MIGRAINE WORLD SUMMIT

INTERVIEWS WITH WORLD-LEADING EXPERTS

TRANSCRIPT

HOW MIGRAINE AFFECTS OUR MENTAL HEALTH

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Introduction (00:05): We've also been looking at questions like, "Well, if we treat the depression, or we treat the anxiety, or the risk factor for chronic migraine, can we eliminate the risk for progression?" So that's an area that's really interesting. Can we improve people's migraine condition by treating their depression or their anxiety? Well, research shows us that the opposite is true. When migraine improves, when the number of headache days per month is reduced, we actually see reductions in depression and anxiety, and other psychiatric conditions, and that's really exciting.

Wendy Bohmfalk (00:39): Migraine is known for its debilitating attacks that cause pain and a wide range of physical symptoms. But there's another domain that is under siege, which is our mental health. Beyond the pain is the disappointment of failed treatments, guilt from missed commitments, the strain from suffering relationships, and the fear of the next attack. It's an incredible burden to carry on top of a chronic disease that leaves so many feeling isolated and unfairly judged. How can we protect our mental health? And when do we need to turn to professionals for help? Dr. Dawn Buse is with us today to answer those questions. Dr. Buse, welcome back to the Migraine World Summit.

Dr. Buse (01:17): Thank you, Wendy. I'm so happy to be here. And hello to all the listeners today.

Wendy Bohmfalk (01:24): We should start by defining some important terms and separating psychiatric or psychological comorbidities from quality of life, disability, and feelings. Dr. Buse, can you define these terms for us, and then we can dive into each one?

Dr. Buse (01:38): Wendy, that's a great place to start. So let's talk about comorbidities of migraine. That means something that occurs together at higher than rates of chance. So someone with migraine is also more likely to have X, Y, and Z. And they really fall into clusters. There's a cluster of cardiac and heart issues. There's a cluster of respiratory issues, of chronic pain conditions, as well as psychiatric conditions. In the psychiatric realm, conditions that are comorbid with migraine, meaning they occur at greater rates than by chance, include depression, anxiety, post-traumatic stress disorder, bipolar disorder, suicidality, and some other conditions. So that means someone with migraine is more likely to have some of those conditions than someone without migraine.

Dr. Buse (02:27): Now, we also talk a lot about life with migraine being hard. It is just hard to live with a chronic, unpredictable, painful, debilitating disease with attacks that may occur out of the blue and really affect your life. So it is not surprising that someone living with migraine may feel depression at times: they may feel feelings of worry, anxiety, wondering what's coming next; they may feel sad, guilty. So many emotions that are absolutely understandable, human emotions to feel in response to living this difficult, challenging, unpredictable disease.

Wendy Bohmfalk (03:07): Absolutely, and I think that lays a great framework for the rest of our discussion. Let's start with the psychiatric comorbidities. Can you please explain the relationship between migraine and psychiatric comorbidities? Are there actual pathophysiological links?

Dr. Buse (03:24): Well, what we know about each one is going to be a little bit different. So let's take depression, for example. We've actually done a lot of research into migraine [and] depression, and have some pretty good understanding of what's going on. So we can think about: Does depression cause migraine? Does migraine cause depression? Do they cause each other? Or is there even some shared underlying reason that's causal for both of them? And it's

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likely a mix of all those things. It's likely that there is some shared genetic predisposition towards both of them. So, migraine runs in families, has a genetic predisposition; and depression runs in families, has a genetic predisposition. We know that when someone experiences migraine, they're more likely to experience depression later on. When someone experiences depression first, they're more likely to experience migraine later on. But we don't necessarily think that that means one is causing the other. It may be that there's something in the genes and the neurobiology that causes that.

Dr. Buse (04:21): And for example, those two share a common neurotransmitter that plays a big role, that being serotonin. So maybe differences, changes in serotonin might be one of those markers that predisposes someone both for migraine and for depression. Now each comorbidity is a different condition, so it's going be a little different if we talk about anxiety. It's going to be a little bit different if we talk about PTSD. And PTSD is going to be a little bit more complex. Because if you think about PTSD, post-traumatic stress disorder, is something that occurs as a response to having a stressor. So the person with migraine would have a stressor or a significant trauma that they experience, and, their reaction to it might be a prolonged reaction of multiple psychological and physical feelings that are these symptoms of PTSD. So for each kind of pair of comorbidities, there might be different reasons why they occur together.

