Episode 37 – Combating congenital syphilis in NC

Intro music: 0:00

Podcast introduction: 0:10
The North Carolina Medical Board is a quasi-governmental organization. On the one hand, the Board regulates the practice of medicine and surgery on behalf of the state of North Carolina. That's the government part. On the other hand, the Board is an independent organization that receives no government funding. That's the quasi part. This is Jean Fisher Brinkley, Communications Director for the North Carolina Medical Board, and this is MedBoard Matters. NCMB may not be part of state government, but we still partner with it. When the State Department of Health and Human Services (NC DHHS) wants to get information to medical professionals, we stand ready to help. As the licensing board for physicians and PAs, we have direct access to two of the most important groups of medical providers in North Carolina. NC DHHS has monkeypox information, the medical board sends it out. Flu and other respiratory illnesses are on the rise, we've got NC DHHS's clinical guidance on our website and all-over social media. And during the COVID 19 pandemic, NCMB was practically a satellite communications office for NC DHHS, getting the word out on everything from volunteer opportunities to anti-infection protocols to vaccine recommendations. On this episode of MedBoard Matters, we are partnering once again with NC DHHS to raise licensee awareness of a worrying resurgence of an illness considered all but eradicated: syphilis. Over the past decade or so, public health officials have tracked an alarming increase in the sexually transmitted disease and a shift in who gets it. Until relatively recently, syphilis was typically seen in men who have intimate relations with men. That's changed so that now the most significant growth in syphilis infection is seen in heterosexual men and in women of childbearing age. And when women of childbearing age have syphilis, they give birth to babies who have it, too. In North Carolina, there has been more than a 500% increase in the number of babies born with syphilis over-about the last decade. Similar increases have been documented across the country. The nation's public health leaders view this situation as a massive failure of the public health system. I am delighted to welcome Dr. Victoria Mobley, who is Medical Director of the HIV and Sexually Transmitted Disease section of the State Division of Public Health. Listen up as we discuss the shifting patterns with syphilis and explain what NCMB's licensees can do to help.

Interview with Dr. Victoria Mobley: 2:49
JFB: Dr. Mobley, welcome to MedBoard Matters.

VM: Thank you.

JFB: We're here today to talk about a worrying increase in infants being born with syphilis. Could you begin by explaining what's been going on with syphilis in North Carolina that led to the situation?

VM: Absolutely. So, we have been seeing an increase in overall syphilis and our syphilis epidemic for about a decade, with men accounting for the majority of our reported cases. And among men, really, the most disproportionately impacted population had been our men who have sex with other men population. But in the last few years, we've seen a concerning shift with our most rapidly growing reported cases being among women, particularly women of reproductive age and the men that report having sex only with women. And of course, whenever you see an increase in syphilis among women of

reproductive age, unfortunately, you subsequently see an increase in congenital syphilis, which is what we're seeing now and has been the case for roughly the last 5 to 6 years. We've been seeing a steady increase in our number of reported cases among infants.

JFB: Now, I do want to stay focused on that shift. But could you say a little bit, I'm just curious, you know, do we know what's caused the shift from men who have sex with men?

VM: I don't know that we know the cause. I think maybe that population has been because they weren't the most disproportionately impacted. A lot of the prevention resources in education wasn't really aimed at that population, so, it might have slipped under the radar. And then, of course, COVID didn't help, but the increase was already starting before COVID. But then COVID added a whole other level of barriers to access to treatment and to testing. And I think coming out the other side, we're just seeing an exacerbation of what had already started in providers that women may not have syphilis in their differential because that really wasn't a huge issue in that population like it is now.

JFB: Right. And just to be clear, this didn't start during COVID, but COVID maybe exacerbated it because, as I understand it, this is something that's really been happening for about the last decade. Is that right?

VM: So, the increase in overall syphilis in the state has been going up over the last decade. The increase that we've seen in women has really only been an issue for the last five or so years. The rise was slow at first, but rapidly picked up speed.

