. Michael Gevertzman:
That is a great, great question. So one of the best things that you can do is go on to the APTA website or the American Physical Therapy Association website. You also may be able to go on to the ABPTS website, which is the board certification website, and you can search in the search box for certified specialists in neurologic physical therapy. And so most people who, and the title is NCS, or Neurologic Clinical Specialist, those individuals usually have more training in all of neurologic physical therapy and should know what they're doing a little bit better. I think there's also a registry for people who are multiple sclerosis certified specialists through the Consortium of MS centers, but I could be wrong. But, sometimes Googling, honestly, is a good way to go about it. But if not, the ABPTS website should have a "Find a Specialist" navigator where you can actually view based on your zip code or based on your town, it should be able to find somebody who's a clinical specialist in the area.

Yahaira Rivera-Bobadilla:
Thank you for that advice. And our last question for tonight is what do you recommend for us to find motivation?

Dr. Michael Gevertzman:
I mean, so many things. It's really going to be so specific to you. You know, what motivates me may not motivate you, but I think looking towards the future, can be really helpful. Thinking about what things could look like, right? Versus what things look like now can be really

motivating. But some people, you know, if they have a vision for what they're looking at in the future and it doesn't come about as quickly as they would like, that can actually get them down. And so if that's not the route that you would prefer to take, sometimes just being process oriented can be very, very helpful. It takes a shift in mentality, but I think it's really helpful to go through life being process oriented, right? Being excited about the winds of the process, not necessarily about the results, knowing that you're doing everything that you can to be as healthy as possible, to do whatever you can for your brain and body, giving yourself that control to accomplish those things. I think that can be really motivating for a lot of people and give you back a little bit of a sense of control or something that you actually can take a handle on. At least for me, that would be something that would motivate me. And I found that a lot of my patients feel the same way.

Yahaira Rivera-Bobadilla:
Thank you so much, Dr. Gevertzman. Again, this presentation was so engaging and the feedback that we're receiving so far - thank you for including the visuals to support the content and the learning. We appreciate your expertise and your time. And to everyone who participated, on behalf of MSAA, thank you so much. We hope that you enjoy the learning and attending our program.

This concludes our webinar. This program was recorded and will be archived on our MSAA website within the next couple of weeks. Please take a few minutes to complete the brief survey. And thank you again for participating. Have a wonderful night. Goodbye.