

## **HRSA/MCHB 2007 FEDERAL/STATE PARTNERSHIP MEETING**

### **Building Blocks for Promising Practice Models**

October 14 - 17, 2007

#### **Parental Depression: From Intervention to Prevention**

DIANA CHENG: Thank you. It's a pleasure to be here this morning. I'm actually surprised when Maribeth told me I'll be the first speaker in the morning in the plenary session. I thought no one would be here at 8:00 in the morning but it's nice to see everybody here. What I'm going to do is give you a short overview of perinatal depression, and then give you a few insights into what our state has been doing.

Let's see. Are my slides up here? Great. Thank you. So when we look at depression in general, the root of the question is what are--what causes depression? And this is age old discussion of is it genetics and environment, and it goes back and forth, the pendulum swings. And we kind of at the point now where we think it's about half due to genetics, half due to environment. But for women, there's a special extra thing, that's really hormones, and they have a real pivotal role in terms of the impact they have on depression.

When we look at this sort of timeline for a woman's life from birth through death, and you have menarche and menopause in between, the area that is when prevalence of the depression is most common and you see that's pregnancy and postpartum, pre-menstrual and perimenopause. It's during these age groups, the

reproductive age groups that we really have the highest incidence of depression in women. It's not older, which I think a lot of people think, and actually personally, since I'm between--I've already passed the menopause milestone, I'm heading towards death. You think that would be depressing, but it's actually before that it's more depressing.

And I'm going to be talking about perinatal depression during the next few minutes. Basically, it affects one out of every eight postpartum women. It's really relatively common. The timeline, it begins two weeks to one year postpartum. Although this is an arbitrary timeline, a lot of people define it as within 28 days postpartum to three months, to six months. But I think the most common time and sequence is to one year postpartum. Symptoms are--it's just basically very similar to general depression. The symptom of depression and (inaudible) which is the loss of pleasure or interest in doing things, emotional stress, helplessness, irritability, anger, inability to do normal everyday task, and this isn't that they can't function but let's say they don't groom themselves as well or they don't--they keep their houses tight and things like that. There's a little bit of a difference there in terms of their daily functioning. And I have to say, in high functioning women, it's very hard to tell this sometimes, because they're already functioning at such a high level that you don't see the differences readily. Their appetite changes, sleeping too much or too little, thoughts of self-harm or suicide, of course.

And then with postpartum depression, these are very unique, overly intense worries about the baby and lack of interest or fear of harming the baby. The fear of harming the baby is very interesting, because a lot of them will come and tell me, "I just can't even vacuum anymore because I'm afraid the cord that I use to vacuum my house will actually go around the baby and strangle the baby." So, it's kind of these really fears that are really paralyzing to women. But they don't-- but nothing happens to the baby. It's just that they have these fears and anxieties.

Depression during pregnancy really, I think, a lot of people thought that pregnancy was kind of this protective cocoon during that perinatal period and then people didn't get depressed. But we really know that pregnancy is not protective against depression, and really affects 10 to 15 percent of pregnant women. It can begin any trimester. The symptoms are really very similar to postpartum depression.

Now, this graph shows the percentage of mothers who reported being at least moderately depressed in the postpartum period, and this through the PRAMS survey that we did in Maryland from 2001 to 2003. These are really the results of about 7,000 women who are surveyed, and we have the 70 percent response rate for PRAMS. And you can see here, if you just look at the higher bars that the women a little bit greater risk for being depressed. We did it by race and ethnicity, by age, by--my eyes are not good anymore. I can't even, by income

level and by marital status. And basically, you could see that the higher bars were those who were adolescence, lower income, and not married. But that's not the important part I want you to take home from this slide. The important part is that almost every single category has a significant prevalence of depression. Even if we took white women who were older, who were wiser, who were the higher income groups, who are married, they even had at least a 15 percent prevalence rate of depression. So, we can see here that depression is very--actually common and impossibly a little bit more common in these high-risk groups.

So, the risk factors for maternal depression aren't really socioeconomic or demographic. It's really the history of depression. And we know that women who have a prior history of depression, they have a 30 percent chance of being depressed during pregnancy or postpartum. A history of prior postpartum depression or psychosis, even greater risk depression during pregnancy, they have a very, very increase risk of--to postpartum depression. Prior PMDD, which is Premenstrual Dysphoric Disorder, which is really severe PMS, those women also have a high risk of perinatal depression. A family history also blends into this high risk perinatal depression. So, really if we look at any high risk category for perinatal depression, it's a history or family history of depression in the past. Of course, you have to realize that reproductive age women are fairly young, so a lot of them won't have a history of depression, and this will be their first incidence of depression in terms of a long chronic history of depression in their

lives.

