PALMER EDWARDS: Well, I thank you all very much for inviting me to come. I feel special being the only psychiatrist. I'm not sure if that's good or bad. I should say right off the bat, though, that I do have conflicts, but not financial. And we won't get into those.

And you might wonder, OK, why is this psychiatrist here? This is practical pediatrics, after all. And I realize, in some ways, this is preaching to the choir, particularly those of you that may have a few gray hairs like I do. I think, well, heck I know this stuff pretty well. And my guess is you probably out prescribe me as far as these medicines. So I realize there's lots of expertise here.

I suppose the reason I ended up here is about two years ago I was asked to start doing consultations in internal medicine at the downtown health plaza. So I hang out with the residency attendings, and they come by and ask me random questions. And I stumble through it, and we help out a little bit.

And working with the internist is a very interesting process. It's really a very smart, driven group. But they're focused on diabetes, and high blood pressure, and dyslipidemia, and so on. And so I really have to coax them to think outside the box, and think about all this mental health stuff.

And so about a year ago, I added on some time with the pediatrics clinic that Gil just mentioned. And it's really been a different experience for a couple reasons. One is I've been really impressed with the pediatric residents, as well as the attendings, are much more about the whole person. They're very interested in whatever the pathology of the day is, whether it's hemangiomas or whatever it might be.

But they're really interested in how is the child doing in school, who's living at home, how are things going on with the siblings, and so on. And so it's been, in some ways, a much easier transition for me as I talk with the residents and the attendings to talk about enhanced mental health parts of it. But I really think the secret sauce, though, when working with pediatric residents-- I think one of the attendings didn't know that I was listening when she said this one time. But she said, we really recruit residents.

One of their primary things is they're like internal medicine residents. They're smart. They're focused. They know where they're going-- blah, blah, blah. But really the secret sauce is we recruit cheerful people. And so it's really nice working with cheerful people. I can tell you.

So anyway, on we go. So we're going to talk about psychiatric medicines for depression and anxiety. And let's green is forward.

So as far as my objectives, we'll get to those in a minute. We're going to just go through common diagnoses for depression as well as treatments. We'll do the same for anxiety. I'll give you some conclusions at the end, and there's some references.

The hand out in your packet is pretty close to this one, but it's not exactly 100%. I've done a little bit of fine tuning since then. But that's all right.

So the objectives are to learn what types of depression and anxiety that primary care providers might treat with medicines and to learn a methodology. And I've got two or three methodologies. I want to share to how to make these decisions.

And so one question that often comes up is, why the heck should we care? Isn't this like mental health turf? You should call Center Pointe. Let them deal with it. Or refer people to me, like in private practice.

Well, the big reason is volume. 10% to 20% of kids have some kind of mental something going on. So it's huge. And if you add on learning disabilities, it's of a higher percent. But only less than half get treatment. And those people that do get treatment, typically, it's from primary care or from schools. So the bottom line is there just aren't enough mental health folks to go around to treat all these people. It's about default who goes to primary care.

On top of that, about 5%-- it's been shown in surveys-- of adolescents are already on antidepressants. So you think, well, I don't do that. Well, you probably will do that, just because they'll come in to you saying, I need a refill. Or my doctor moved, or can you start prescribing this? And to broaden this further, is in 2009, the American Academy of Pediatrics changed things. For maybe the previous 10 years or so, there was interest in pediatricians being trained in ADHD for evaluation and treatment. But then in 2009, three things were added-- substance abuse, depression, and anxiety. So the professional organization, for most of you, changed the rules.

So let's talk about depression. So this is-- "The Blue Bird of Happiness, long absent from his life, Ned is visited by the Chicken of Depression." And unfortunately, this is probably-- well, there may be a couple other slides-- this may be one of the few slides I have. When I talk to residents about suicide, it's really hard to get a little joke going with that. So here we go, plunging down.

"There's nothing more depressing than having it all and feeling sad." And there's a wonderful account by William Styron, who was a famous writer and wrote about his own depression. And he was on the Duke faculty, and he was writing. As he wrote about his depression, he was in France for an award for all his literature.

And he said, he just felt depressed and just couldn't enjoy anything. He could observe it, and know that he should enjoy it, but it just didn't make any difference. The book that he wrote about his depression is *Darkness Visible*, which some of you might want to look at.

So the common depressive symptoms, I don't want to put too much time into this. So I can talk about some other things. But this is that familiar SIGECAPPS. I don't know when SIGECAPPS started, but it wasn't around when I was training. But it's everybody talked about SIGECAPPS now.