JFB: Okay. Now, North Carolina law is actually designed to protect women of reproductive age from syphilis. What does North Carolina law actually say about testing for syphilis?

VM: Absolutely. And so, I will start by saying that North Carolina's sexually transmitted disease control measure, which is the public health law around this, actually was put into place when we were reporting many more cases than previously. So, in the sixties in North Carolina, we were reporting over 100 cases a year. Public health efforts went into effect, got those numbers down, but then in the early nineties we saw a rapid increase in congenital syphilis cases again, at which point our public health law was enacted. And what that law requires is that every pregnant woman, regardless of her perceived risk for infection, be screened at least three times in pregnancy. So, at the first prenatal care visit, whenever that is, again, 28 to 30 weeks gestation. So really aiming for that early third trimester time period, and then again, at delivery. You don't have to ask for risk, even though it's a good idea to talk to your patient about their sexual history. But this is for every pregnant woman at least three times in pregnancy. Additionally, the public health law requires that hospitals not discharge a baby from the hospital until the mom's delivery syphilis screening result is known so that if the baby is in fact at risk, the appropriate evaluation and treatment can happen before they go home.

JFB: That sounds pretty comprehensive. So, my next question is, is the required testing in pregnant women just not happening?

VM: Yeah, so it's happening. It's just not happening as often as it should. So, I will say the good news is that the delivery syphilis screen that happens at the hospital at the time of delivery almost always happens. We have seen some missed cases that fell through the cracks, but for most of our pregnant women that deliver in a hospital setting, that screen is happening. It's really the testing at the first

prenatal care visit and the third trimester, in the 28-to-30-week gestation period, that's not always happening and where we really need to see some improvement.

JFB: Okay. Can we break that down a little bit? I'm curious about why that might be. What groups are most at risk of not getting that test and who are we not reaching?

VM: So, I'll try to split that into two different groups. You have the mothers who actually had prenatal care, and among those women, it really does appear to be based on when they enter prenatal care. So, for women who enter prenatal care early in that first trimester, they're for the most part, getting that first prenatal care visit. But then we saw a drop in the third trimester visit. That might be because if your first screen was negative, providers who aren't aware of the public health law are thinking, 'Okay, my patient's down at risk, I've done the syphilis screening at their first care visit, I don't need to do it again.' Whereas that third trimester screening really is important to identify women who were infected during the pregnancy, which we see quite often. But if you move to the women who aren't accessing prenatal care or aren't accessing it early in their pregnancy, that's where we're really dropping the ball on getting them screened. Those are the ones where we tend to have very little screening during the pregnancy, and so that delivery screen is really our safety net or a screen maybe randomly from some other non-prenatal care site.

JFB: So, women who are not entering prenatal care early or even at all are the ones who are really not being tested. Okay. Now, I understand from reviewing some of NC DHHS's materials on congenital syphilis that there's been I think it was more than a 500% increase in congenital syphilis over about the past ten-year period. And at the same time, though, I want to point out that the number of cases is relatively small. So, I want to ask you, you know, some of our listeners might be wondering, why is this such a big deal? Could you talk about why it is such a big deal? What are the effects of syphilis on both mothers and babies?

VM: Sure, sure. I mean, so first of all, acknowledge that it's true. The overall number of reported congenital syphilis cases every year are small for a state like us. So, we're about 11 million individuals, and in 2023, right now, we preliminarily have 72 cases. So, yeah, overall small. But if you think about it in the larger context, which is that syphilis is curable using one of the earliest known antibiotics that we discovered and congenital syphilis is almost always preventable if diagnosis and testing happen in a timely manner. So, when we miss an infection, the consequences to both mom and baby can be quite devastating, which is why every case that's reported to us we treat as a sentinel event. So, maternal syphilis, when left untreated, can lead to a number of poor pregnancy outcomes, including preterm delivery, miscarriages, stillbirth, neonatal death. Unfortunately, we've seen several of those in 2023. Infection in utero can result in fetal hepatomegaly, severe anemia, placentomegaly, polyhydramnios and then infection in babies. So, babies who make it to delivery can present with meningitis and seizures, cranial nerve palsy, blindness, deafness, bone and organ damage. I mean, the list goes on. There really isn't any organ system that syphilis can't impact. And in a developing fetus and then subsequently growing infant, really, missing syphilis can result in devastating and deadly consequences.

