Welcome to the Cutting Edge Health Podcast with Jane Rogers, where we discuss science to help prevent cognitive decline.

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[00:00:00] Jane Rogers: Welcome back to the *Cutting Edge Health: Preventing Cognitive Decline* podcast. I had the distinct pleasure of interviewing Dr. Gill Livingston. She leads the Lancet Commission on Dementia Prevention, and she hails from London. She and 26 other colleagues from around the world have come up with 14 risk factors for dementia that are really important to know because if you can move some of those, your chance of getting dementia decreases markedly. I hope you get as much out of this as I did. Gill, thank you so much for joining us.

[00:00:38] Gill Livingston: Thank you so much for inviting me. I'm so delighted to eventually meet you.

[00:00:43] Jane: Oh, I would like that very much. You play the role of the leader of the Lancet Commission on Dementia Prevention, and it gets even longer than that. What is the official title of the Commission you're leading?

[00:00:56] Gill: It's the Lancet Standing Commission on Dementia Prevention, Intervention, and Care.

[00:01:02] Jane: That's a long title. How many years have you been sitting on this commission?

[00:01:05] Gill: Well, we started putting it together, I think, 2014. The first one that came out was 2017, so about 10 years.

[00:01:13] Jane: Okay. What is your purpose? What have you been charged with?

[00:01:16] Gill: To bring together the best evidence, to produce new evidence, to try to produce a base for researchers, policymakers, and health professionals, and perhaps then to try and write it in a way that's as accessible as possible so that people don't need to be a professional, can perhaps look at it and get something for themselves.

[00:01:41] Jane: I think you've accomplished that. We're going to go over the 14 points that you and your 26 other members on the Commission have come up with that are really important to prevent dementia. They're all stuff we can do. We just have to apply ourselves and know about it. Why are you involved in this? What touches your heart? Why this commitment?

[00:02:01] Gill: It's an incredibly important thing to make a difference. When you ask people aged 50 and over what they're most frightened of developing in later life, dementia is always right at the top. It's something that people dread, that they're going to develop dementia, they'll spend years when they lose their relationships and love, lose their independence, and it will be a long and slow decline to the eventual death.

It's something that people want to avoid most. If we can do something, do a lot really, that makes a difference, then I think, how could I do something that's more important? It's also very interesting. That's my commitment to it.

[00:02:49] Jane: You work with your colleagues on the Commission, and you sift through the latest research. Then you come up with what you feel are the most salient points that can lead to Alzheimer's. Is that correct? You're looking through existing research?

[00:03:02] Gill: Well, it's not just Alzheimer's; it's all types of dementia, which is mainly Alzheimer's. We do look for existing research. We also identify things that perhaps we can do to make what we're publishing more complete. There is new research within the Commission, as well as existing research. We build on other people's work. Then I think other people build on ours because we say, "We don't know this. We don't know that." People say, "Okay, maybe I'll be able to find that out."

[00:03:38] Jane: Excellent. Do you want to jump into it?

[00:03:40] Gill: Yes, absolutely.

[00:03:41] Jane: Okay. There are 14 points. You came out with this report in August of 2024. You included two more points than you had included four years ago in 2020. Tell us about those two new points and why you included them. What are they?

[00:03:58] Gill: The two new points are high cholesterol and uncorrected visual impairment. We included them for the same reasons that we included all of the other risk factors, that we're looking for risks that have good evidence, high-quality, scientific, consistent evidence that they are related to dementia, that they come sometime before, that they are biologically plausible, that changing the risk factors changes the risk of dementia, that there's a sort of dose-response that the worse you have it, the more likely you are to get dementia. We looked at them. These 2 then fitted in with the other 12. They had much more evidence than we had seen a few years before, and we were able to add them.

[00:04:54] Jane: Did I read this correctly, that if you have high cholesterol at the age of 40, that's a problem?

[00:05:00] Gill: That's right. High cholesterol, midlife, 40, 50, 60, makes you more likely to have dementia. If that is corrected, and that can sometimes be corrected by a change in diet or exercise, a lot of the time that doesn't make a difference. People have a hereditary tendency, a genetic tendency, and statins tend to work, then your risk goes down to what it would be without having high cholesterol. That's really important. It's something that we can all do. We can go and get it checked, and we can correct it.

[00:05:35] Jane: When you say high cholesterol, is that over 220? Are you talking total cholesterol or LDL or APOB?

