

Fall Prevention Webinar

Good evening, everybody. Hope you're enjoying the spring season and making the most of the opportunity to get out and about. This sets up the perfect stage for our discussion today. My name is Andrea, and today I will be guiding you through this presentation. Welcome to our fall prevention seminar. This is presented to you by ASIAAN, which stands for Aging Services Inclusive of Asian American Network. We are a technical assistance center and resource development center for Asian-identifying older adults, and we are supported by the University of Illinois Chicago, the Administration of Community Living, and the US Department of Health and Human Services. As you know, we have live translations in Hindi, Urdu, Cantonese, Mandarin, and Vietnamese available. You can pick the languages by selecting them on the globe icon on the Zoom panel, or you can select them based on your preference on our website.

We're also thrilled to have a fantastic panel of experts joining us today. A gentle reminder to our panelists to speak at a slower pace, allowing the translators to effectively translate. First up, we have Dr. Bhatt, a professor from the Department of Physical Therapy. Dr. Bhatt, could you please introduce yourself and share a bit more about your expertise?

Yeah, thank you, Andrea. Is it okay if I share my screen?

Sure.

Hi everyone, my name is Dr. Bhatt. I'm a full professor in the Department of Physical Therapy. I'm the director of the Cognitive Motor and Balance Rehabilitation Laboratory, and we're committed to actually teaching seniors how to prevent falls. As we may know, one in three adults over the age of 65 experiences a fall annually, and this risk increases 6 to 8 times if we experience cognitive decline, that is, if you have problems with your memory or have any other pathology such as a stroke. Now, there are many exercise-based programs designed to reduce falls. However, we still have thousands of people slipping and

tripping. That's why, at the Cognitive Motor and Balance Rehabilitation, we are committed to teaching seniors how to reduce falls.

First, in our lab, we start by examining why people fall. So, we do a lot of science. We look at brain factors, we look at how people move, and we look at how people generate muscle forces to try and figure out why seniors fall more. Next, based on what we've learned from our perception or our examination, we target fall prevention. So, if you come to our lab, we put you in a mountain climbing harness and have you experience about 40 simulated slips or trips, as you can see in the people here. Now, you will not hurt yourself. This training actually teaches you how to respond implicitly to fall prevention. Here you can see someone playing a game while they're actually slipping. Now, this kind of single session works like a vaccine, and it helps prevent falls for a year. We might also teach you how to play a game that, while you're doing a memory game, you're moving. This helps you with what we call dual tasking, and this again helps you prevent falls.

Now, for people who like dancing, dance is a great form of being active and preventing falls. So, we might even have you hooked up to a harness and move and groove, as you can see here. Now, of course, prevention is important, and we also like to give you something called a prognostic fall risk score. So, if you come to our lab, we're going to kind of record the way you walk, and just based on the way you walk, we can tell you whether you have a 50% chance of falling from a slip if you experience it, or a 30% chance of falling from a trip if you experience it. We use modern technology, such as artificial intelligence, very simplistically so that we can give you the likelihood of falling and provide appropriate intervention if needed. So, that's all from my side. Thank you.

Thank you, Dr. Bhatt, for such a wonderful introduction and all the amazing things you do. Now, let's hear from Professor Lee, an associate professor from the Department of Occupational Therapy.

Hi, good evening everyone. My name is Jenica Lee, and I'm an occupational therapist. I currently teach in the Occupational Therapy Clinical Doctorate Program at UIC, and I have many years of clinical experience working with adults and older adults in inpatient hospital rehabilitation settings, as well as in their homes, to

help them engage in activities that are important to them in a more independent, confident, and safer way. The main goal of my work is to promote health and wellness and help older adults thrive in place. This includes fall prevention, home modifications, and self-management of their chronic conditions. So, that's my intro.

