JEFFREY STAAB: Well, hello. I'm Dr. Jeffrey Staab from the Department of Psychiatry and Psychology at Mayo Clinic in Rochester, Minnesota. And I'd like to welcome you to the second of three talks on the somatic symptom disorders.

This one, we're going to focus on the core features of a couple of the disorders and also talk some about treatment strategies. I don't have any disclosures of conflicts of interest. It's important to know that the US FDA has not approved any medications for the treatment of somatic symptom disorders. So some of the medications that I'll mention later on are off-label use, although there is some clinical trial support for them.

Once again, I'd like to thank my colleagues and coworkers in the behavioral medicine program here Mayo Clinic, and as always, a special thanks to our patients.

So in the last talk, we spoke about how important it is to move to defining the somatic symptom disorders by what they are, namely, that meaning a positive definition as opposed to what they're not as they were in DSM-IV defined by the absence of medical morbidity. And so just briefly, again, somatic symptom disorder is this illness in which the patient is burdened by one or more physical symptoms and that that burden interferes with their functioning or causes distress that's significantly disproportionate to what we might expect of the symptom itself. So essentially, the central feature here is the burden that physical symptoms bring.

Second diagnosis, illness anxiety disorder has got the essential feature of being the preoccupation with being ill, so the thoughts, fears, of a catastrophic or untreatable illness. And the other thing is that there's not this split between medical and psychiatric as there was in the past. So somebody can have either of these disorders along with a medical illness. They're not diagnoses of exclusion.

So let's take a little bit closer look at somatic symptom disorder and some of the research that was behind it so that we understand why it was defined this way. So investigators have looked at how to define a syndrome in which the main manifestation is one or more persistent, nagging, and debilitating physical symptoms.

And so what we've found is that if you just add up the number of symptoms that someone has, that the more symptoms they have, the more they tend to be burdened by those, and that's a continuous-- there's not really a threshold. So it's not that at some point there's a cutoff where if you have above a certain number, things are really bad, and if you have below that number they're not.

But one interesting thing that came out of that is that there's really not much difference between those symptoms that we think we have a medical explanation for and those that we can't readily provide a medical explanation for. So this idea that was really embedded in DSM-IV of explained versus unexplained medical symptoms really doesn't seem to hold out.

Now, this isn't a completely solved problem, but the evidence is starting to point in that direction. Further studies are under way about that. So it's having one or more symptoms, whether they're explained or not, and there's this distress and impairment that comes with it.

So it's not just I have a bunch of symptoms and I'm going about living my life, but rather I have these symptoms, and they're holding me back. I can't go to work, I can't go to school, I can't enjoy my kids because these symptoms interfere and especially when that impairment seems not to really align with other elements of the history or exam findings.

Now, this presentation of somatic symptom burdens associated with several adverse outcomes, one is increased health care utilization. There's no doubt that patients with this type of presentation will seek more medical care. Sometimes serial exams. They may fall out of the picture for a while because they get frustrated with the lack of diagnoses and treatment strategies, but oftentimes, reappear and go through, again, a series of examinations. often with unclear results or unrevealing results. They also tend to have more likelihood of being in some sort of a disabled status, whether they're truly receiving benefits or just unable to work and not qualifying for any support.

The core feature of illness anxiety disorder is a little bit different. Here we're talking about three main elements. The first is body vigilance, and it's is what it sounds like the person much more tuned in to symptoms that they experience from their body, either from their five senses or internally, coupled by worry about the cause and consequences of those symptoms, what could be creating the symptoms, and what do those symptoms mean in terms of physical health and well-being.

And the third element and a crucial one is the inability to be reassured by negative medical findings. That probably is based in the person's intolerance for uncertainty about aspects of their health, symptoms not readily explained, prognoses that can't be clearly given, and just the fact that no test result is 100% sensitive or specific.

This is important because a lot of times we as physicians will say, well, let's just do a few more tests, and that will really reassure the person that everything is negative. But if a core element of illness anxiety disorder is that they're not reassured, no matter the number of tests that are done, then those additional tests, especially if they're not medically indicated, are not going to really provide much relief for the patient.

There are a number of measures, actually, that have been developed over the years for illness anxiety. Here's one of them developed by Swokowski and his colleagues, the Health Anxiety Inventory, there's a long and a short form. Here's a couple of questions just for illustration. One is, I'm aware of bodily changes and patients rate that is never, not at all, occasionally, much of the time, or most of the time, measuring the element of body vigilance.

And here, that issue of inability to be reassured when my doctor tells me there's nothing wrong with my health, I'm completely relieved; I'm relieved, but the worries come back; I'm relieved, but the worries always return; and I'm not relieved at all. So it's that type of questions, there's 14 of them on this short form, that make for a nice survey of the core elements of illness anxiety disorder.

Now, one of the things that we know is that the somatic symptom disorder, that somatic burden, and the worry, the illness anxiety disorder, are not exactly the same. We also know that they're not entirely distinct from one another. And here's a little bit of the data to illustrate that.