[00:05:42] Gill: No, I'm not talking total; I'm talking high LDL. We spent a long time looking at the different amounts, and we've published what had the best evidence within it. There are different studies that use different amounts, just as you probably find that in America, people use different units. What happens if you go and get it tested is that they will have a corrected range for how you measure it. They are able to tell you whether it's high or not.

[00:06:13] Jane: It's the LDL that's the problem in midlife, not total.

[00:06:17] Gill: There is a suggestion, but it's not really clear that HDL is protected. Don't look at the total; look at your LDL.

[00:06:26] Jane: Okay. Let's go over to vision. What part of vision is a problem? Is it close up for reading if that's uncorrected or is it long distance?

[00:06:34] Gill: It seems to be all vision that is uncorrected. It's interesting because probably most people as children, for example, will have their vision tested, but people often begin to lose their vision, particularly in older age, you tend to have more difference with long-distance vision. People don't necessarily know. They don't know how they're seeing compared to how they were seeing before or compared to how other people are seeing.

It's not just a loss of visual acuity like that. It's, for example, developing cataracts. Correcting them again seems to take away from the excess risk. I have a friend, quite a close friend, who's a professor of medicine. He told me that recently they were driving down the street, and his wife mentioned something and he said, "I can't see it." She said, "Stop the car." Then she said, "Tell me what that number plate is." He said, "I don't know."

She said, "I'm driving." He went and got tested, and he had quite mature cataracts. He just hadn't noticed. He just assumed that this was the way that he always saw. He's smart. He's self-aware. He's quite young as we think of cataracts. He's had them taken out. As he said, he's now got better vision than he's ever had in his life because we put new lenses in. It's something that you're not necessarily aware of.

[00:07:58] Jane: Because cataracts develop so slowly that all of a sudden, things get much darker and darker. It happens so slowly that you don't realize it. Yes.

[00:08:06] Gill: That's right. Loss of visual acuity also can be quite slow, and people don't necessarily know. Especially now, we can make our screens a bit bigger, and you don't really know that you're not seeing maybe as well as you ought to.

[00:08:24] Jane: Now we know that and high cholesterol are the two new contributors that can lead to dementia–

[00:08:29] Gill: Yes, that's right.

[00:08:29] Jane: –to get on top of. Okay, so let's tick through the other ones. Hearing loss.

[00:08:35] Gill: I think that when we first started doing it, hearing loss surprised me and surprised many other members of the Commission that hearing loss and midlife uncorrected hearing loss made such a difference. It was and remains the largest risk factor of them all. Again, people often don't notice they have hearing loss. They think other people mumble or sometimes they do. Sometimes it's you that can't hear.

They often don't notice. People have struggled against the idea of wearing hearing aids. For people in my generation, it's often been quite stigmatized. Hearing aids have been ugly and difficult to manage. There seems good evidence that wearing hearing aids protects, and hearing aids are much better than they used to be. I don't think it's going to be the same in the younger generation because younger generation people always have headphones or things in their ears all the time.

I don't think they'd be so bothered about wearing them. Now these are beginning to be developed to be used as hearing aids as well. I think it's something that we can all do. It improves your quality of life and relationships as well as your hearing, the fact that you can communicate with people.

[00:09:52] Jane: You're talking midlife hearing problems in addition to older age senior citizen hearing problems.

[00:09:58] Gill: That's right. In older age, it's very, very common, but in midlife again, it creeps up, and people aren't necessarily aware.

[00:10:07] Jane: The reason for that is if you're not hearing, then those synapses in the brain that detect that certain frequency just die, don't they?

[00:10:14] Gill: Well, we think there are several reasons, but one big reason is that the temporal lobes of your brain, they begin to atrophy, the use it or lose it. It's not actually

getting the stimulation, but we also think that the hearing loss changes people's behavior. You can't hear in a group of people. You stop seeing them. It's not enjoyable. It's humiliating.

People begin to socially isolate and sometimes become depressed. Maybe even it leads to less healthy behavior. They don't pick up cues from going to see their doctor. They miss half of what's said. We think it's both direct and indirect.

[00:10:52] Jane: Okay. High blood pressure?

[00:10:55] Gill: I think the high blood pressure is probably not surprising for most people. I think it's been around this idea for quite a long time that what's bad for your heart is bad for your brain. The high blood pressure is bad for your heart. Sometimes I think, again, people don't know they have high blood pressure. I meet people who tell me that they can tell when their blood pressure is high, but I don't think anyone can.