Wendy Bohmfalk (05:18): It sounds like it's very complicated, and we are going to get a little bit more into some of these more common comorbidities. But before we do, I'd love to know, what is the latest research with regard to migraine and psychiatric comorbidities?

Dr. Buse (05:32): So one area that we spend a lot of time looking at is, are psychiatric comorbidities associated with a new onset of chronic migraine? We call it progression, moving from episodic to chronic migraine. And so far, we've found that yes, both depression and anxiety are risk factors for the new onset of chronic migraine. And in fact, when it came to depression, we found that the severity of depression from moderate — from mild to moderate to severe — increased the risk for chronic migraine in a stepwise fashion. So each more severe level of depression gave a higher risk for chronic migraine. Now that doesn't necessarily mean, again, that the depression is causing the chronic migraine. It may be that something's going on underlying in the system that's causing both of them. Or it may be that the migraine is progressing, and that's increasing the depression symptoms. So we don't necessarily know what causes the other, but we know that they go hand in hand.

Dr. Buse (06:27): We also have been looking at questions like, "Well, if we treat the depression, or we treat the anxiety, or the risk factor for chronic migraine, can we eliminate the risk for progression?" That's an area that's really interesting. Can we improve people's migraine condition by treating their depression or their anxiety? Well, research shows us that the opposite is true. When migraine improves, when the number of headache days per month is reduced, we actually see reductions in depression, in anxiety, in other psychiatric conditions, and that's really exciting. We've seen that in a study of onabotulinumtoxinA, or Botox, for chronic migraine. We've seen that in the studies of some of the monoclonal antibodies. Some of the other interesting analyses that were done in the clinical trials of the monoclonal antibodies were, did they work as well for people with depression? And in fact, yes, the answer is yes. They worked equally as well for people with or without depression with their migraine. And as the number of headache days reduced, so did the amount of depression.

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Wendy Bohmfalk (07:29): Well, with the understanding that depression and anxiety are comorbidities of migraine, how do we know when our mental health becomes a problem that really needs to be specifically addressed?

Dr. Buse (07:40): Well, I think that's something each person can feel. If you feel that you are not living your life the way that you'd like to be. If you feel that in addition to the migraine impact that either depression or anxiety is really causing a significant impact in your life. You may notice it at work or school. You may notice a loss of interest in your usual activities, or social activities, or hobbies. And that's going to be in addition to the actual burden of migraine interfering in the ability to do, for example, hobbies or social activities. That's going to be like you don't want to, you just don't feel like it anymore. That's probably a sign of depression. It's certainly worth talking to any of your healthcare professionals. Your primary care doctor is a great person to talk to about depression. If you see a neurologist or other headache provider regularly, you can talk to that person. You can talk to your OB-GYN; you can reach out and find a psychologist or mental health provider. And it's good to just kind of do a screener and get an assessment of, "Do I actually meet criteria for depression, or do I have depressive symptoms?" The good news is that it's treatable. There's medication options, there's nonmedication options. You can often do them hand-in-hand. It's very treatable.

Wendy Bohmfalk (08:55): That helps, I think, kind of define some of those differences. Well, what are some potential warning signs that we should note about depression and anxiety that would make us want to get help maybe more immediately?

Dr. Buse (09:07): When it comes to depression, if you have a thought of hurting yourself, please reach out and talk to someone immediately. When I say hurting yourself, it can mean two different things. Hurting yourself might be suicide, killing yourself, ending your life. In that case, you need to talk to someone in that moment right away. You can call 911, you can go the emergency department, but I wouldn't even wait to talk to a doctor a week from now. Please talk to someone in the next couple minutes. Get yourself right there to talk to someone if you have the feeling of ending your life. There's also something called nonsuicidal injurious behavior, NSSI, where someone hurts themself in some way like cutting on their arms or their legs, or burning their skin or their flesh. And there are different reasons why people engage in self-injury behavior. If you're doing self-injury behavior, there's also treatments and help for that, that can be very helpful.