And there are the things that it stands for. I think one of the take homes from the SIGECAPPS business is remember in children and teenagers that often you see irritability as opposed to sadness or unhappiness. So if you see irritability, crankiness, easy frustration, I want you to think depression. Don't necessarily think it's something else. Now, unfortunately, there are other child psychiatric diagnoses that have irritability too, like ODD, ADHD, and other stuff. But think depression when you see irritability.

So as far as the common depressive diagnoses, here they are, with adjustment disorder probably being the most common. Then there's persistent depressive disorder, which is the new terminology per DSM-5 for dysthymic disorder. Major depression, which, astoundingly, 5% of teenagers have that. Maybe that's the same 5% that are on antidepressants we hope. Then there's just a new kid on the block, and I'm going to talk about the disruptive mood dysregulation disorder, then bipolar and unspecified depressive disorder.

So you might think, well, what the heck is disruptive mood dysregulation? Why do we need a new diagnoses? Well, the reason is, about 15 years ago at Mass General, a couple of the psychiatrists there started to redefine what bipolar disorder was in children. And they said, we think that children with chronic irritability, this is a variant of classic mania. And so it's just been a big hoo-ha the last 15 years.

Is that true? Is that wrong? I've heard people argue that this vehemently either way. And I think that, on the one hand, it's like, well, how many Catholics are on the head of a pin? Who cares?

But that what the reality is, and then the treatment for that, was the problem. And the most efficacious treatment for pediatric bipolar disorder are the anti-psychotic medicines. And so this resulted in this explosion of kids being put on all the atypical antipsychotics-- Risperdal, Abilify, and so on.

And so then there was huge pushback by the more conservative members of the professional organization, saying is this really bipolar, or is this something else? Well, here's the something else. And so the idea is with this DMDD is that children often are in an irritable mood. They're like that most of the time. And that once they're over six, they have temper tantrums at least three times a week.

And so there's some age exclusionary criteria. So this is an alternative, not a disorder that lasts lifelong, that probably responds to different treatments than pediatric bipolar disorder does. So that's DMDD.

So what types of depression should primary care treat? I think the first three, yeah, you probably should do that. Adjustment disorder is this persistent depressive disorder-- the old dysthymic, and major depression, if there isn't psychosis or if there isn't a lot of suicidal thoughts. I think that's probably fair game for primary care. Or at least that's my sense of what the AAP is hoping that you will treat.

I think these other ones at the bottom, I would proceed with caution. And I'm going to get into that in a minute as to why. But those are major depression with psychosis with a lot of suicidal ideation, this DMDD I just said.

[SIDE CONVERSATION]

So maybe DMDD, and maybe bipolar disorder, but I think those are questionable. As far as treatment, in many ways psychiatry is a pretty easy speciality. You just have to remember three things-- change the environment, recommend talking therapy, and give them medicine. I could live on that thumbnail sketch. If you think about it though, that's really the biopsychosocial model that George Engel developed in New York 20 years ago or so, maybe 25 years ago.

And so we're going to be talking a little bit about therapy and mostly about medicines today. As far as therapy, here are some things maybe you probably shouldn't say, or at least some of these you shouldn't say if you're wanting to be a therapist or you hear your therapist in your office say this. "I know how you feel." Do you really? "It's all in your head," "think positive," "stop feeling sorry for yourself," "look how lucky you are," blah, blah, blah.

Now, some of these I agree. We could argue that maybe some of these are legit, like everyone has problems. Let's put this in some perspective. But there are some buzz phrases there that might get you smacked.

So in terms of psychotherapy, this is the seminal article for psychotherapy for children and teenagers. So this is 11 years ago. In *JAMA*, there was this TADS study, and a lot of kids, over 400. And they looked at, in acute treatment, the combination treatment.

Cognitive behavioral therapy plus Prozac was better than Prozac alone. And Prozac was better than CBT alone. And CBT was equal to placebo.

But keep looking. As the CBT progresses into 18 weeks, then CBT catches up with Prozac. And look ahead three weeks, then CBT has caught up with a combination treatment and with Prozac. So that's pretty cool.

And so that's a big take-home from today's talk, is that CBT works. There's lots of evidence beyond this major study that support it. And please, don't forget therapy as you're managing kids with depression. And often, we'll touch on later that a treatment with medicines typically involves some type of talking therapy too.

So when should you recommend therapy? Probably depends on the severity, with the more mild, moderate types of depression probably leaning more towards therapy alone. There's, of course, lots of patient and parent preference as to what they want. Some people are very intent on getting and developing coping strategies, or they just think the idea of medicines is really bad.