Now you have met our panelists. Let's dive into the presentation for the next 30 minutes. Let's take a look at what we will be covering for the next thirty minutes. For today's discussion, we will understand what falls are and what would lead to falls, how you can prevent your falls, and questions that you can ask your doctor. Steps that you can take to make your home safer. We will also share some important resources to help you. Did you know that more than one out of four Americans aged 65 and older face falls each year? Falls are indeed serious and costly. In the 2020s, emergency departments recorded 3 million falls across America. Over 800,000 patients per year are hospitalized after a fall. Think about this: falls can lead to physical injuries, pain, and even long-term disabilities. One out of five falls can cause broken bones or head injuries, and more than 95% of hip fractures are usually caused by falling sideways. Let's not forget the psychological toll, which includes fear and loss of independence.

Looking into more detail about what we know when it comes to fall risks among Asian Americans, we can see that research comparing falls among Asian American older adults and other racial groups actually shows mixed findings. Some studies show that fall risk is lower among Asian Americans, while others show that it is higher or about the same as any other racial group. There might also be differences between the different Asian American subgroups. The research also suggests that some Asian American older adults tend to avoid talking about falls, hide falls from their adult children because they don't want to worry them, and have a fatalistic view about falls. For example, they believe that it was destined to happen that way. They also may have limited knowledge about fall prevention.

So what is a fall? A fall is an unintentional event resulting in an individual coming to rest on the ground floor or lower level. It could be either a slip, which means losing balance due to slippery surfaces like wet floors or an icy surface, or it could

be a trip. You could stumble over an obstacle or an uneven surface like a stone on the road. Maybe it could even be a stumble, that is, tripping over one's own feet or losing balance momentarily. But here is why this matters deeply. Falls, with or without injury, can have a significant effect on the quality of life. It is something many of us can relate to, especially as we witness a growing number of older adults limiting their activities and social engagement.

So here's a quick question for both panelists, Dr. Tanvi and Dr. Jenica: why do you think that it's not a good idea for older adults to limit their activities due to the fear of falling?

Thank you, Andrea. I can go first. So, I think there are several consequences of limiting your activity due to fear of falling. One, it really limits older adults' physical fitness. Avoiding activities can, in turn, increase muscle weakness because you're not using your muscles. This can further reduce your balance and overall physical functioning, which then increases the risk of falling. It's what we call a vicious circle. Also, restricting activities can impact your function in your activities of daily living, which Dr. Jenica can talk a little bit more about, like doing transfers—sit to stand, toileting, bathing, car transfers. It makes it more difficult for older adults to perform their tasks independently, and we want them to continue functioning independently. Restricting activities can also lead to social isolation. Due to the fear of falls, you're going to limit movement and withdraw. For instance, if you're going to the grocery store or going out to meet your friends, you might be afraid of bad weather and decide not to go out. This can escalate and lead to social isolation, reducing your quality of life and impacting your happiness. So, there are more benefits to being active and moving rather than reducing your activity because of the fear of falling.

I think Professor Bhatt covered both important areas in terms of staying engaged and being physically active. All of this can start to have a negative domino effect. When you start to have muscle weakness, it impacts how your body moves, which can translate to decreased balance when walking. If you have longstanding issues, they can worsen. This includes increased swelling and joint pain from disuse and not moving. So, it definitely can impact your daily activities. As Dr. Bhatt

mentioned, it can also have a negative mental impact, decreasing your confidence in doing things and leading to depression. So, there is a very significant impact on both physical and mental health.

Moving on to debunk the myths of falls. Falling is definitely not a normal part of aging, which means that aging does not automatically mean that you will fall. Many falls can actually be prevented with proper precautions. The risk of falling can change over time due to various factors, including balance, medications, or vision. We will talk more about these risk factors in our next slide in detail. There are also many strategies to reduce the risk of future falls. Even after experiencing one, many fall prevention strategies are actually quite simple, local cost, and very easy to implement.

Some risk factors include age-related physiological changes, behavior and choice, environmental risks, and social and economic factors. Certain lifestyle factors can increase the risk of falls, such as lack of physical activity, poor nutrition, alcohol consumption, and misuse of medications. Hazards at home, like slippery or uneven surfaces, and poor lighting can also cause falls. Environmental risks include a lack of supportive structures in bathrooms or stairwells, which we will discuss further in detail in a slide. When it comes to social and economic factors, limited access to healthcare, including prevention services and rehabilitation, social isolation, and financial constraints, increase an older adult's vulnerability to experiencing a fall.