Now, I put a question, why aren't as the teens being not married and low-income, because this has been very controversial whether they do have an increase incidence or not. Some studies have found yes and some studies no. But we're still looking at that more carefully. And then recent stressful of events, I think, for any kind of depressive episode, a stress can really trigger a depression. So, marital or partner discord seems to be the strongest kind of risk factor, but also a loss of a loved one, family illness and premature birth are very, very significant factors for--as triggers for depression.

Now, when we look at the symptoms for depression--when you look at the DSM-IV categories from the American Psychiatric Association, you'll see a lot of them are weight loss, weight changes, sleep changes and things like that. And you realize that when you're talking about women during pregnancy or postpartum, that these are completely bogus. What women doesn't sleep differently or can't sleep at all because they're up every night breastfeeding their baby every two hours or feeding their babies every two hours. So, who doesn't have sleep changes? Who doesn't have weight changes during pregnancy or postpartum? That's just the natural physiologic course. So, we realize that screening can be a little bit difficult. And this Edinburgh Postnatal Depression Scale is really wonderful, I think, because it really takes the physical symptoms out of the depression category. And kind of modifies it towards parental depression. So, it

was created especially for postpartum women, but it can also be use and has been validated during pregnancy as well. There's less of an emphasis on physical symptoms. So I think that's really a nice part of the scale. It takes us in five minutes to complete. It's self-administered so you just give it to the women. It's this 10-question questionnaire. It's been validated. It's been translated to 12 languages used all over Europe much more and so than in the U.S. And it's very useful in primary care settings. It rates the intensity of depressive symptoms. There are 10 questions and each have zero to three in intensity. And a score of 12 or greater really indicates that they are very likely to have depression and should be screened really by a health provider who knows about screening for depression.

I only give this as one example of a screening tool. Some people don't like to use screening tools. There are a lot of other screening tools out there, the CESD tool is out there, Hamilton, Zung. So, whatever works and whatever professionals are comfortable with should be what they use.

Now, the treatment for depression, the first thing you really have to rule out, the baby blues and psychosis, but also rule out thyroid problems. I want to mention that because there's about a three to five percent incidence of a postpartum thyroiditis. And a lot of the symptoms with thyroid disorder especially the hypothyroid, this likely will come in, have depression is a very, very prominent symptom. And the depression during thyroid--hypothyroiditis postpartum can be

exactly like the depression symptoms of a postpartum depression. So, it's important to really--if you going to be treating for some of the depression to really do a thyroid test to rule that out. Support can be very, very helpful. Support groups especially facilitated support groups with maybe a social worker or professional that really--could really guide and facilitate that session is very helpful from mild depression. The support from family, friends, helplines could be very useful, because stress is a trigger for depression, so, anything that you can do that will alleviate that stress can be extremely helpful.

I tell women who are pregnant if they are prone to depression to really have their family, their mothers come out with them during postpartum period and really help them kind of get rid of that stress of taking care of the baby immediately after pregnancy. Of course, if they don't get along with their mother, that can be the exact opposite effect, but whoever--whatever work is going to be very helpful for mild depression.

Counseling with the psychologist, social worker, psychiatrist could be helpful. They found a lot of really significant impact with cognitive behavioral therapy or interpersonal therapy. Other treatments such as light therapy, that's the light box that they use for seasonal affective disorder. They're experimenting with that. We don't really have good data on that yet so we're still in their--runs of research with that.

Alternative medications that's kind of--if you still--people you say John's Wort especially in Europe, (inaudible) but I don't know--I am not a big proponent of that.

I've even seen on Web sites that women will eat their own placenta as a way to combat depression but that's--it's--so (inaudible) way out there with these alternative therapies and you need really good research to really buy that.

ECT, electroconvulsive therapy is very effective and it's used for women who really can't use antidepressants or don't want to use antidepressants. It's usually use as a last resort. And antidepressants, I think that depression is really a biochemical disorder and sometimes all the talk, all the support in the world won't get you anywhere, and antidepressants really will. So, it's very important for people have at least moderate to severe depression and it's very, very effective.

The problem is with depression; here we have a prevalent condition. We have severe consequences with that and we have effective treatment. But 80 percent of women are undiagnosed and out of the ones who are diagnosed, 80 percent don't get treated. And this is a problem, because we do have severe consequences with untreated depression. And the consequences on the infant and child are really very well-known.

There are poor pregnancy outcomes--I have all these alphaneumonics, but

preterm labor, low birth rates, low for gestational age infants, respiratory distress syndrome, pregnancy-induced hypertension, spontaneous abortion or still birth, and fetal deaths are all associated with depression--untreated depression during pregnancy.