Dr. Buse (10:05): There's often a lot of stigma and embarrassment associated with this, but this is also comorbid with migraine. And if you find yourself doing this at times of stress, at times when you perhaps are dissociating, at times when you're feeling helpless or hopeless, please also talk to a healthcare professional about that because there are treatments. Those are warning signs for depression when you need to seek help immediately, right away.

Dr. Buse (10:31): When it comes to anxiety, if you feel that you are cutting off yourself from the world, you are really not making plans, you're avoiding, you're not maybe leaving your home, or you really can't fall asleep or stay asleep because your mind is racing. And you worry so much to the point where it's hard to function, that's an anxiety disorder. Again, there are treatments for that, and we don't want anyone to suffer through that without getting treatment. So that's also worth talking to your doctor about right away. Anxiety doesn't reach the same level of depression where I say, "If you're feeling suicidal, if you are thinking about ending your life, I want you to get to the doctor in the next couple minutes, go to the emergency department, call 911." Anxiety doesn't have that level of urgency, but I still don't want you to suffer like that. So I

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want you to talk to your primary care doctor right away. Primary care doctors are pros at talking about depression and anxiety.

Wendy Bohmfalk (11:29): That's actually a perfect segue to my next question, because according to a survey released by the American Migraine Foundation, 77% of people with migraine and depression, or anxiety, say they hesitate to talk about their mental health with their medical provider. So why do you think this is?

Dr. Buse (11:46): There's a lot of stigma. Well, there really should not be. I really want to tell you that healthcare professionals and scientists are very aware that these are all just balancing chemicals in our brain, in our nervous system. And there are treatments. So please never be embarrassed to talk to a healthcare professional about depression, or anxiety, or migraine. These are common conditions for humans, and we have treatment for all of them. If you ever talk to a healthcare professional and feel judged about any of these, please head out of that office right away and find another healthcare professional, because you should not feel judged about any of these.

Dr. Buse (12:22): Now when it comes to society, it might be a little bit different. When it comes to coworkers, or bosses, or family members, or friends, they may not understand what is the — we call it pathophysiology, or reason behind — depression, or anxiety, or panic attacks, or PTSD, or migraine. And it might take some more education. And for some people in those relationships that really matter, and that you need to have a good either working relationship at work, or a family member, it's going to be worth it to take the time to start to educate them about why and how these diseases occur, and how they can be treated. And then sometimes some friendships or relationships, if they're not bringing more to the relationship than the work that you put into it, it may be time to kind of move on. And that's OK.

Wendy Bohmfalk (13:08): Another emotion that people with migraine often feel is disappointment. And one reason for that is sometimes we feel like we're doing everything right. We're trying all the healthy habits, we're implementing all the suggestions that we've heard, and yet we're still having attacks. How do we handle that?

Dr. Buse (13:25): Absolutely. Disappointment is understandable. That it is really hard to live with a chronic, unpredictable disease, with attacks that strike out of the blue, and are painful, and potentially disabling, and really wreak havoc with your life. And even when people follow all the best advice, try to avoid triggers, maintain healthy habits, talk to their doctor, get all of the available treatments, you still have attacks, and that's really frustrating. Migraine is not your fault. Migraine is a disease of the nervous system. And while we as scientists and healthcare professionals try to do everything we can to find out as many clues, and treatments, and understand to the best of our ability, this is still a problem that we haven't solved yet. And yet so many people take it on themselves that they themselves feel guilty, they themselves feel frustrated, like, "I'm not trying hard enough, I'm not doing the right things." Or maybe they feel like other people, doctors, friends, coworkers, look at them as if they're not doing all the right things. Like if they just did this or they just did that, they can avoid the attacks. Unfortunately, there's still a lot we don't know about migraine, and we have not been able to cure migraine. So unfortunately, even with trying everything to the best of your ability, you'll still have attacks. It'll still affect your life to some degree.