And of course, another big issue, particularly for people in rural areas-- are there good child therapists? I've heard more than one therapist say, well, aren't children like little adults? Aren't they? I just do the same things.

It's like, well, no, that's wrong. And they are not little adults. So you really have to approach them more specifically.

Another issue with therapy, of course, it's labor intensive. It takes time to do it. So if you have time, great. And then also therapy is expensive.

Do you all know how much it costs to come see me to do therapy if you have Medicaid? Any idea what the outpatient co-payment is? It's $5. And you think, OK, great, cheap.

Well, OK, but if you think about it, if you've got Medicaid, and you have transportation issues, well, you need to come probably at least every other week, if not each week initially. Then suddenly, you're looking at $10, $15 a month. And then a typical course of CBT might last 8 sessions, 12 sessions, 15 sessions. And suddenly, you're into multiple months.

And suddenly, you're into $60, $100 plus for the therapy. And then if you go to Wal-Mart and you need a prescription for Celexa, it's $4 for a month. So even though it's discounted therapy, it's still just typically much more expensive, unless it's completely free.

So as far as moving on to antidepressants, there's lots of this going on out there. You may be seeing this new signage on I-40. So here's a story about the antidepressants in children and teenagers. The SSRI response rate is 40% to 70%, kind of a wide response rate. And you think, well, that sounds pretty good.

But look at the placebo response rate. It's 30% to 60%. And so the number needed to treat for SSRIs, it's not so impressive. It's 10. And remember, the ideal number you need to treat is one, and so-so is greater than 10.

So that's kind of depressing, isn't it right there? Here are these medicines we got. I'm telling you, you have to treat 10 patients to get some kind of decent response. But that's the way it is.

These people probably should receive antidepressants-- people with more moderate or severe symptoms, a lot of the SIGECAPPS symptoms we talked about. Certainly if the symptoms are dragging on, I think if their daily function or quality of life, i.e. not going to school, if they're miserable, stop doing activities, those B1s, I would think about medicines. Certainly, if this is not just their first episode of depression, family history of depression, a lot of family preference, if they have been involved in therapy but it hadn't done what was hoped for. I think, invariably, most types of therapy help some. But whether it gets people in remission, that's another story.

So in terms of what should you do? How can you choose which medicines to give? Well, they're all equally efficacious, which doesn't help us a lot. But typically, SSRIs are the ones we use first for children and teenagers. And that's due to their efficacy, tend to have few side effects in safety, which we'll talk more about in a minute.

And so digging down a little bit more, often clinicians choose based on what they had experienced in training. And of course, what they've been marketed to. Of course, perhaps as you all have too, I've had more than one person say, well, that's really nice Doctor. Thank you for the advice. But what about Abilify? And I'll say, what about Abilify? And they'll say, well, I saw the butterfly on TV, and it looked great.

[LAUGHTER]

Can I take that? And I say, well, no. Here's why we give it. Or we could get to that, after about step six of the treatment. But that's not going to be step two.

So this third bullet may sound silly. If a person's responded to an antidepressant, well, of course you give that again. But I've had a couple times, and I know the pediatric residents would never do this, but the internal medicine residents, on a couple of occasions, had said, well, I'm going to put this person on Celexa.

And I'll say, great. Have they ever been treated before? Oh yeah, they took Cymbalta five years ago. And it really worked well.

And so we have to stop and think. OK, well, why would we want to change medicines, because they're not all interchangeable, particularly in a given person's response? So you've got to get a history then. You have to work a little harder to find out if they've been treated before.

Similarly, but maybe a little bit weaker, is that someone in the family has had a good response to an antidepressant. Those would be ones you'd probably want to think about using their antidepressant as well. And of course, always avoiding or looking up drug interactions.

So the are SSRIs are metabolized by the P450 system. They tend to be very long half lives. Prozac is the king of the heap there, because if you stop Prozac and somebody is on a decent dose, like 40 milligrams a day, you might be able to pick up in the blood stream four or five weeks later. So it really lasts a long time, unlike maybe Paxil, paroxetine, and venlafaxine, Effexor, the more short acting ones.

And of course, with all SSRIs, people with depression, we're going to start low and go slow. And so as far as side effects, they tend to have limited side effects. Histamines out of whack there. But they're of little affinity for those receptors.

Often as not, what you'll see is nuisance side effects I call them. Maybe some transient insomnia, maybe some transient upset stomach, maybe headaches that go away, that type of thing-- now granted, sometimes those things don't go away. And we have to reduce the dose or stop it. But often, they're transient.