So, what can you do to prevent falls? Have you asked yourself if you are concerned about or have had a fall in the past year? You can also practice standing up slowly. If you have an assistive device, definitely ensure to use it, such as checking prescriptions for glasses, using special footwear if prescribed, or even having a bed alarm system as forms of assistive devices. This can reduce the risk of a fall. Using appropriate footwear can provide support and stability to your feet and ankles, reduce foot pain, and prevent falls. Discussions that you should ensure to have with your doctor include asking about the best type of exercise program for you. Exercise on its own, as well as various combinations of fall prevention

strategies, including vision tests and treatment, and environmental checks, can influence changes that can be most beneficial. Many individual Asians patients compared to individuals of European descendants have lesser muscle and more abdominal of fat this in fact put Asians add in higher risk of insulin resistance and for this reason it is important to get an annual health check up to monitor for diabetes and having any side effects of medication can also cause symptoms of dizziness and also cause sleepiness which can lead to fall ask your healthcare provider about the best type of exercise program for you exercise on its own as well as the various combinations of all prevention strategies including

Getting your eyes and hearing checked regularly is really important too. Ask your doctor if you need any calcium supplementation and vitamin D supplementation, because this can also reduce the risk of falls leading to injuries. Quick tips on how to explain your fall to your doctor: write down the details of your fall as soon as you can and discuss this with your healthcare provider. You can even ask family members or friends to note down details as soon as you experience your fall and contact your healthcare provider.

You may not feel like you are seriously hurt, but these are the questions you should definitely ask yourself and explain to your doctor: How did you feel just before the fall? For example, did you experience dizziness, weakness, fatigue, confusion, or blurred vision? Where did you fall? Were you at home or outside in another environment that you regularly go to? What were you doing when you fell? Have there been any recent changes in your health, such as starting or stopping medications, experiencing a hospital stay or medical procedure, or feelings of depression? Have you gone through a stressful event recently, like losing a loved one, moving, or retiring?

Here are some recommendations to keep yourself moving and staying active: Avoiding activity due to fear of falling can have negative effects on your physical ability. Ensure to stay physically active and engage in regular social activities and hobbies as much as possible. Take time to engage in your local senior center or volunteer your time in different volunteering services. Exercise prescriptions should be created by a qualified health professional who understands your

background and health conditions well. Exercise must also be sufficiently frequent to have an effect on your health, which means engaging in exercise at least two to three hours per week.

Physical therapists and occupational therapists play a big role in helping you with the majority of health exercise recommendations. Professors, could you talk about some evidence-based fall prevention exercise programs that you would recommend to our audience?

thank you very much you covered a lot and you kind of touched upon the frequency of exercising which is very important you know at least like 2 to 3 hours to get that required minimum physical activity and then again to consult some professionals who can design your and that's why there's a lot of research or evidence where the programs are well tested in large clinical trials and some of them are there's a program called exercise program which is a home base program and it consists of simple muscles strengthening balance and walking exercises to reduce Falls in older adults there's also something called the matter of balance and we have people from our own University who have been you know a kind of crucial in founding this program that is again a group base program so you can get kind of get to interact with other people also while you do this program and it can it's a 8 week program you can do it once a week or you can also kind of shorten it and do two times a week where people actually teach you some tips they give you fall education tips simple exercises that you can continue doing at home and then you the goal is that you want to learn this program you engage throughout to make it a lifestyle modification program where you exercise and pay attention to these tips

Other programs like Fit and Strong actually prevent or reduce your risk of arthritis, right? Dr. Lee mentioned pain and reduced mobility can be, again, a respective of the Fit and Strong program. It kind of addresses both for risk. There are a few others to list, such as Stepping On and Lifestyle-Integrated Functional Exercise (LiFE) program. I also recommend just traditional programs, such as Tai Chi. If anyone is a Tai Chi practitioner or knows about this type, which is the ancient Chinese form of exercise, it is very good and has good evidence to reduce falls. It is

less impact on your joints, but it again strengthens your core, strengthens your muscles, and involves weight shifting, single-leg balance. It is very good for balance and fall risk reduction. Similarly, if people are familiar with the ancient Indian practice of yoga, there's upcoming evidence for yoga. It's something which people might be routinely doing, and that really helps. Again, it not only helps physically, but Tai Chi and yoga also help improve your mental strength, increasing your attention focus, and all this also helps with fall reduction. So yeah, that's what I would recommend.

