

How to Manage Visual Issues

You can listen to the audio of this talk at: https://youtu.be/rZ6FWn_CtXc

Deb Nikkila, MOT, OTR/L: [00:00:00] First of all, thank you very much for having me and for the introduction, Dr. Poon. My intent today is to just kind of provide an overview of the functional impact, functional impact of visual disturbances, define what low-vision rehabilitation is and how it can impact your quality of life, a tidbit on management strategies, and the avenues to seek out some resources and support.

[00:00:22] What I wanted to figure is, vision loss itself is a traumatic life event regardless of what causes it. And when your vision deteriorates so rapidly it can really evoke some panic. For some, it may improve in a matter of days to weeks, but for others, it may take months or have some permanent damage. The fact that vision affords us the ability to perceive the environment instantaneously could make us feel like there's a barrier between us and the world when we have a vision loss. So for that reason, as an occupational therapist, I feel it's important and valuable to have an awareness of how, globally, vision loss can impact your daily life.

[00:01:08] All right. The visual symptoms, you know, are listed here, and this is ultimately what I'm going to go on talking more about.

[00:01:22] Eye pain is pretty self-explanatory. Discomfort, concentration difficulties, light sensitivity, and just a general disrupt to your daily activities. Blurred vision is actually a change in your acuity and really impacts your reading, writing, and driving abilities. We don't realize how much we read on a daily basis, whether it is, you know, work email, personal email, the flyer that your child brought home from school about an event, or even the Walgreens banner saying that Coke is on sale. If we have... If our vision is blurred enough to the point that we can't read what's in our environment, we lose a lot of information. And then driving insecurities occur, because even if you're able to accommodate for your blurred vision when you are stationary, it can intensify when a person is in motion. Your eyes simply doesn't have enough time to accommodate to that motion, and so it can be worse when driving.

[00:02:19] A loss of color perception impacts functionally in your world. Things like selecting and matching clothing. You might feel uncomfortable doing your own clothing shopping. Deciphering if food has mold or contaminant on it. Possibly even approaching the wrong car in the parking lot, because you couldn't determine what color it was. And simply missing the beauty of the world: sunsets, fall leaves.

[00:02:44] Contrast sensitivity. A reduction in this area is, really impacts our daily life significantly. Again, reading difficulties come into play because you need a lot more light in your environment to be able to read print material. Navigation can sometimes be trepidatious in that you can't perceive sidewalks or curbs, uneven cracks in sidewalks increases the incidents of trips or falls. Facial recognition, some don't realize, has a huge bearing on contrast sensitivity, because the contours of

the face and how light reflects gives your face dimension. And when you're no longer able to pick up on these subtle contrast differences, people often experience the inability to recognize others, which can not only be embarrassing, but also be detrimental to work relationships or professional expectations.

[00:03:41] ADLs. I could go on forever. The picture depicts one. You, you may not be able to perceive spilt water on a counter. And reduced dark light adaptation or night blindness can change. For example, maybe your favorite restaurant has dim lighting, and you've found that you either don't patron it anymore, or you can only order your favorite dish because you simply don't have enough light in the environment to read the menu anymore.

[00:04:11] Depth perception. You can experience, functionally, problems with this when you're reaching and placing objects. It may result in frequent dropping of items. Also spillage can occur, like, when you're pouring items pouring coffee and not able to determine where the liquid level is to the cup. In the picture, it depicts how this person was not able to perceive their position in space to the parking space because of depth perception problems. It increases the risk of falls. Again, for example, on not perceiving stairs well, the size of stairs, how many there are. And then safety in driving is also a concern because a reduced depth perception impacts the response, your response time relative to distance and can contribute to car accidents.

[00:05:13] Visual field deficits also impact reading difficulties, particularly with central field loss, which is depicted in the picture on the left. In this case, what you want to look at is the very thing that you cannot visually perceive. So you have to learn to look away, and you use your periphery to see what you want to see. On the right is just the opposite, a peripheral field loss, or also called tunnel vision. And in this situation, it really impacts your ability to understand the entire environment. Let's say, for example, these children running towards you are all running in excited greeting. But what you don't know is that a child on the left happens to be leading the pack, and they get to you before the others. You're not ready for that, and, you know, you all just topple down.

[00:06:08] Other field loss is, you know, the Swiss cheese effect, or the top, the bottom. It can be any number of things. This also does impact social interactions because you have a hard time perceiving facial expressions and that nonverbal communication.

[00:06:30] So what does this all add up to? Basically, difficulties with daily routines and virtually anything: shopping, driving, cooking, reading, laundry, mealtime, which can be very discouraging and create a lot of fatigue and frustration. With that, you have a lot of stress. And with increased stress, decreased rest, it becomes a cycle, and you get more stressed. Over time, without strategies for coping with it or managing it, it can really lead to some health consequences and possibly even depression.

[00:07:06] So there are low-vision resources to support and optimize your personal wellness. I'm going to talk now about low-vision rehabilitation services and some use of assistive technology. Beyond that, there's also professionals, orientational ability, vocational rehab, and national organizations to support, but I don't have enough time to get into all of those today.