So this is from a survey of 800 patients that we did here at Mayo Clinic, where we gave them the PHQ-9 rating scale for depression, the GAD-rating scale for generalized anxiety, that short health anxiety inventory that I illustrated on the last slide, as well as the somatic symptom burden in here. All we used was just a count of the number of symptoms that they reported on their physical review of systems when they sought care from us.

And what you can see is that the somatic symptom burden does not correlate with the other two, whereas illness anxiety does correlate in part with depression and anxiety. That's not a big surprise. All anxiety and depressive disorders have some level of correlation with one another. And so we expected that illness anxiety would correlate at least, in part, with depression and a generalized anxiety. But curiously, there's not a strong correlation, not a statistically significant correlation at all with somatic symptom burden, suggesting that they are measuring two different elements of patient's somatic presentations.

Here's another example. When we looked at dividing patients into those with high ratings of illness anxiety versus low and those with a high number of somatic symptoms versus low. And what you can see is that there is a higher number of those who have increased somatic symptoms and increased illness anxiety and also that are low on both measures, but there's quite a bit or quite a number of patients on the off diagonals.

So that means that there are quite a few patients who have high illness anxiety, but not a lot of somatic symptoms and vice versa, have a quite low number of somatic symptoms, but yet a lot of worry about them. So interaction among these two in ways that we don't fully understand, but still a sense that they are measuring and capturing two different aspects of somatic symptom presentations.

Let's look at illness anxiety a little bit more closely. This comes from that same group of 800 patients. This is the distribution of illness anxiety scores or health anxiety scores across that population of 800. And what you can see here is a good distribution from very little in the way of illness anxiety to nearly maximal scores, on the other hand.

And to give you a little bit of sense for how to interpret this, that's where the normal patient population is. This is a normal, healthy, general population would have a score of about nine with the range that you see there plus or minus 1 standard deviation.

If you look at patients who are in primary care, it's slightly higher, a couple of points higher, but not dramatically so. And even when we look at patients with panic disorder, an illness that presents with dramatic physical symptoms, the average score is only about 13 or 14. And that compares with patients out of here who were diagnosed with hypochondriasis via DSM-IV definition.

So the question is, is if this is the case, why weren't we just satisfied with drawing a line right there and identifying those with hypochondriasis the way that we did previously that is way out on the far spectrum of worries about illness. And the answer is that we have to take a look at these data a little bit differently.

And so we plotted them differently. So what a cumulative plot is is a graph in which, on the x-axis, our scores ranked from lowest to highest. And on the y-axis, you just add you just keep adding and adding patients as you go up in the score until you get the full population.

And so for depression, it yields a plot like this. And we're all really pretty comfortable now with saying there are patients who are not depressed, there are patients who have a mild level of depression, patients who are more in the moderate or moderate-severe range, and then there's patients who really do have a severe level of depression.

And so in a tertiary care setting, it's about 1/3 of patients who present with no depression, and another 30% or so who have mild depression, and then the ones that are more clinically significant, 30%, with moderate to severe, and then 10% who are really up in that highest category of a severe depression. If we plot anxiety, it looks exactly the same. So GAD scores have that same sort of distribution 30%, 30%, 30%, and 10% from normal to mild to moderate to severe.

And if we plot illness anxiety scores in the same manner, it falls along the same distribution, which says that illness anxiety behaves many ways like depression and other anxiety disorders do. It has a range from normal to severe. It's not just those 10% that are way up on the top, which we would have called hypochondriasis in DSM-IV, but others who have lesser symptoms, but still a distressing impairing level of symptoms that add to their morbidity, both medical morbidity and psychiatric morbidity, and probably warrant intervention.

One of the other things that this plot doesn't show is that illness anxiety can wax and wane, can remit and recur as other anxiety and depressive disorders too. So it's not just that somebody is born a hypochondriac, lives their life a hypochondriac, torturing their doctors, and then dies a hypochondriac, but rather that there's a range of illness anxiety that waxes and wanes over a lifetime that remits and recurs often in conjunction with the appearance of physical symptoms.

So why does this matter that we've made these changes other than the data suggests that maybe that's the direction to go? And here's some data from one of our Fellows who measured disability, looking at level of impairment being no impairment, partial impairment, or total disability in these domains of work, social and leisure, family and home situations, days lost from work, and then days at work, but not particularly productive.

And what we can see is when we tried to predict disability, which category-- none, partial, or total disability-- someone was in, controlling for demographics, depression, not surprisingly, is a major predictor. That's not new. That's been known for a while. But right behind depression in terms of impact on disability level is illness anxiety and depending on what domain we're measuring, also the somatic symptom burden.