I think it's important to ask, particularly in teenage boys, ask about sexual side effects. As you may know, when SSRIs first came out over 25 years ago, the thought was they didn't have any sexual side effects. And they thought, well, maybe it's less than 5%. And now the estimates range anywhere from 20% to 60%. So sexual side effects are very common. If you wonder why someone stopped taking a medicine, that's a good question to ask.

And also, one of the things that's commonly done in prescribing antidepressants is to exploit desirable side effects. And you might think, OK, what does that mean? Well, here we go.

So if you want to avoid weight gain, give bupropion, on vilazodone, or vortioxetine. And those last two tongue twisters, those are Viibryd and Brintellix, the new kids on the block the last two years. You want someone to gain weight? Give them mirtazapine, Remeron, or give them paroxetine, Paxil.

You need some activation? They're anergic, apathetic. Think fluoxetine, Prozac. It could be bupropion, Wellbutrin.

Need a long half life for poor compliance? Prozac's a great medicine for adolescents because it just lasts and lasts. And people can miss a day or two, and it doesn't matter.

You want sedation? Back to the mirtazapine, the Remeron. Or of course trazodone has found its niche in medicine as an alternative to other medicines for sleep.

And so this question often comes up. I don't know if it's from*The Walking Dead, Addicts.* But it's like every one says, am I going to become a zombie if I take this medicine? And so I thought on and off, well, I don't know. Maybe you will.

But then I thought, what does that mean exactly? Best I can tell it means, am I going to be wiped out and sedated? And so the answer is no. Your child will not become a zombie. They're good to go.

However, if they do become sedated, then the dose might have to be decreased, or you might have to try a different medicine. So I just say, if your child becomes that way, that's a bad side effect. Let's do something to get rid of it. But that's a common fear, the zombie fear.

OK, and so I mentioned earlier that I think primary care should proceed cautiously with some of these diagnoses. And the reason is that some of these diagnoses are these hidden time bombs, like agitation, mania, psychosis, which you don't want to go there. And those diagnoses where you might see those include major depression with psychosis, and/or a bunch of suicidal ideation. Or maybe this new kid, this disruptive mood dysregulation disorder, or certainly bipolar disorder itself.

And the reason, of course, the time bomb is that those things might be dormant or not bothering the person too much. And then, boom, you give them an antidepressant, and things get out of hand. And actually, I saw a girl this morning who's 15 who's mother and grandmother both have bipolar disorder. She had anxiety and some dysphoria.

She's been in therapy. It was somewhat helpful. I gave her Celexa about six weeks ago, and it worked really good. She was doing fine.

And then two days ago, her mother called and says, I think she's manic. And she's very restless. She's talkative, couldn't sleep, and so on, and so on. So I saw her this morning. And so anyway, the Celexa now is being stopped because of concern that it may have triggered the family gene of bipolarity.

And so it's very important-- very important, underscore that-- to get a history of these core things-- agitation, psychosis, what level of suicidal ideation. And suicidal ideation is a huge spectrum, from people on one end who just think about the concept of death-- or if I died, would I have made a difference?-- to people that are planning to do whatever terrible thing this afternoon. And of course, you also want to get a family history, like in this patient I mentioned this morning who perhaps is becoming manic related to the Celexa, or at least is going hypomanic.

And so you might think, well, this is great. But man, this is really just an alternate psychiatry. Dan [INAUDIBLE] made a smart crack a couple weeks ago. This doesn't happen most of the time when I'm at the pediatrics clinic. But I was doing laps around the pediatric attendings as far as supervision.

They had a couple rashes that came in. But it was like ADHD here, depression there, autism there, educational stuff. And Dan said to one of the residents, are you enjoying your psychiatric fellowship this afternoon? So you might think, oh, we just covered a lot. Isn't there a better way?

So the scouts will lead the way on this one. And the answer is yes. There's a really good child psychiatrist at Johns Hopkins named Mark Riddle that's come up with a guide to psychopharm for pediatricians. So cool-- you can blow off what I just said if you want to and just go right to this website.

And so what Dr. Riddle did is he says, look, let's look at the antidepressants through these three filters. What do we got? What's most effective? Which ones' doses aren't too complicated? And which ones are pretty safe?

And so what makes this cool is that there's only three that meet the criteria of the 20 plus antidepressants. And those are are fluoxetine or Prozac, sertraline, Zoloft, and escitalopram, or Lexapro. They're all SSRIs as you can see by their class. The FDA gives thumbs up to two of those, fluoxetine and the escitalopram. Although, the FDA did say OK for OCD, for the sertraline. And there are the doses.