This poor mother-infant attachment--you could imagine if someone's depressed, that they really are not picking up the cues of their baby. They're not really doing--being there emotionally for their babies, so, the babies are more irritable, lethargic, they have poor sleep patterns and there are language delays in these children, behavioral difficulties, lower cognitive performances, more mental health disorders in these children especially depression, and a lot of the attention problems. It has--have all been done with the studies.

Maternal effects of depression are many. For the mother, their--they have poor prenatal behaviors, they change and eat poor, have poor prenatal care, tend to abuse substances more. They smoke more during pregnancy. They have poor parenting behaviors like that I mentioned before. There's a longer persistence of their depressive symptoms and increased risk of postpartum depression if they have depression during the pregnancy, and an increase risk of relapse.

We just have an excellent study during last year in the February 2006 JAMA Journal that showed that if you have depression and you treat it with antidepressants and you stop them, the odds of having a relapse during

pregnancy are five times greater than people who actually stay under antidepressants. So, a very real on difference and having untreated depression versus treated depression on the mother.

And of course the greatest impact and consequence of depression, untreated depression is suicide. And I have here; these are real death certificates for women in Maryland that we did a maternal mortality review on. And you can see here this mother who is 26 year old, died on multiple injuries of a fall. She died of suicide. She jumped of the--just a Chesapeake Bay Bridge--postpartum, because of untreated postpartum depression.

We have here another woman who died of multiple injuries. This woman basically jumped off the parking garage on the way to work. She parked and spontaneously that day decided to commit suicide. The tragic thing about this woman is she was an OB-Gyn physician, six weeks postpartum. So, when you talk about access to care, you talk about knowledge, what a tragic death that she left behind on a six-week-old infant and her family.

And here is another death certificate of a woman died of multiple injury. She, basically, struck by a train. This woman was Hispanic woman who, six weeks postpartum, died of being run over by a train. And what was more tragic about this, it was listed as a homicide, because--actually I pulled this certificate by accident, but because this is--she held her baby with her. So, this woman

actually committed suicide and her baby died with her. So, we have a homicide suicide with this woman who died of postpartum depression. I'm almost out of time and I wanted to get into some Maryland programs. I'm a strong believer that data really helps propel--really propel a lot of action and a lot of programs in the state. We analyze (inaudible) in which I showed you the slide for the demographic features. We looked at death certificates and we looked at hospital discharge data, and that really helped, I think, in terms of getting a paternal depression team together with in our state. We actually put forth some legislation in 2004. It didn't get passed but it also--what it did do was actually create a great recommendation from the legislature to actually educate women before they left the hospital about postpartum depression. And really, I think it creates a lot of awareness about it.

And we have (inaudible), which I really want to mention, because we got a grant on--we were, I think, one of the original 10 states to get a grant from the MCH Bureau of the Department of Healthy Start and perinatal services. And we actually did a media campaign. We have a Web site up, [www.healthynewmoms](http://www.healthynewmoms). We have a helpline. We did media messages throughout the state, posters, video, PSAs, radio ads. We did local partnership grants and provided training to (inaudible). We had information packets, CME's that we gave, screening tools. We sent every OB (inaudible) biophysician and provider in the state a packet telling them how to screen for depression, and a lot of resources to use and a lot of (inaudible) throughout that time. This is just a sample of our webpage that we

had through the grant, and you can look at it yourselves at your leisure. That was an example of the poster we did and on the right is a packet that we sent out. We also, as a result of the legislation, developed a postpartum depression brochure that is available to every hospital that delivers to the state. And we have it translated into six languages and those languages available. But we actually have it in a lot of different things on woman's health. On back of our Women's Health Screening Guidelines, we have a screening tool for depression. And I also have to mention we have also MCHB grant that we had with integrating women's health activities into MCH activities. And one of the first things we did was a Title Ten Planning Grant and this was in 2001. We actually did depression screening and treatment during our (inaudible) family planning visit. And I think that's (inaudible) the importance of not just isolating depression screening on perinatal depression during the pregnancy or postpartum, but also it's important preconceptionally, interconceptionally, and a family planning program is a really excellent way to do it.

So, in summary, the maternal depression is a common disorder, underdiagnosed, undertreated. We have adverse effects of the mother, fetus, infant, and family. We have a validated screening tool and effective treatment. So, when you have all those four things, when you have a common disorder that's prevalent, adverse effects with severe consequences, we have validated screening and effective treatments we really should universally screen for depression during pregnancy and afterwards. We can't tell who's going to be

depressed, and we could do so much good by screening and actually increase the capacity. You can't screen without knowing who you are going to refer to of women--of providers who can really treat depression. And I think we also have to continue advocacy, research, and education in this area. Thank you very much.