JFB: I have to admit, I don't know what all of those things that you mentioned are, but I understood enough to know that obviously it's bad and we don't want to let this happen. I think you made a great point this is a curable disease with a readily available antibiotic. So, why would we sit back and do

nothing if there was something that could be done to stop this? So, that brings me to my next question which is, what can licensed medical professionals in North Carolina do to help? What are you asking them to do with respect to syphilis, specifically?

VM: I think primarily I want them to be aware of this changing epidemiology and our syphilis epidemic. So, understand the risk of syphilis infection in their communities, especially in women of childbearing age and their sex partners. I will say in 2023 compared to the prior three-year average, we in North Carolina observed more than 40% increase in reported early syphilis infections in women and in men who report having sex only with women. This is such a shift in the epidemiology that a lot of providers that work with women may not be aware that this change has happened, and that's been compared to a negative percent increase in our men who have sex with men population. So really, we're making great strides in addressing the syphilis epidemic in MSM, which is where the epidemic was sitting. But now we need to turn our focus to our women of reproductive age and their male partners to make sure that we make the same inroads.

JFB: Okay, so what's that going to look like? What exactly? Like when you said we need to be screening pregnant women, my mind immediately goes to OBGYN because OBGYN's are the ones who provide prenatal care. But then you also said that the highest risk group are people who aren't getting prenatal care. So, how are we going to reach those people if they're not in prenatal care?

VM: Yeah. So just to be clear, yes…yes this podcast obviously is focused on women of reproductive age and pregnant women because it's congenital syphilis. But we're not going to get out of the syphilis epidemic unless we start screening everyone who is sexually active. So, really increasing screening of sexually active individuals, men and women, is going to be important. And then for medical professionals that are not prenatal care providers, I think it would be great if you start to ask yourself, as you're seeing your patients, should I screen this person for syphilis? So that's the start of it. You're thinking about in your differential, and then you're asking yourself, why wouldn't I screen this person?

JFB: So just to be clear, your vision is for medical professionals in all specialties and backgrounds to be screening for syphilis, males and females, or is the priority pregnant women?

VM: I think it's both. I mean, the women are getting syphilis from someone. So, I think screening men and women who are sexually active is important. I think when you have a pregnant woman, one because North Carolina public health law requires that three screens happen during pregnancy, that that's really critical for both prenatal care providers and providers that are seeing pregnant women who may not be actively in prenatal care, to incorporate that syphilis screen in the services you're providing.

JFB: Okay. I'm trying to put myself in the shoes of licensees who might be listening. So, I'm wondering if you could talk a little bit more about what this looks like in the clinic when you're faced with a patient. Maybe an example of how a clinician would address the issue of screening for syphilis with the patient?

VM: So, I think the easiest way to go about this is to take that syndemic approach. So, if you're an Emergency Department physician or an Urgent Care provider, or maybe a family planning clinician and you're seeing a woman of reproductive age, whether she be pregnant or not. Or you're seeing a male patient, if you determine that a gonorrhea or chlamydia test needs to be done, then why not do a syphilis test as well? And if they're not known to be HIV positive, why not do an HIV test as well? So, we

know that HIV and STIs are syndemic infections. That means that they're not only transmitted in a similar way, but they also disproportionately impact the same population. So really doing that syphilis test, doing that HIV test in a patient that you've already determined needs a gonorrhea chlamydia test is addressing those missed opportunities to make sure that we're giving comprehensive care and services.