So when in doubt, default to these three. And I've really encouraged the residents and the attendings, as I supervise the residents, to really get a handful, maybe three, maybe a couple more, antidepressants you feel comfortable with. And I expect that applies to you in practice as well.

You don't have to be comfortable with all of them like maybe psychiatrists are. But get a few, and get comfortable with them. And if you don't have any in your armamentarium currently, these are the three I would definitely go for.

And so what does Dr. Riddle say about the rest the medicines? There are 20 plus more. He just recommends those for monitoring only. And that means that, suppose that maybe someone seen at the local private mental health agency in town has started someone on a medicine. Or maybe the predecessor primary care person has started someone on a medicine.

And they're on Wellbutrin. Or they're on Remeron, or they're on Cymbalta, or whatever. You think, well, OK sure. I can continue them on this. I don't think I'm going to start this one, but they're doing OK. They're very stable. I'm going to keep it. And that's what Hopkins recommends about that.

So a few antidepressant tips-- one is that remember they're all irritatingly slow. They take this two, three, four weeks to kick in and do some things. You've got to be patient. You've got to tell patients that. If you started with an SSRIs and nothing's improved after you've seen them back after three or four weeks, maybe increase the dosage if you see some response.

But after, let's say, two months, there's nothing going on, that's not the time to add Abilify. That is the time, though, to try a different SSRI. If you've tried a couple of antidepressants or three, tried a different class of antidepressants or subgroup, then you go into augmentation, which might be trying two antidepressants, or maybe adding some other adjunctive medicine.

Although the atypical antipsychotics get more publicity for augmentation, that's just because they're marketed. The ones that are more tried and true that we use are lithium, buspirone, and Cytomel, or T3. Those are the ones where there's lots of research data supporting that they work for augmentation. And of course, many fewer side effects than Abilify or Seroquel or whatever.

One of the new things in psychiatry in the last five years or so, or in mental health, is really we're shooting for remission now. We're not just looking for symptom reduction. So you really want to push hard with combination therapies, with augmentation, with involving therapy, to push for remission, not just so-so response. And then if you get to that point, hopefully you do, then you continue the medication treatment for 9 to 12 months.

And then the general idea there is that, in ways that no one understands yet, that the brain reboots after that period of time. And then, often, the medicines can be stopped. However, the bad news is from adult data is that if people have had one episode of depression, there's a 40% risk of a second episode. If they have two episodes in five years, there's a 75% of having another episode.

So unfortunately, there's a certain recurrence, at least in adults. I don't know that there is comparable data yet available. And so the current standard is for adults that have had a few episodes of depression, and certainly the idea of the three episodes of major depression in two years, is maintenance antidepressant therapy, just like they have blood pressure, or diabetes, or whatever. So that's unfortunate.

And so somebody might have been waiting for this. Yeah, but what about the black box issue? Well, here's the black box issue.

And so what is a black box issue? Well, in 2004, the FDA said, we're putting a black box on antidepressants for children and teenagers and everybody under 25 because in a very small percent of people, they can cause suicidal thoughts or worsen moods. And so that occurs maybe in 4% or less of children and teenagers. And all antidepressants are at risk of doing this, maybe a little bit greater chance with venlafaxine. Or if you surf the web, you'll see maybe a little bit more for Paxil or paroxetine, although I'm not so sure about that one.

However, it's very important to remember that, first of all, the child psychiatric community thought this was probably baloney. And I think a lot of seasoned primary care physicians, presumably a lot of pediatricians, thought this was baloney. This was just off base. People have been giving these medicines for years, people are not dropping dead right and left because of suicide. So why are we freaking out about it?

In the studies that they used to make this determination, there were no completed suicides. So there were suicide attempts, but no one no one died. It was subsequently, or in the same year, found in geographical areas in the United States where there are higher usage of antidepressants, there were actually fewer completed suicides.

Untreated major depression has a 15% chance of suicide. So it's huge. And then in 2007 *JANA* ran an article showing that people treated with antidepressants, there are many more beneficial effects than there are this risk of developing suicidal ideation. So that's the come back.

And so the way I pose that to parents and kids is to say-- I don't usually say this to the elementary age kids or younger. But in middle school and high school kids and parents, I'd say, look. I want to tell you about one weird side effect you may have already heard of. It's that sometimes these medicines make moods worse, and occasionally they can seem to cause suicidal ideation.