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Wendy Bohmfalk (14:50): Well, what are the recommended treatments for managing migraine with either a psychiatric comorbidity or even just the emotions and thoughts that may not reach the level of a clinical diagnosis but are still very distressing?

Dr. Buse (15:02): So first off, absolutely you want to get an optimized personalized treatment plan for migraine. So, let's talk about the other conditions. Let's talk about if someone else has depression, if they also have anxiety, what would we do there? So, for depression, we're going to think about either a medication or a nonmedication approach, probably starting with how severe the depression is. If we're worried about someone having a risk of self-harm, we may start off with a medication antidepressant, which generally does not need to be of lifetime duration. It's generally a shorter temporary duration to get someone to a point where they're feeling good enough and well enough that they can kind of continue on with their life, and that they can work through and learn some of the skills and strategies. And the nonmedication approaches that have great evidence are going to be cognitive behavioral therapy, some of the mindfulness-based therapies which can be mindfulness-based stress reduction or mindfulness-based cognitive therapy, biofeedback, and relaxation therapies. Also, some people may be referred to dialectic behavior therapy, DBT. And I mentioned a couple minutes ago about the ideas of self-harm. So, someone kind of hurting themselves, not to the point of wanting to commit suicide, but more engaging in behaviors like cutting on their skin or burning on their skin.

Wendy Bohmfalk (16:24): You did talk about fear, and that that comes up I think quite often. In fact, one of our viewers wrote in about it. Claire mentioned how fear and anxiety over attacks leads to avoidance, which leads to further fear. So how do we overcome this fear-avoidance cycle?

Dr. Buse (16:40): So, people can get very nervous about making commitments. They feel like they don't know if they indeed are going to be able to follow through. And as Claire said, this gets into a vicious cycle of avoidance. The more you avoid, the less you do in life, the more you can become kind of isolated. You can kind of start to not have those connections anymore with your friends, your family, your community. And that isolation can be strongly associated with depression. It's depressing as it feels like your life starts to shrink. And your life becomes only about migraine, or some combination of medical or psychological conditions. You don't have all these other aspects of your life that bring you joy and purpose and meaning and happiness.

Dr. Buse (17:22): So we call this interictal anxiety. It's a term we borrowed from the epilepsy world where during the attack is called the ictal or the ictus, and then between attacks we call interictal. So, in migraine we started examining what's life like even between attacks. Now some people may have daily migraine or continuous pain and may nearly not have time between attacks, whereas some people of course their attacks are spaced out further and they have more time between. And it turns out that there's a lot of symptoms which can continue even between attacks. Some people may have allodynia, or extreme sensitivity to touch on the skin, that continues between attacks. They may have that heightened discomfort with certain odors or smells even between attacks. They may have heightened photophobia, or the discomfort from bright lights and sunlight, even between attacks. And then the anxiety even between attacks, worrying about the next one, when it will come.

Dr. Buse (18:22): So [a] couple things to do that can be helpful: One is make sure you've got the best treatment regimen for you, be it medication and nonmedication. Acutely, do you have the right acute medication that you can count on, that always works for you? Do you have it with

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you in your purse, in your pocket, when you need it? Does it work fast enough? Do you kind of continue through, on with what you're doing? Preventatively, can you just knock out those attacks before they even happen or reduce the number of them? And that again can be medication, nonmedication, or both in combination. So of course, having a better treatment regimen is going to start making us feel more confident, because we're going to know that, "OK, we can handle this a little bit better with these better treatments." On the other side of things, some people listening here have tried every treatment and still don't get enough benefits, still have a lot of attacks, a lot of pain, a lot of disability. What do we do then?

Dr. Buse (19:21): Well, you start to change your life a little bit to fit into that new normal. And it may mean modifying your work schedule. It may mean having a lot of backup and plan B’s for your children, for your family. It may mean kind of choosing a different group of friends that you socialize with, who understand a little bit more that you may need to cancel a fair amount of time, or you may need to leave early, or that you just can't go to really loud, really bright places. So it may be that you start to modify aspects of your life so that when you can't make it, or you do have to leave early, that you're around people who understand. So some combination of all of the above can start to help take that pressure off of you, so that's not always your worry, and your stress, and your anxiety.