People would tell me that they take medication when it feels high, but you can't feel it. High blood pressure is an important risk factor, and interestingly, what happens when they have randomized control trials of a high blood pressure medication is they're always abandoned because the non-intervention group always does much, much worse in terms of cardiovascular health.

Because the numbers tend to be small because of that and dementia is a longer term, if you add several of these small trials together, there is randomized controlled trial evidence. Getting your blood pressure down makes you much less likely to develop dementia, and that again, starts off in midlife.

[00:12:03] Jane: I know that you're an MD, in addition to all your research capacities that you're doing. Tell me what blood pressure you're looking for. What do you consider high?

[00:12:11] Gill: It's the systolic, which is the higher number, and we consider that anything over 130 is probably better to be reduced but certainly over 140, so aim for over 130, but don't panic if it's just a bit up between 130 and 140.

[00:12:29] Jane: Smoking.

[00:12:30] Gill: You never meet a doctor who says that you should smoke. Obviously, you shouldn't smoke, but I think that the great news, which we didn't know a few years ago, is that there are a couple of big cohorts and what they've looked at is people who've stopped smoking and ex-smokers after a couple of years in both Britain and South Korea lose their excess risk of dementia. It's not too late. Smoking is a risk, but if it hasn't caused the problem yet, then you can recover, and that's hugely hopeful.

[00:13:01] Jane: Yes, that's very, very encouraging. That's motivating. Good. How about obesity?

[00:13:06] Gill: Obesity is very interesting because having a BMI of over 30 is a risk factor for dementia. Again, that's something that we've known for a period of time, and it tends to cluster, don't they? The person who doesn't exercise and is obese is more likely to be diabetic and more likely to have high cholesterol and more likely to have high blood pressure. They do tend to cluster together, but obesity by itself is a risk factor.

I think what's very interesting is that people who have extremely high BMI have for a long time found it very, very hard to lose weight, but that may be beginning to change in some countries, as we all know with the new drugs. We know that from the randomized controlled trials for diabetes and have these drugs like semaglutide are less likely to develop dementia than those who are on another drug.

We don't know for people who don't have diabetes, but it might also be true that it's not just the people who take it for obesity, even if they don't lose that much weight, because that's what's interesting about the people with diabetes. Even if they don't lose that much weight, they are less likely to develop dementia than other people with comparable blood sugar.

I think that's very interesting that that might be another opportunity for people. Obviously, as everyone has been saying for years, eat less and exercise more, but perhaps also the possibility of using drugs as an intervention may be something that's life-changing, not just for general health but for dementia.

[00:14:51] Jane: With the caveat, we just interviewed someone relatively recently who's seeing a real problem amongst people who are using the weight loss drugs, and that is that they're losing so much muscle mass. He's an MD. He's worried and seeing that people once they lose that muscle mass, gaining muscle is hard. You've got to go to the gym. You've got to work really hard to gain muscle mass, especially as a woman going into older age then you risk frailty and falls and osteoporosis.

[00:15:17] Gill: Absolutely, so the people who do it should be lifting weights as part of it. When you get very thin around the neck area, that's not thinness. That's a lack of muscle mass. You should be lifting and trying to prevent that loss because it is very important and makes you more likely to be frail.

[00:15:35] Jane: This is a video podcast, too, so people could see you.

[00:15:37] Gill: I didn't know that. I would have put on a better dress.

[00:15:40] Jane: Do you want to start over? I think you look beautiful.

[00:15:44] Gill: Thank you.

[00:15:45] Gill: You do. You look beautiful. How about depression?

[00:15:47] Gill: Well, again, depression is another risk factor, and it's a bi-directional risk factor. When people are developing dementia, they are more likely to become depressed. Their brain is less resilient, and they are less able to cope with stresses of life. People who become depressed in midlife are more likely to develop dementia. A very hopeful thing, which is again a new study of the UK Biobank, which is a very big study of 500,000 people who've been followed up, is that for people who take antidepressants or have psychotherapy or have both, they, again, lose their excess risk for dementia, as do people who get better by themselves.

Depression really affects your quality of life, but doing something about it and some varieties of ways of treating it, if it's behavioral, if it's psychotherapy, if it's medication, that not only improves your quality of life enormously at the time, but it reduces your risk of further dementia and later dementia.