And for many people, they looked at me quizzically, like you're kidding, right? Or isn't this counterintuitive? And the answer is, yeah, it is. However, it does happen.

I think in my own practice, I've maybe had five kids in the last 15 years or so that have had suicidal thoughts that I really don't think were there before the antidepressant. But then that's, again, several hundred where that's not happened. So I wouldn't at all say it doesn't exist. But I would try to put it in some perspective.

And sometimes, if I'm feeling in an irritating mood, I'll say, look. How did you get here today? I bet that you rode in a car, didn't you? And they'll say, yes. And so I'll say, well, why didn't you walk?

It'd have been much safer if you had walked. You know what the fatality rate is of riding in cars? You should have walked.

And some people will say, oh, that's right. We talk of this whole risk-benefit analysis that we're doing all the time unconsciously in all decisions we make, whether it's driving in a car, or taking Tylenol, or taking antidepressants. So I think some polite arguing about that point can be helpful.

So one question that comes up is-- what the heck? Why does this happen? And no one really knows why there is suicidal ideation.

One is that maybe akathesia, or internal restlessness, maybe that gets people pumped up. They just want to get rid of that. Or this agitation like I mentioned in this patient I saw this morning, maybe this is incipient mania where people have really lost focus and are really speeding high. And so they get that way.

Or maybe this interesting quote of external improvement precedes internal improvement. That is, people get energy back, but they really aren't feeling that good inside. So now they've gotten off the couch, and they're more energetic. And so they swing into action to do something they've been kind of thinking about. And so this is the so-called cruel irony of antidepressants.

Anxiety-- so Linus, "you look kind of depressed, Charlie Brown." And Charlie Brown, "I worry about school a lot. I also worry about my worrying so much about school. My anxieties have anxieties." It's a tough life.

So what does anxiety look like? Well, with Major League Baseball season starting last week, it's kind of like that. You're at the game enjoying yourself, and here comes this broken bat right in your face. And that looks anxiety-provoking to me.

So the anxiety symptoms are very similar, or familiar to you all. I probably won't go through all those, but just feeling really anxious, nervous, restless, easily annoyed, that kind of stuff. As far as the anxiety diagnoses, here are the common ones-- adjustment disorder with anxiety, social anxiety disorder, separation anxiety, panic disorder, GAD, the generalized anxiety, and the unspecified anxiety disorder.

And for those DSM-5 whizzes out there, you probably saw that OCD and PTSD are gone from the anxiety classification. They don't exist anymore as anxiety disorders. So we're not talking about them today. They've got their own separate classifications now.

And so, although we often think about, in generalized anxiety disorder, one of the more common anxiety disorders, worrying-- in primary care, you've got to look for this other stuff too. Autonomic hyperactivity, motor tension, insomnia, fatigue, headaches, backaches, lots of visits to the doctor-- that's the kind of stuff that you all may be picking up on if the anxiety itself doesn't hit you over the head. So treating anxiety, the same simple approach to psychiatry-- the biopsychosocial, let's change the environment. Let's try therapy, and let's consider medicines.

As far as treatment of anxiety, therapy is something we don't want to forget. Here's Charlie Brown trying to get it right. "I developed a new philosophy. I only dread one day at a time." I wouldn't call that remission, but working on his cognitive CBT techniques.

So we want to encourage therapy again, particularly CBT. That's where the evidence base is. The big study that nailed this down was in 2008, the so-called CAMS study, that looked at both CBT and sertraline, Zoloft. Both outperformed placebo. Or together, they outperform placebo. But the combined treatment of CBT and Zoloft outdid either individual treatment. So again, think CBT, and think CBT in combination with medicines.

So when do you recommend therapy? Like I said early on the depression slide, consider the severity of anxiety and so on. So treatment of anxiety, as far as medicines, let's look at that. So look at the number needed to treat with antidepressants for anxiety. Kind of cool, huh? It's only three.

What was it for the treatment for depression?

Three, no?

No, depression it was something higher. What was it?

10.

It was 10, right. So this is much better, right? So ideal is one, so every third patient gets a lot better with an antidepressant for anxiety. So that's kind of cool.

So who would you give it to for anxiety? Of course, probably people with moderate to severe symptoms, those having lots of panic attacks, those, again, with some chronicity. It's been going on for several weeks. Quality of life is down. The functioning is off. And maybe they responded so-so to therapy.

Again, the antidepressants are equally efficacious. So what do you do as a clinician? How do you choose? Well, similar logic that we talked about earlier, that you're going to have familiarity with hopefully a few antidepressants after this talk.