[00:07:25] Alright. So, occupational therapists as well as certified low-vision therapists can provide low-vision rehabilitation. And what is that? The objective is to help you learn to use your remaining vision effectively and develop new strategies for completing everyday tasks to maintain your quality of life and optimize independence. I want to reiterate this to say, this is not about improving your vision. Whatever has happened to your vision has happened. It's about teaching you to use the vision you have effectively. So that can start with education regarding what your visual condition is, specifically, and what the status is, what you can expect. A functional assessment: how is vision loss impacting your daily life, your roles and responsibilities? Ultimately prioritize what is needed for you to get back to your normal routines.

[00:08:22] Environmental assessment. How is the setting contributing to your ability to use your vision, and what's your safety in the environment? These things then lead to home modifications and adaptations to improve your access, to improve your ability to pursue your leisure activities, and just your perceived quality of life. It may involve visual skills training, which could use the magnification, or it could simply be actual strategies like using that periphery, or what we call the next best spot of vision.

[00:09:00] Accommodation strategies, assistive technology, and connecting you to resources are also roles of the occupational therapist or low-vision rehabilitation therapist.

[00:09:09] So daily routine management strategies. I've already spoken about lighting quite a bit, but I want to say a little bit more about it because of how important it is. What is vision? Vision is light coming into the eye, stimulating receptor cells on the retina that then leads a message to the optic nerve to the brain to perceive the image. So if you have damage to the retina or the optic nerve, then you need more light to come into your eye in order for those cells to stimulate and give that message to the brain. So lighting is huge, and it may be that you need to set up task lighting, or it may be that you need to play around with what kind of lighting you're using. For some, LED might stimulate their vision better, and for others, maybe halogen. There's all kinds of avenues to try out.

[00:10:05] Simplifying your environment and organizing your space. Decluttering your area. This isn't about keeping the tidiest house on the block, but just keeping things in predictable locations and high-use items at very quick access. So for instance the bathroom drawer. Maybe the top drawer, instead of it being filled with things, you only have your top-use items in it so that you can quickly access them, and you're not having to look through a lot of materials to get what you need. Same with maybe your computer desktop. If you need to categorize your icons so that maybe your work icons are on the left and your personal icons are on the right so you're not ciphering through them when you need something.

[00:10:52] Using high-contrast backgrounds. For example, a red cutting board is going to be a whole lot easier to cut an onion on than a white cutting board is. Using tactile markers, maybe on the washer and dryer, so you're not having to decipher where you're turning the dial to. You can use a tactile marker to give you cues. It's all about simplifying how you go about doing things and also, modifying the way you might do something. So, for example, cooking is a big deal, because some people aren't comfortable any longer with using knives. So maybe you go to using steamed vegetables, frozen steamed vegetables, or maybe food choppers, you know, just, there's other ways

of doing something, and that's what occupational therapy comes in and tries to problem-solve with you.

[00:11:49] Also, in our environment of technology, there are so many things that are voice-activated, and you can do a shopping list. You can turn lights on and off, you can manage your calendar all through voice-activated technology. Alexa and Google Assistant are examples.

[00:12:08] And then finally, there are community resources you might not be aware are available. So for example, if you go into a grocery store because, you know, doing your grocery shopping is something your vision has made very difficult, and you go to the customer service and ask for a shopper's aide, they will send a staff person with you through the store, locating the items that you need. It's a free service.

[00:12:32] Assistive technology. This is just kind of a list of some very commonly used items by individuals with visual impairment. On the right, you see a picture of a handheld magnifier that is just a pocket magnifier. You can go through the community with. Apps on tablets. There are a lot of great apps available. I wish I had more time to explain them. But screen readers, so you're not having to read every piece of material on your computer. And talking devices. Maxiaids.com happens to have a wide variety of these items.

[00:13:14] So I had mentioned before, there are additional professionals besides occupational therapy that can help. A certified orientation mobility specialist teaches you to travel safely and efficiently in your home, your work and community. Also, there's... Your state has vocational rehabilitation agencies. There's, you know, different agencies organized in every state. Contacting them can open up a lot of resources. Whether it's job training, evaluations, connecting you with professionals, a lot of resources there.

[00:13:54] And then, you know, just organized support. Support groups, and believe it or not, you can learn a lot through blogs, podcasts, and even YouTube. There happens to be one on there that's one of my favorites: The Blind Life. Pretty good one.

[00:14:12] These are just some national organizations that are available for your advocacy and resource. And they'll just be available on, I'm sure, the website, at this point when these lectures are uploaded.

[00:14:27] The big message. What I really want you to take away is that the loss of vision does not equate to a loss of living well. Rehab does not improve your vision, but it can improve your ability to use your vision you have to protectively engage in the world around you. And there are many professionals that specialize this, in this area and can guide you through developing your skills and your confidence. So seek out what is out there for you. That's, that's the big message.

[00:14:56] So next slide is just references, and then we move on to our question and answer.