[00:16:53] Jane: In the medical literature about depression, what seems to be the problem? Is it because you've got a serotonin issue in the brain? Is it because you isolate because you're depressed and you don't have the social engagement that you should? What is it about depression that can hurt you long-term?

[00:17:09] Gill: I don't think we have any evidence that it's related to neural chemistry. There's a possibility it is, but we don't have that evidence. People with depression do not look after themselves as well as other people. They tend not to exercise. They tend not to socialize. They tend not to look after their physical health. They sometimes treat their depression with excessive alcohol, so often the depression makes many of the other risk factors very much worse. They will tend to be inactive and unhealthy. They're depressed because they're not able to look after themselves in the same way.

[00:17:53] Jane: Let's take a sorbet in this big list of things. Are you seeing encouragement in that people are getting better educated in the world? Our lifestyles may be changing. We're seeing an incidence of dementia decreasing compared to where we were just a couple of years ago.

[00:18:08] Gill: I'm seeing huge encouragement. As fewer people are dying at a younger age, more people are living to old age, and that means since more people are developing dementia, but within that, age-adjusted rates of dementia have gone down in many high-income countries or most high-income countries, and that's continuing. I think that's incredibly encouraging, and that seems to be related to decreases in these risk factors.

I think that's really encouraging. For example, the States has now adopted goals to decrease risk factors for old dementias to begin to decrease these risk factors and to make a difference. I think that's hugely encouraging. I also think it's very encouraging that individuals used to mainly think that dementia was something that just struck you at complete random. I think more and more people know there's quite a lot that they can do about it.

I think more and more people are doing that. I think that's very encouraging. There are more individuals. There's more government action. I've been asked by the World Health Organization about policy. I've been asked by the American government, been asked by the EU, and many members of our commission who come from countries from at least all continents, and many countries are talking to their governments and talking to people around there. I think on an individual, a governmental level, there's been massive changes. I think that that's very encouraging. There's obviously a lot more to do.

[00:19:49] Jane: You're right. You're right. When someone comes to you and says, "Do you know what, I'm scared to get my genetics tested. I don't want to know if I have the Alzheimer's gene, the APOE4, because there's nothing I can do about it." I get that so much. Now, what you're saying and what I believe, too, is that you want to know because then you can really hone in on all these 14 things and make sure that you're not messing up.

[00:20:12] Gill: Again, it's another thing that we didn't know. People have begun to look. People who have a delay in their development of Alzheimer's, if they do these things, if they change it, so for them in particular, it makes a difference. For all of us, it is likely helpful. Of course, lots of people develop dementia without having this gene. For all of us, it is likely helpful but in particular, if you are likely to get it, it is more likely to be helpful, and I think that's great. It's great to know that you can do something and have more years of healthy life.

[00:20:48] Jane: Yes. Okay, physical inactivity.

[00:20:52] Gill: Everyone knows that they should do 150 minutes of moderate exercise a week, but many people find it very difficult to do and perhaps don't enjoy it, and it doesn't fit in with their lifestyle, so many people don't, and again, it's a risk. It seems to be that the more exercise you do and the earlier you do it, the more it helps, but you have to do it and keep doing it over a period of time to make a big difference. Again, not just to the individual but having time and having the resources to do it, it's much easier. It's a safe space outside your home to exercise. It makes a big difference.

[00:21:36] Jane: I know you live in London, and in Europe, you walk much more than Americans do. We get in our cars like that. You walk more and that's better, isn't it?

[00:21:45] Gill: It's much better, and it's interesting because part of the policy, since I've been living in London, has been a policy to make getting in your car harder, so you have to pay for the road. You can't park. Many, many more people now use public transport, and to use public transport, you've got to walk more. You just don't have any options. You have to walk between stations, around stations, up and down things, so we walk much more and we use our cars much less, and that's very good for us.

You can see if you go to other cities even within the same country that the population is on average a bit thinner, look a bit fitter because they're living a different lifestyle, and every day people move to get where they're going to go, and I think that then they get in the habit of it. They don't think anything of it. Otherwise, they think it's a difficult thing to do, and "How can I get anywhere without a car?" Stop asking that.

[00:22:42] Jane: Yes. Then if you live in Paris, boy, they're bringing all the bikes into the city, and it's almost all bikes now instead of cars. It's fascinating.