Thank you so much for that. And a question for Professor Lee: How can older adults incorporate more physical activity in their daily lives? Sure, so I would say all physical activity, no matter how small, can have a positive impact on your health. So, I think if you can start reframing that physical activity does not necessarily only mean traditional exercise like lifting dumbbells and doing sit-ups for 30 minutes, right? You can actually get a lot of physical activity through doing your day-to-day activities. So, for example, to begin, you can pay attention to really look at your daily habits and routines, right? Just reflecting on how many hours per day or how many minutes you're watching TV all day and just really pay more attention to how much you are sitting per day and then figuring out how to reverse that, right? Can I do more standing? Can I incorporate a little bit more standing activities to make you less sedentary? So, instead of sitting down to prepare vegetables or folding cloth, you can maybe do that standing up, right? Even that small incremental increase can really help amp your activity level. I think also another advice is finding a friend to do activities together in the community can also be very fun and motivating, and also keep you accountable too. So, or even when you're going out grocery shopping, either by yourself or with a friend, you know, if you're driving to the grocery store, you can think about parking a little bit further away so then you can get more steps in during that activity. And it's also good to just do a little bit more reflection on why you want to be more active, right? Ask yourself, do I want to be more active to get stronger, and/or I want to improve my balance, or I just want to feel more energized, right? Because if you have lack of activity, that can definitely make you feel sluggish and less energy. So, if those are your goals, reflecting on that can help motivate you and increase your

activity. Afterwards, when you do more activity, it really makes you feel good and improves your energy as well as your mood, so you can latch onto that and those can serve as important reminders. With all that said, it is a good idea to talk to your care providers about your exercise and activity plans because, you know, if you are going from zero to 100, you just want to make sure that increased activity plan isn't contraindicated, so it's always good to check with your health plans.

Participate in any hobbies, such as Zumba. You know, classes which are safe. There are certain Zumba classes run by YMCA's or other exercise activities which are specially targeting seniors. You know, so there is a silver sneaker program, I think, that used to be run by YMCA, so that can help. Any other dance form like ballroom dancing is great. If you are a swimmer, I would like to do something, you know, engage in swimming as well. So, any other things that would, you know, make you feel happy, feel that you're engaged, plus give you the physical activity, then it's not like an extra thing that you have to do, you know. So, I always recommend that a lot.

Like we just discussed, the more you move, the less likely you are to experience certain falls. Fall prevention programs are definitely more than just exercises. Chair yoga, when done seated or using a chair for support, is a great way to engage in exercises that can help prevent falls. And like professors mentioned, Tai Chi and yoga have shown incredible ability to improve balance, flexibility, and strength.

And how to prepare yourself in case you may experience a fall in the future? Here are some precautions for the same: Having a cell phone or a telephone in all areas of your home and keeping them on lower shelves or tables can help you reach them from the floor. Having an emergency contact number on all your phones and entering these numbers on speed dial can help, especially if you live alone. Ensure you give yourself a daily phone call or an in-person check-in with a friend or a family member. Consider even getting a personal emergency response system. Medicaid does cover emergency response systems in some cases, but it varies by state and program, so ensure to check in about this with your healthcare provider

and talk to your healthcare provider about your options. It can either be wearable pendants with call buttons or advanced in-home sensor networks.

