

**TERRY OH:** Dr. Terry Oh in the Department of Physical Medicine and Rehabilitation at Mayo Clinic Rochester. I have a special interest in fibromyalgia, and I would like to discuss some of the interesting research findings with you.

Fibromyalgia is a symptom complex characterized by chronic, widespread pain and constellation of symptoms such as fatigue, poor sleep, and cognitive symptoms. It affects about 2% of the population, and is more common in women. Fibromyalgia is a chronic disorder, and the condition negatively affects quality of life and can have a devastating effect on people's lives.

Mayo Clinic has a comprehensive fibromyalgia treatment program, which was established in 1999. Our dedicated team members include nurses, therapist, wellness coach, nurse practitioners, and physicians. We have collected our patients' data and their treatment response to learn more about this challenging condition, and to also improve our treatment strategy. With a database of more than 1,000 patients, we have done a number of studies, and haven't made many interesting observations.

I'd like to highlight some of the findings. We published in 2010 6 to 12 months treatment outcome of our brief inter-disciplinary fibromyalgia treatment program. Our program focuses on cognitive behavioral therapies. We wanted to see how our patients do after undergoing the program. The majority of our patients reported improvement in their symptoms and the quality of life after undergoing the program.

However, we noted that some did not improve. Therefore, we analyzed the factors associated with treatment outcome. Our study showed that those who had a greater benefit from were younger, had more years of education, higher baseline depression score on the fibromyalgia impact questionnaire, lower number of tender points, and did not have abuse history.

We looked into factors associated with symptoms and quality of life in patients with fibromyalgia. So we looked into BMI status, and we noticed that obesity was more common in our patients than the general population. Close to 50% of our patients were obese, and furthermore, those obese, about half of them were severely obese. Then we examined the association between BMI and their symptom severity and quality of life.

Our study found that those obese had worse fibromyalgia symptoms and worse quality of life compared to those non-obese and overweight. The differences were mainly from the severely obese, which means BMI greater than 35. So our study highlights the importance of staying active, keeping weight off. However, it is challenging for them to stay active when they have chronic pain and fatigue. It is important for us to understand their barriers and needs in their weight management to be able to help them better.

Another aspect interesting was alcohol consumption in patients with fibromyalgia. As you know, alcohol consumption is a one of a common lifestyle behavior. And previous studies showed positive effects of alcohol consumption in cardiovascular disease, chronic pain, and rheumatoid arthritis, to just name a few.

So we examined association between alcohol consumption and symptom severity and quality of life in patients with fibromyalgia. The majority, 50%, reported not drinking. And those who reported alcohol consumption, the majority reported low amount of alcohol consumption, which means less than three drinks per week. Then we examined the association between alcohol consumption and symptom severity and quality of life, and we found that those reported low and moderate amount of alcohol consumption had better, lower fibromyalgia symptoms, and better quality of life compared to those non-drinkers.

We found the association quite intriguing. However, we do not yet completely understand the association. The association might be related to patient characteristics who drink rather than beneficial effect of alcohol consumption, so it is premature to promote alcohol consumption to relieve their symptoms, and we do need further investigation to understand the association better.

I'd like to discuss the age factor, how that's associated with symptoms and quality of life in patients with fibromyalgia. We divided our about 1,000 patients into three age groups of young, 39 years and younger, and middle age, those 40 to 59 years, and older means 60 years and older. Then we compared their symptoms and quality of life across the age groups. Our study showed three main findings.

First, we compared their symptoms and quality of life to see whether there are differences across the age groups and, yes, there were differences. Number two, we wanted to know which age group reported worse or better symptoms and quality of life, and we found that those young and middle-aged showed worse symptoms and quality of life compared to the older patients.

Third, we compared with our patients' quality of life with a general population of similar ages, and we found that all age groups had worse quality of life in both physical and mental health. And that difference was more prominent in physical health, and were more so in young patients than the middle-aged and older patients.

And this finding is quite interesting, because physical health in the general population has been reported to be negatively associate with age, which means younger population report better physical health than the older population. However, our study showed opposite findings, that older patients reported better physical health than the young patients.

So age is one of the factors associated with symptoms and quality of life in patients with fibromyalgia. When treating patients with fibromyalgia, it is important, not only address mental health, to address physical health, particularly in young patients. And exercise should it be an important component of treatment when you're treating patients with fibromyalgia.

So far, we have made many important observations regarding factors associated with symptoms severity, quality of life, and their treatment response in patients with fibromyalgia. The next step in our clinical investigation is based on the findings I just mentioned, to see whether modifying these factors in patient lifestyle, along with our current treatment program, would improve their symptoms, quality of life, treatment response, in patients with this challenging condition of fibromyalgia. I'm Dr. Terry Oh in the Department of Physical Medicine and Rehabilitation in Mayo Clinic Rochester. Thank you for listening.