[00:22:50] Gill: Yes, it's great. London is not that safe for bikes although I do know lots of people who go out on them.

[00:22:56] Jane: Yes, I agree. I wouldn't bike in London. You drive on the wrong side of the road over there. I'd get hit.

[00:23:01] Gill: [laughs] We might get that into your head after a bit.

[00:23:05] Jane: How about diabetes?

[00:23:07] Gill: Diabetes is a risk factor for dementia, and yet again, we know a lot more about it than we used to. We know that people who have midlife diabetes and their diabetic control is not great are much more likely to get dementia, but we also know that if you have good control, then you lose a lot of that excess risk, and that's really important. You shouldn't be keeping your blood sugar so low that, basically, your brain doesn't have enough sugar in it, so you keep it low within the range.

Then you begin to lose that excess risk, and that's great to know. All of these things, we know a lot more about what difference it makes from tackling the risk factors than we used to, as well as knowing more about the risk factors.

[00:23:56] Jane: I was surprised because my hemoglobin A1C, my fasting insulin, and my fasting glucose were all within normal parameters, but when you run another study, a HOMA-IR to compare how those, I guess, interact, my HOMA-IR was way out of line, which showed my body was not handling my sugars properly, so I was appreciative of having that HOMA-IR figure since everything else was okay because now I'm able to

manage it, bring that down in line so in midlife I was managing my sugars okay. I didn't know about the HOMA-IR marker.

[00:24:31] Gill: I don't know the research on whether that makes a difference, but obviously, anything that gets your blood sugar under better control is very good, very helpful, but I don't know whether there is research saying that in itself is a risk.

[00:24:46] Jane: Interesting, okay. Thank you. Excessive alcohol consumption is a risk for dementia.

[00:24:51] Gill: Again, I think that we've always thought that excessive alcohol would be a risk for dementia, and that's not surprising, but I think that what we didn't know is that it doesn't need to be that excessive. Everyone calculates alcohol units a bit different in different countries, but if you have more than 14 units a week in American units, which is more than 21 in British units, then that is a risk for dementia, compared to having less than 10 American units a week.

Again, not suggesting that you have to give up drinking, we're just suggesting that there'll be some days a week that you don't drink or when you do drink, you use smaller glasses, but it's quite easy to go above that if you just have a large glass with dinner every night so you're never drunk. It is relatively easy. I think it's interesting that people who will answer surveys and say they don't drink at all do a bit worse than people who drink a little.

I don't think we're clear whether that's because some of the people who don't drink at all are people who used to drink and have stopped because they're drinking too much and they're harming themselves or whether because drinking a little is protective, but whatever, there's certainly no evidence that drinking a little is bad for you.

[00:26:18] Jane: How about drinking wine with resveratrol? Is there any research to say if you're going to drink a little bit, you should be having red wine, or is there not enough resveratrol?

[00:26:27] Gill: I think people used to think that, but it doesn't really hold up. If you like red wine, then drink a little red wine, and if you like spirits, drink a little spirits. You can drink, but if you're drinking every night, it is likely that you're going to be drinking too much even if you're not drinking very much every night.

[00:26:44] Jane: One other clarification, when you say 10 units in America, does that mean 10 drinks?

[00:26:50] Gill: A large glass of wine can be quite a lot of units. When I'm talking about 10 units, a very large glass of wine can be about 5 of them. That's what I'm talking about.

There are units within them. If you have a small glass of wine three or four days a week, then you're fine. If you have a large every night, then you're going to go way beyond it without trying.

[00:27:14] Jane: Okay, oh, how about TBI, Traumatic Brain Injury?

[00:27:17] Gill: Yes, we've always thought that traumatic brain injury is bound to be bad for you and that sometimes people are in a road traffic accident or something happens to them, they are attacked, and then they never get better. What I don't think we understood before is that when people get better, then it leaves them vulnerable and that they are more likely to develop dementia over the following years after traumatic brain injury.

You've probably seen, in the States, there have been huge campaigns about protecting the children from head injury from sport. In Britain, as well, they've stopped children heading balls while they're playing soccer. One of the US people said to me that the campaign in America is that "Don't hit your children in the head," and it's extraordinary that professional football players have a helmet and children don't even though they're not competent to make that decision.