You're probably going to think SSRIs. If someone's responded to some other kind of antidepressant for anxiety before, we're going to definitely go with that. Or if a family member's done well with panic attacks with whatever, we're going to use that medicine. We're going to look at expense, drug-drug interactions, and the same exploitative desirable side effect, the same logic I mentioned earlier.

And so again, the scouts are here to point the way. You know this is complicated. And there's an easier way to do this. And the answer, yeah. I got two this time.

OK, so a few years ago, the North Carolina Academy of Family Practice and the state Psychiatric Association got together and built this algorithm to how to treat anxiety. And this is in your handout, I think. It was supposed to be. If not, it's listed in the references.

But this is something where, I think for mid-teenagers, like 14, 15, and up, late teenagers, early adults would be fair game. It's all laid out there by diagnosis, how to assess, and what medicines to treat. So that's a very helpful thing that you can use.

The other thing is go back to Johns Hopkins website. They've also got a cover for anxiety as well. And remember that the doctor focused on what was efficacious, what dosing was pretty basic, and what was the safety profile. So this time though, things were not as strong as they were for the antidepressants, despite the number needed to treat being much better.

But there is convincing evidence is the way Dr. Riddle phrases it for the same three antidepressants. So suddenly, life's easy, right? We just learned the three antidepressants for depression. Hey, now you can remember those same three for anxiety. What could be better?

Well, I guess you could look at column three, and think, does the FDA agree with that? No, no, no. Oh, well. So there aren't any antidepressants OK for children. But that's the way it is. We're using off-label stuff all the time.

And the doses are similar to what we used up above for depression. Although, probably you start a little bit lower, because there's a little bit more chance of activation in people with anxiety that you give antidepressants to.

So what are some more tips? I just mentioned one. Maybe start out a little bit slower. It's going to take this, again, those few weeks to kick in. And the same thing, if the SSRI hasn't worked or has worked partially after three or four weeks, increase the dose. If it's done nothing after the first four or five weeks, probably you should be changing it to another antidepressant.

And don't get into adding Abilify yet. And then if it works, and the generalized anxiety is better, or separation anxiety, or whatever, then we're going to keep them on that medicine for 9 to 12 months.

OK, now, here's an interesting side effect. Have any of you all seen this? And I can see the picture pretty well. Of course, I chose it.

But here's a little girl kicking the you-know-what out of some guy on the plane in front of her who clearly is probably not her father. So he does not think it's sweet and adorable. He thinks it's irritating. What's wrong with this family back there?

And so, have any of you all run into this with anxious kids where you've given an antidepressant, this disinhibition? No one? OK, either you all have missed it or something. I'm not sure. But I don't see it all the time.

But I was pushed into action with a six-year-old I saw like six weeks ago, who had big time separation anxiety. Would refuse to go to lunch bunch, would refuse to do anything like go to school, and on top of that, she had OCD. She would refuse to wear her clothing, except for her shirt.

That was it. She came to my office with only a shirt. Her parents swaddled her in a blanket for some modesty reasons.

And so I gave her-- she was five then-- I gave her Prozac. And she got a lot better. Things got better. But then last week, her parents came in and said, she's a lot better.

Anxiety is better, which is good. OCD has gotten 50% better, as OCD tends to be a little more stubborn. But now our daughter, she poops on the floor. And it's like, what? That's not cool.

And so we have talked about that. And I think this is good, old-fashioned antidepressant disinhibition. And so we talked about ways to manage that, which may include a decrease in medicine. Which of course, they have no interest in doing. They'd much rather have poop on the floor than a naked girl going to school.

So there are trade-offs in life. So anyway, watch out for the disinhibition. When anxious kids are suddenly super extroverted and getting in trouble, that's your red flag.

OK, so what medicines other than antidepressants are out there? So the Hopkins group into this too, the anxiolytics. I got two benzodiazepines there, lorazepam and clonazepam, and buspirone and hydroxyzine. And again, look at the FDA. OK, no, no, no, yes for hydroxyzine, even though that's not even on the Hopkins website.

But so these are the medicines that we use. And I guess I'm going to talk-- how does this set up? Yeah, we're going to talk about benzodiazepines.

One of the other very reflective, thoughtful internal medicine attendings said pretty much from what he could tell, the internal medicine residents think that benzos are poison. They just don't want to give them, no matter what the logic is, no matter what the situation is. They look at it as poison. And I don't want you all to think of them as poison. OK, that will make me feel badly if you do.