Wendy Bohmfalk (20:16): If we're still working to get to that place where we have kind of a more understanding and supportive, maybe, network around us. You know, I think a lot of us feel a lot of guilt over canceling the plans, or not making it, or having someone else having to pick up your slack. How do you suggest that we handle the guilt that can often accompany migraine?

Dr. Buse (20:35): Well, migraine is a medical disease just like any other medical disease. And things like the Migraine World Summit are doing that good advocacy work, starting to share more information about what migraine is, that it's a medical genetic disease that carries significant pain, and disability, and burden. The World Health Organization's Global Burden of Disease Study, again with migraine being the No.1 cause of disability for young-to-midlife women, again hammers this home. But somehow, we need to continue to spread this message far and wide so that people we work with, people in our communities, our families, understand what the migraine experience is like and don't always place that burden on the individual.

Dr. Buse (21:22): So, there are kind of two aspects to stigma: One is, what do you feel yourself? That's your internalized stigma. The other is what does society think about migraine? And that's the externalized institutionalized stigma. And we've all got to continue to work together to reduce that, to educate people in the world about what migraine is, that it's not the fault of any individual living with migraine. And that we're doing as much as we can as quickly as we can both to learn about and understand migraine as well as to find really effective and safe treatments that can help people get through migraine. So, open communication, education, advocacy, and don't be shy or embarrassed to say that you have migraine. The more we can all stand up and explain what it is, and talk about it out loud, the better. Our key to moving forward in advocacy is being strong, and being vocal, and doing it together.

Wendy Bohmfalk (22:20): I'd like to move on to migraine and stress. A lot has been learned about the relationship of migraine and stress. Can you tell us some of the ways that stress may interact with migraine?

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Dr. Buse (22:31): Absolutely. This is a really interesting area of research because there's so many different relationships between migraine and stress. So first off, incidence — like the first occurrence of migraine, is related to chronic stressors like low socioeconomic status. We also know that each individual migraine attack can be related to stress, and it turns out it may not be what everyone thinks. Turns out changes in stress levels seem to be the biggest culprit. It's not only high levels of stress — let's say during finals week, while you're moving — any of these kind of prolonged periods of high levels of stress can lead to more attacks. As well as reduction after stress that drops — so your first day of spring break, or your honeymoon after your wedding, first day of vacation — is also a potential time for migraine attacks.

Wendy Bohmfalk (23:24): Absolutely. And that's very interesting. I didn't really know that part about the change in stress, but it certainly makes sense. So, since we do know that it is a big trigger for so many people and we all have to experience stress in our lives, what do you suggest that we do to minimize attacks when dealing with stress, or going through a stressful time?

Dr. Buse (23:42): Yes, that's a great point. So, we all have stressful events. And what turns out to be the case is, it is not entirely just the event, but it's what it means to us or how we react to it that makes all the difference in the world. So, it's going to be kind of, "How do we moderate our reactions to stress?" That might be through doing some cognitive behavioral therapy, or some mindfulness, or some meditation to kind of learn to roll with stress a little bit better. And Jon Kabat-Zinn has this great quote where he says, "You can't stop the waves from coming, but you can learn how to surf." So, I kind of think of the surfboard as resilience. So, what are our strength factors? Are you getting enough sleep? Are you eating healthy meals on a regular basis? Do you have a support group? Do you have a hobby, or an outlet you enjoy? Do you have pets that make you happy?

Dr. Buse (24:34): What are the good things in your life on the one side that kind of balance out and give you that resilience reserve while these stressful events keep happening? So it's really important we think about balancing out the stressful events with these kinds of protective factors, those healthy habits, those positive things in our life, keeping those balanced. So, for anyone, any human, consistency is really beneficial for the nervous system. And for someone living with migraine, consistency in all things is really important, especially during the stressful time. So we're going to really think about those kind of basic migraine healthy habits, the SEEDS: the good sleep; the exercise, or just movement if you can't do strenuous exercise, some kind of movement; the eating on a regular basis; the staying hydrated; the social support; and then practicing anything that helps bring down your stress, even for little tiny bits of time, on a regular basis.