I think there's a lot more evidence that sports-related injuries make you more vulnerable, but sports themselves are good for you. If you can be active without injuring your head, then that's great. Protect your head in road traffic accidents. Protect your head in sports, and it might make a difference years later. If you get injured as a young man or woman, then 20 years later, you might still be relatively young, and you really don't want to be developing dementia.

[00:28:48] Jane: No. This is an interesting one–air pollution.

[00:28:53] Gill: Isn't it? I think it's difficult for individuals to do a huge amount about air pollution because you walk down the street and there is air pollution within the street. Air pollution, small particles that we can't see called particulate matter, 2.5, whatever they are made from, it seems to make a difference. Obviously, we can all try to contribute not to use highly polluting vehicles, not to use vehicles as much as we can.

I think it's interesting that wood-burning stoves cause a huge amount of pollution. If you're inside and you've got closed windows and a wood-burning stove, it might seem very romantic and pretty, but it's probably pretty bad for your brain. Air pollution, the environmental change, is important but more difficult to control.

[00:29:44] Jane: Air filters inside could be helpful in some way.

[00:29:48] Gill: Yes, probably. Certainly not harmful.

[00:29:50] Jane: Especially if you live in Beijing.

[00:29:52] Gill: It's probably a lot of it is outside.

[00:29:54] Jane: We have 3 more on your list of the 14 things you need to really pay attention to to prevent dementia. Social isolation.

[00:30:04] Gill: Being sociable is good for you. It's not just enjoyable and people are social animals, but it's helpful. We know that social isolation is, again, bad for you in more than one way, so it probably massively reduces your cognitive stimulation, but also, it's very bad for your health in ways. If you're socially isolated, you tend to eat worse. You tend not to go and see people about your symptoms.

Other people in your house who say to you, "You can't hear, go get your ears tested." If you're just by yourself, you don't notice any of that, so there's a variety of different ways. Go out. See people. Walk with them. Move. It's good for you. Enjoy it. Your life will be better, and in the long term, it makes you much less likely to develop dementia.

[00:30:57] Jane: Good advice, good advice. Well, we've already talked about vision loss, haven't we? And hearing loss. High cholesterol.

[00:31:04] Gill: We talked about that as well.

[00:31:05] Jane: We talked about that, too. Well, those, never mind, I repeated myself at the bottom of the list. I'm sorry.

[00:31:10] Gill: Yes, I think we didn't talk about education and cognitive stimulation.

[00:31:14] Jane: That was it. I knew I was missing two. Education.

[00:31:17] Gill: Education. Education is important, of course, for everything. I think that the new thing that we've known for a long time that it's not just quantity, it's quality, they're quite related to each other, but if you look at people with the same amount of education, the people who have reached higher standards, I'm talking about cohort, not just individuals who might be smarter, then they tend to do better.

What we didn't know and what we now know is that even if you didn't get much education, if you have a cognitively stimulating occupation, that can make you less likely to develop dementia. That's protective as well. If you have both, it's even more protective. Keep thinking. I'm not talking about doing Sudoku, which makes you good at doing Sudoku. I'm talking much more general cognitive stimulation where, for example, your occupation is clearly very cognitively stimulating.

You have to think about things, talk to people, listen to them, integrate it, so a lot of things that make you judge and think and learn new things and a variety is very, very good for your brain health and probably pretty good for your mood as well.

[00:32:31] Jane: Did you say the last one is cognitive enhancement?

[00:32:34] Gill: That's the thing. That's all part of cognitive stimulation. Yes, cognitive stimulation is important as a child, but it's important as an adult. We didn't really know that. We didn't know whether we didn't have it as a child. It was too late, but it's never too late, and keep doing it.

[00:32:48] Jane: One of the things that comes to mind on this list that I'm not seeing, and maybe I just missed it, is nocturnal oxygenation, sleep apnea issues. If your brain is deprived of oxygen, you're going to start having problems because brain cells will die. Is that one of the factors taken into account or that may in the future?

[00:33:04] Gill: Well, thinking a bit more broadly about if you don't get oxygen to your brain for whatever reason. If you don't move because you're in a toxic environment, then that's bad for you. Sleep in itself is very interesting. There's a lot of debate about sleep and whether sleep is a risk factor for dementia. We know as people are developing dementia, they don't sleep very well. They don't sleep as well.