So here's the short video on how to prepare to help your loved ones if they experienced falls

like we discussed most falls actually happen indoor so it is important inspect your home so here's a great guide available on the AARP website and it's called homefit features smart and conception ways to make sure home environments is fit for older adults with Korean Chinese and Vietnamese translation

There are home fit videos are primarily in English but the free homefit app which is available for us an iPad can we use to identify the improvements that fit

More tips on preventing indoor falls, Involve your family members in the home inspection process regularly inspect your home to take proactive measures to mitigate if any safety risks or changes arise ensure that all areas of your home are valid key floors clear of obstacles such as true but electric car even installing contrast color strips on the edge of each step can help with visibility like the picture you see here of a staircase marked with bright contrast tap. Considering using non slip floor materials in area with high moist level such as kitchen and bathrooms.

here are our recommendations for some evidence-based fall prevention program many community-based service provider such as your senior centers or the area agencies on Aging provide excise programs so ensure to find the one in your locality you can do this by locating your state or local areas of Agency on Aging but going on the Elder care. ecl.com lined given below

Fit and strong, which is an in-person prevention group program. Matter of balance, which is provided either online and in-person, is available in English, Chinese, Korean, and Vietnamese. Tai Chi for Health Institute is in Chinese and Persian languages, where transcripts are provided in both languages, but the voice-over for online courses is only in Chinese. Tai Chi health programs include arthritis and fall protection, and even seated Tai Chi programs for people with arthritis.

This is the time for question answers to ask a panelist. Before that, please ensure to take the 2-minute survey to let us know about your webinar experience today. The survey is available in Hindi, or simplified and traditional Chinese. You can simply click the link or scan the QR code.

So, without further ado, the platform is now open to ask questions to our experts. Moving forward, what do you think are the biggest priorities for preventing falls among Asian American older adults?

Andrea, thanks for asking that. I live with my parents, who are over 80 years old, and my father-in-law. We have like one fall every 6 months, so certain tips that I would like them to do is what I would like to kind of speak towards. One thing I will already have covered that participating in some I would even emphasize strength training. Read a 30 minute or any kind of you know if you don't have weights at home, use like a soup cans or bean cans, you know very cost-effective. Elastic bands are available, but some sort of exercise which could build your strength is important.

Fall prevention tips in your home, regular home inspection, I think it's very important, which we kind proper lighting, and you've spoken to all of these things. I would like to speak towards or maybe is a little bit of a stigma maybe in Asian Americans is if you need to use an assistive device if you see that your balance is getting weaker. It's okay to see a physical therapist and get some kind of official rehab to get a plan for you and know why am I falling such as sensation, perception or vision. Then you might be prescribed an assistive device that will at least keep you mobile, so a proper shoes, again, one other thing is sometimes I see that improper footwear is also a problem, so those kind of extra factors also need to be addressed."

I agreed with doctor Bhatt that stigma, or just within the Asian American culture, especially the elderly, or just thinking about my parents as well, and my parents' friends who are all aging and press. And when I work at the Asian American elderly agencies, they don't want to talk about it because there's some level of shame, I guess, or not shame, but partly shame. But I think it's also they don't want to be bothersome, they don't want to bother their children about it. So

that's why they don't want to talk about it because they're in denial or they think it's nothing, right?

So I think part of, I guess, the priority from us as health care provider is to continue to provide education that is culturally tailored to this population, so that whatever we provide them is going to be appropriate and useful for them. And I think the language barrier as well, to make sure that the education or information that we create or that we impart, that is accessible for the Asian American population. So wanted to add that piece to that.

Yeah, yes, absolutely, doctor Lee. I would like to give, you know, I mean as children or, you know, caregivers, I think we're all, we also tend to get overprotected because culturally that's what you've done or you've seen, probably, you know, in the countries back home that you will say, 'Oh, if you have the first fall, you're going to actually protect your parents and say like try to do everything for them,' which limits their mobility and becoming more independent, you know, as good children, you're going to get all the help that they need, but they do need to move, they do need to step out in the safest way.

I often see myself telling my mom, 'Oh, I think today you don't need to go out and walk,' you know, because I'm afraid if I'm in the city and something happens to her. But no, you know, I think I should tell her, 'Okay, here's your Walker, be safe and go complete your three-miler and walk outside.' So I can guess that's something for us to learn. Yeah, for sure, it's like that delicate balance between the filial and that help promotion piece that because you know you're making your mom walk and not doing everything for them is not because you're being a bad daughter, it's because you're trying to improve her health.