Wendy Bohmfalk (25:40): Well I'd like to close out with one final question. Many of us operate in survival mode. How can we cultivate resilience when we're just treading water, and even lifestyle changes can seem really monumental? What do you suggest?

Dr. Buse (25:56): Absolutely. Everything I've talked about today, while it can sound easy at some points in your life, really may sound overwhelming. Things like exercising regularly, getting enough healthy sleep, all of these things can be challenges, especially when you're living with migraine, or another chronic illness. So I don't take for granted that any of these things are easy to do. Starting with wherever you can and breaking it down into smaller steps may be the right place to start. Choosing what feels like a doable task for you, or what you're most attracted to start with, may be the right place to start. Or it may be that you want to get help with some of these changes. It may be that you decide, "OK, instead of just trying to start exercising, maybe I

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need to start with physical therapy, or maybe I need to start with a personal trainer, or maybe I need to find the type of exercise that I would enjoy, that fits my body, that fits me where I am right now."

Dr. Buse (26:55): So it's understandable that all the ideas we've talked about today can be a lot to ask of someone. And I certainly don't want anyone listening to our discussion to come away feeling embarrassed, feeling stigmatized, feeling guilty that you haven't done enough. Even with all of these healthy habits, it's still likely that you will still, if you're someone who lives with migraine, have more attacks. And even when you take away all the risk factors for attacks, attacks can still be quite random and out of the blue. So I don't want anyone to feel down on themselves or judged by listening to these ideas, but rather think about what works best for you with where you are right now. And talk to either your healthcare professional or get some other people on your team to figure out really how to start to make progress that feels good to you.

Dr. Buse (27:51): I also really want to recommend that people not only ask for help but accept it. We all have people in our lives who want to help. And sometimes the way they may offer their help may feel annoying, or pushy, or not helpful. So think of what would actually be helpful for you. And the next time someone asks you, "Can I help? What do you need?" I'll say, "Yes, thank you. It would really help if you picked up something for me at the grocery store." Or whatever idea comes to mind: "Have my child over for a play date." Give them something they can do, because people do like to help, and you can kind of guide them into a way that would actually be helpful for you.

Dr. Buse (28:28): And then finally, in some cases it can feel like migraine steals away so much from our lives: Our goals, our relationships, a lot of our enjoyment. So it's really important to think about what gets you going, what are you passionate about, what brings meaning to your life? And try and figure out how you can retain those things in your life. It may be that it looks different than what it used to look like. And you might have to make changes and modifications to still enjoy the same hobbies, or the same friendships, or the same activities. But finding passion, and not letting that go as much as possible is really important so it feels like you don't lose control of your life to migraine. Ultimately, the more that you can retain your own sense of self and really feel like you're guiding the direction of your life, the better it's going to feel.

Wendy Bohmfalk (29:24): That's great. I think that's a perfect, perfect way to close today. Well, thank you so much. Where can we learn more about you, or what you're doing, or follow your work?

Dr. Buse (29:34): Well, I do have a website. It's just my name: dawnbuse.com. And that's a good place if you're looking for resources like finding a provider for biofeedback, for example. You can look on the resources page. Or if you'd like to practice some relaxation exercises, imagine you're on a beautiful beach, you can listen to some guided visual imageries there on my website for free, as well. And you can also follow me on Twitter: @dawnbuse. Another neat thing to do if you are interested in learning more about the science of migraine and following what's happening up-to-the-minute, is you can yourself read the articles in their original form in PubMed. So, the website is: P-U-B-M-E-D, and that's a website that gathers all of the scientific and medical science articles published. And there's a nice search feature right there.

Wendy Bohmfalk (30:27): Oh, great. Well thank you very much and I just want to say thank you so much for joining us today on the Migraine World Summit. We were so glad to have you.

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Dr. Buse (30:35): Thank you so much Wendy, and thank you to everybody listening. And thank you to the Migraine World Summit for the great work that you do.

Wendy Bohmfalk (30:42): Oh, thank you very much.

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