JFB: Next question is, I can imagine, again, some of our licensees listening to this and just groaning and going, 'Great, here's one more thing for us to have to fit into what we're doing in the clinic.' What would you say to people who have that response?

VM: I understand there are barriers to incorporating syphilis screening, including that syphilis testing is not easy. Serologic testing can be complicated to interpret. It can be timely to do. So, it doesn't typically come back the same day. It may maybe a few days or even more before you get the results back. If you're a physician who works on shifts, then the results may come back when you're off shift. So, figuring out how to make sure the patient gets notified of their results and gets linked to treatment, I completely understand that there are a lot of barriers to that. And I think what I would say is that understanding the barriers, I think we can probably all agree that the benefit of preventing congenital syphilis outweighs the inconvenience. So really the next step should be figuring out how best to incorporate the screening practices for the right patients, for the patients that need it, and overcome those barriers that exist in our clinical practices for doing it.

JFB: Okay. I don't want to downplay the importance of screening men and women, but I also don't want to lose sight of the fact that pregnant women, it seems to me at least, that they maybe should get priority. That if you see a pregnant woman just to ask, 'Hey, are you in prenatal care,' would be a good question to ask. Because again, thinking back to what you said about, you know, these are the women who are most at risk of not getting those three screenings during pregnancy.

VM: Yeah, no, I think it's great. And I think Emergency Departments and Urgent Care are actually quite skilled at identifying resources for the individuals that they serve. So, if they're seeing a woman who's obviously pregnant, finding out that she's on prenatal care and linking her to resources in her community for prenatal care would be great. And that might be part of, you know, that might be the solution that you can incorporate into your practice. Maybe you can't incorporate the syphilis screening right now, but linking her to a prenatal care provider where she will get that screen in addition to all the other services that pregnant women need in order to have healthy pregnancies, I think is a great move forward in helping to address this epidemic.

JFB: Okay. Now you've addressed the barriers, and it does sound like there are quite a few to figuring out how to make this work. But one of the obvious questions is what happens if the screening for syphilis comes back positive? What happens next?

VM: Sure. So, what I will start by saying is that a provider who suspects syphilis, if you have a patient that you're seeing that has clinical signs or symptoms of syphilis, you should go ahead and initiate that treatment before the results come back. And the other caveat is, if they are a known partner, if their sex partner's confirmed syphilis infection, if the woman is pregnant, you should go ahead and initiate that treatment based on her exposure to syphilis. And the goal is to start treatment as early as possible because you're more likely to prevent the infection in the unborn child, or if the child is already infected

to eradicate the infection in that unborn infant. But once the results come back, treatment is key. So, rapid initiation of treatment, making sure you follow the CDC's STI treatment guidelines for treatment of the appropriate stage of infection, advise your patient on the importance of getting their sex partners treated. So, we have seen many reinfections occur. So, the woman was appropriately screened and treated during pregnancy, but at the time of delivery, it's quite clear that she reacquired the infection because her sex partners were treated. Make sure that the new or suspected infection is reported to public health in a timely manner. And this is because public health prioritizes pregnant women diagnosed with syphilis. So that's the last part of that, let your patient know to expect outreach from a county or state public health advisor who will touch base with them to make sure they have the resources they need. So, if they're not in prenatal care, they'll help link them to prenatal care, if they're struggling with issues of mental health or substance use, to help link them to resources for that. But they'll also help them notify either directly or confidentially their sex partners to help reduce that risk of reinfection.

JFB: I think that is a really important point, I just want to underscore it. You said it, but I'll say it again. So, syphilis is a reportable disease in North Carolina. So, in addition to the testing being required, if a screen comes back positive, it is on the clinician to report that to the local health department. Is that correct?

VM: Yes. I will say that most of the reporting for syphilis comes to us electronically from the laboratory you contract with to do the testing. So, we usually have that information around the same time that you have it, as a provider, that you have it. But reporting the infection part of the process that you normally report any communicable disease that's reportable is required.