However, of course, there's a big back story as to why the internists run when I talk about-- maybe they should have a low dose of Ativan for a couple days till the antidepressant works to get their panic attacks under control so they can get back to work. It's important to go back to work.

And you can't necessarily wait for your first antidepressant to fail. And then say, oh, we'll try number two. And you'll get back to work in 60 to 90 days. Jobs don't like that.

So benzos can be great short term. The back story, though, is that sometimes people develop tolerance. Most don't, but a minority can. And of course, that can then get you going to higher doses. And then sometimes you drift into dependence.

And so nobody likes that. But I think using them acutely-- I think more in pediatrics, it's the child where it's mid-Septemeber, and she's already missed, or he's already missed, 50% of the days of school. It's mid-September. They just started in late August.

They've missed 8 days already. They've got super bad separation anxiety. And you think, I'm giving you Prozac, because it helped your sister, and it helped your mother. And we'll be good by mid-October, or maybe late October. By Halloween, you'll be good.

And the parents look at you like, you're an idiot. You've got to do something better than that. You think, OK, well, I can give them buspirone. And that's not addictive. That's cool, but buspirone takes a month to kick in too.

And you go, well, I'm going to give them hydroxyzine then. I don't want to give benzos. Well, hydroxyzine might work, but might not. It's more medium effectiveness. But if you want to get rid of the anxiety, then you're thinking the clonazepam or the lorazepam.

And so I think using it is fair game. Now, just to make these talks more of a headache, then here comes the *British Medical Journal* at the end of last year, saying, oh, by the way, we've study people with Alzheimer's. And they many of them seem to have you have been using benzos. And I was like, great.

And so they were cautious to say, we don't know that necessarily the dementia is caused by benzos. But we are putting that out in print as a possibility. They did note that, well, maybe some of these people had anxiety as part of the early development of their Alzheimer's. And that's why they got put on benzos. Or maybe they had insomnia as part of their developing Alzheimer's, so they got put on benzos to help them sleep.

But darn, here's another reason why you all may walk out of here thinking they're poison. And I'm never giving them. So anyway, please don't think that way. But I think you have get into benzos cautiously.

Buspirone, or Buspar, as I mentioned takes three to four weeks to see full effect. As I said, it's a weaker anxiolytic effect. So you can forget about transitioning someone from lorazepam or clonazepam to Buspar. People don't like that.

I think a benzo is sometimes making people, particularly ones like Xanax, is taking people to a high normal day. It's not like a manic day, but it's like, this day was really good. I really had a great lunch, and I got accomplished what I wanted to. And I'm really looking forward to playing tennis tonight.

It's a good day. I want to be like this every day. That's that Xanax glow.

And so that's really hard to replicate with Buspar. It's just not going to happen. It's very popular with primary care though, because it is nonaddictive. Psychiatrists can use it as an augment with SSRIs. And it is non-abusable.

So in closing conclusions, you all are going to be asked to treat depression and anxiety with medicines. And you really ought to have some proficiency with a few. Even if you don't want to, you just probably should go ahead and bite the bullet, and do it.

I think it's important to make decisions to yourself though, about, OK, I'm good with adjustment disorders. Maybe with this persistent depressive disorder, dysthymic, and maybe with not-so-bad major depression. That's good.

But if you're thinking-- there's no way I'm going to treat a child with major depression with psychosis, or bipolar, or this new newfangled DMDD. I'm just not doing it. I think that's very reasonable. I don't think the AAP is going to come hunt you down if you decide that.

Remember also that psychotherapy is good stuff. It's beneficial. It's evidence-based. Do it. Recommend it. When in doubt, recommend it.

But often, patients, particularly that come to you where there's some question of medicine being raised, the severity is pretty bad, they may end up with needing both treatments. Remember, the NNT is great for antidepressants with anxiety, and kind of so-so with depression. Of course, unfortunately, everyone's different. So it may be that you think, no, I'm not giving it. There's an NNT of 10.

It's like, well, no. That person may respond great. And who knows? Maybe their sibling responded to Lexapro or whatever.

So even though there is a black box warning, I just don't think it's legitimate anymore to run for cover and say, black box, not touching it. I don't think that's right. There's enough data to support that benefits way outweigh that risk. But you need to have people make an informed decision.

And I think if you like my language, use it, which is here, let me tell you about a weird side effect. And this happens not very often, but just something you all need to be aware of. And people tend-- OK, that's good. I got it. OK, and so when in doubt, if you're not sure what to do, or someone's gotten so-so better, but you're not really sure, that's the time you can call the psychiatrist or off to a mental health professional.