The question is, is it a reverse causation? Is it caused by people developing dementia, or is it, if we look 10, 15 years before, people who don't sleep very much or don't sleep well, they're not necessarily the same things, are they more likely to develop dementia? The answer, in general, it seems is not, which is not quite the same as actually having a lack of oxygen to the brain, which is a sort of direct cause rather than a risk.

If you don't sleep very much, if you sleep fewer than six hours is the amount we think is not sleeping very much in midlife, that doesn't seem to mean that you're particularly likely to get dementia. Probably not but there we're not 100% sure. If you begin to develop bad sleep, probably something is happening to you, and it might be worth looking up to find out. It might be depression.

It might be sleep apnea, which I think might be what you're talking about, which again can be treated. It might be that you are developing a problem with your cognition, and it's affecting your sleep. It might be anxiety. It might be pain. There are a lot of reasons why sleep might begin to be impaired. Looking for changes, not everyone has times when they don't sleep when they're worried about something, but looking for longer-term changes in sleep, it should make you consider, "What is the underlying reason, and what is going on? Is it something that I can do something about?"

[00:35:02] Jane: Gill, how does the Commission work? Let's say you think, "I really believe that the research is showing XYZ is now a factor in causing dementia." Do you become a cheerleader for that and send that around to your other 26 colleagues and "Look at this, guys"? How does this process work?

[00:35:18] Gill: No, it doesn't quite work like that. The first time the Lancet emailed me and said, "Would you like to lead the Commission on Dementia?" I said, "Yes, and what should we put in it?" They said, "Whatever you like. What we'd like is for you to get different experts from around the globe with a variety of different expertise and get together and think about it."

Now there comes a time when it seems to be there's lots of new evidence, lots of new things to see. I emailed our other commissioners and I'd say, "Right, let's all meet in a place which is convenient," which is, in my definition, London, "and let's talk about possible new risks, and let's check the older risks and what else we know about it." I'll send a list of possible new risks that I've thought about because I think about it over the years and say, "Anybody want to add?"

Then we divide them up, and we don't divide them up at random. We talk to somebody who's written about one or the other, and we say, "Everyone over the next, say, two, three months, we'd like you to put all the evidence together that you can and write about it." Then we all meet in London, and we present them, and we go through it and say, "What do you think? Why do you think this one is a risk? Why are you convinced? Why do you not think this one is a risk? Why are you not convinced? What else do we need to know?"

We put them all together, and we continue really until we can come to a consensus. "These are risks and the other ones might be risks, but the evidence isn't good enough." It's not usually, we're absolutely sure it's not a risk. We have a sort of list of other things that we talked about but didn't think that the evidence reached a stage. We know that there are others that we are not including; we're just not sure which ones they are.

[00:37:03] Jane: You will come out with a report when you have determined that there are other factors in addition to this 14?

[00:37:09] Gill: When there's more to see. It's not just about prevention; it's about intervention and care. When there is a pool of new evidence that we think is worth writing a report about, then we will talk to Lancet about it, and then we all meet together, and then we write it. It's a lot of work, so we're a little bit reluctant to do it, although very interesting. Then there comes a time when it begins to see there really is going to be enough to see it's worth seeing it, so we'll do it again.

[00:37:40] Jane: Well, I look forward to that next time.

[00:37:42] Gill: Thank you.

[00:37:43] Jane: Then I get to talk to you again about the new findings that you and your colleagues come up with. Gill, this has been delightful. I'm so jealous of you. I think your job sounds fabulous.

[00:37:52] Gill: Thank you. Thank you. It's been great to talk to you, and thank you for putting it out there. Congratulations on being able to do a podcast, which a million and a half people listen to. That's a fantastic thing to be able to do.

[00:38:06] Jane: We're helping people, aren't we?

[00:38:07] Gill: Yes, we are. We're doing our best, aren't we?

[00:38:09] Jane: We are.

[00:38:10] Gill: Having a go.

[00:38:11] Jane: Okay. Take care.

[00:38:12] Gill: Take care then.

[music]

[00:38:15] Jane: You've been listening to the *Cutting Edge Health: Preventing Cognitive Decline* podcast. Any information shared here is for educational purposes only. Guest opinions are their own. This podcast is not responsible for the veracity of their statements. Do not use any of this information without first talking to your doctor. Cutting Edge Health LLC is not responsible for what may happen to you if you use their information in place of official advice from a medical professional. Thanks for listening. Be well.

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[00:38:52] [END OF AUDIO]

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