So depression first, but also illness anxiety on top of depression after controlling for depression, still plays an important role in contributing to the person's level of functional impairment. And then on top of that are some more advanced medical illnesses such as advanced cancers, severe neurologic illnesses, which are, as we know, quite disabling. And so this definition of illness anxiety and the identification of a disorder of illness anxiety really does allow us to have a potentially modifiable disorder that affects a person's level of functioning.

All right. So let's turn to treatment a little bit, and I'm going to review very quickly treatment strategies for somatic and functional disorders, many of which are not well known in psychiatry and psychology because a lot of us have had the sense that these types of disorders are just not treatable. We really can't reach these patients. But I hope that this quick review will suggest otherwise.

One of the important things is that being more specific about the diagnosis equates to more specific interventions and then is part of producing a better outcome. So here are some studies that have been done on somatic symptom presentations. So obviously, not somatic symptom disorders defined in DSM-5 because that was just done, but rather patients who present with large numbers of somatic symptoms as the entry criteria for the studies.

This was a review of 34 controlled trials, variable size and quality, but some consistent findings. The first is that a consultation letter from a psychiatrist or a psychologist back to the patient's primary care doctor saying, this person does have a somatic symptom disorder. This is a somatic symptom presentation, can really make a difference in outcome. And beyond that, cognitive behavioral therapy decreases both numbers of symptoms and distress and disability related to symptoms.

Antidepressants do have a role to play, but it's a bit more limited. Tricyclics and dual action uptake inhibitors, such as the SNRIs, seemed to be a little bit better than the SSRIs probably because they have more efficacy for pain, so neuropathic pain and headache, that can contribute to somatic symptom burden.

Now, if we look at illness anxiety disorder, the first thing to keep in mind is that there are these spontaneous remissions. So unlike the categorical diagnosis of as hypochondriasis in DSM-IV, this really is a condition [INAUDIBLE] and wanes and can spontaneously remit. There were a number of very well-done cognitive behavioral therapy studies done, some with mindfulness.

And these were fairly short, only six sessions or so, with some follow up, but also including that important consultation letter that identified the fact that the psychologist or psychiatrist, we were confident in the diagnosis of an illness, anxiety, or somatic symptom disorder. Decrease in illness anxiety, decrease in role impairment, but not so much of a change in the physical symptoms were the outcomes of those CBT trials.

The SSRIs have been studied in a few and growing number of placebo-controlled trials, and right now I think the jury is out. The results have been somewhat mixed with a hint of benefit, but we'll see as larger trials come through.

So in summary then, this idea of identifying the patients, calling them for what they have, but in a positive way that we can identify what they do have as opposed to what they don't and then being willing as psychiatrists and psychologists to step up and say, yes, they have this, and we can help to do something about it seems to be particularly helpful for primary care physicians in advancing the functional status of their patients.

Now, there are a couple of areas in medicine in which the functional disorders are quite well developed. The leading area is in GI disorders, starting with irritable bowel syndrome with the first Rome criteria and now moving to the third edition of the Rome criteria. That's the official nomenclature for functional GI disorders in gastroenterology.

And here, what we found is that being more specific about the type of functional GI disorders allows us as psychiatrists and psychologists to apply quite specific behavioral therapies that yield rather robust outcomes. So for upper GI problems, patients with upper GI bloating, postprandial pain, burping, globus sensations, those kinds of things, diaphragmatic breathing exercises seem to have quite a benefit, even in a rather short term. And pelvic floor training is becoming more and more recognized for patients who have rectal evacuation or defecation problems.

Psychotropics have been increasingly recognized for their ability to modulate the GI tract, usually in low doses, for example, the dual-action antidepressants, including the tricyclics or even more specifically the tricyclics on the concept of visceral hypersensitivity or the condition of visceral hypersensitivity.

When [INAUDIBLE] inversion disorders and break them down into specific types, so gait disorders versus movement disorders, and so forth, we begin to see that physical therapy interventions, particularly for functional movement disorders and functional gait disorders, can be quite effective with success rates of over 70% even from short-term interventions. And then habit reversals. These are those kinds of tricks that we all learned from our neurology professors to differentiate between functional and structural movement problems.

And usually we were taught them as kind of a-ha, gotcha things. So you did that, now we know you're not really a neurologic patient. But those actually form the basis of identifying ways to help to reverse or inhibit functional movement symptoms, and they're starting to come to the forefront as well. Medical therapies for the functional neurologic disorders are really focused on coexisting or triggering neurologic events.

So in conclusion then, if we look at a little bit more of the background that went behind the changes from DSM-IV to DSM-5, we can see that there actually is some empirical research behind the core concepts of each of these two disorders, somatic symptom burden for the somatic symptom disorder and preoccupation with illness for illness anxiety disorder. There are gaps in our knowledge, how these two interact with one another, and what elements they really do explain that differ from one another.

Evidence-based therapies are beginning to accumulate including our willingness as clinicians to step forward and help our primary care and medical and surgical specialists identify patients with these problems. CBT and other behavioral interventions really are leading the way right now. There are selected roles for psychotropic medications as well. Thank you.