JFB: Okay. And I am hoping, expecting, that most medical practices, if not all, have some sort of protocol for making sure that they are following requirements related to reportable disease.

VM: I think that is a good assumption. A lot of medical providers do a great job of reporting on communicable diseases per the North Carolina statute.

JFB: I think that's important because I was going to also ask that DHHS or that public health, you know, the public health enterprises there as a backup, and that is going to go into action when you get a report, notify the person, provide support, help with partner notification, all of that. Because the other side of this is that most, if not all, clinicians are trained that if you order a test, you kind of own the test. You have to read the results and you need to notify the patient of any clinically relevant results. So, what if a provider in the Emergency Department, say, orders a syphilis screening. It comes back positive, and they can't reach the person that they screened, the expectant mother or the male.

VM: So, I mean, I think the important part of that is you've made a good faith attempt to notify the patient of the information that you were given during the encounter. So whatever phone number or address they gave you, you've made the attempt to either call or send a letter with the results and documenting that in your EMR, you satisfied your responsibility as a clinician. From a public health standpoint, we're going to take the extra step for women who are pregnant and we're going to send somebody out to try to find them and make sure they're aware of their diagnosis, that they're linked to treatment, and that we get their partners evaluated and treated as well. So, we're in this together. You

do your part, and please rest assured that we are also going to help and make sure that that notification happens and that linkage to treatment happens as well, and if you don't know the point of contact, the Public Health Office. So, we call them DIS or Disease Intervention Specialists, there is an office that covers every county in the state. If you don't know your point of contact, it will be in one of the resources that are linked to this podcast. Please feel free to reach out to them because they can also be a resource. If you are trying to get your patient back in for their second dose of penicillin and you can't find them, they can be a resource to help locate your…your patient and bring them back in for treatment. So please feel free to partner with us on this.

JFB: Wonderful. Thank you for covering that. Could you talk about some of the other ways that NC DHHS is working to support clinicians with this effort to combat congenital syphilis? I know, for example, that NC DHHS has established a great online resource page. That's where I was doing some reading before this conversation.

VM: Yeah, absolutely. There's two resource pages now, so there's the congenital syphilis provider resource page, and that has a slew of resources for both providers and for providers to give to your patients. It also has information on how to interpret serology, which I mentioned before, and I will mention again can be quite complicated, especially if your patient has a past history of syphilis. It has resources on how to become a part of our rapid testing program. So, we really are hoping to expand access to rapid syphilis tests in both the clinical and non-clinical settings, trying to reach women who don't access prenatal care early or at all, but making sure that they have the opportunity to get the testing that they need. And if you want to be a site that receives free rapid syphilis tests, we are happy to work with you. And so there's a resource on that web page for how to contact us and inquire about getting those tests. We're also launching a social media campaign. You should have already seen it, and Facebook and…and all of those sites that I don't access like Twitter and Instagram. But, you know, it will also extend to radio and television because we really want to make sure that the public is also aware of this increase and that individuals know their risk and know where they can get testing. So that's all on the congenital syphilis provider resource page. And there's another web page that was set up for mainly for the public, but will identify sites near them where they can receive free or low cost HIV and STI testing, including syphilis. And then lastly, I will mention that we just finished uploading a link where providers can order materials that are meant for your office. So, posters with very eye-catching pictures of women and babies and just increasing awareness and both the provider network but also the patients you serve about congenital syphilis and what needs to happen to reduce this trend.

JFB: All right. Fantastic. And we will, as you mentioned, be linking these resources on our MedBoard Matters show page so people can access them and inform themselves and get what they need. Okay. So just to sum up, you know, the call to action here is expanded screening, especially for pregnant women, for syphilis. And then if someone is positive for syphilis to try to get that pregnant woman again, thinking of them as the top priority group, get them into rapid treatment.

VM: Right.

JFB: That is the end of my prepared questions. I always like to give my guests an opportunity to offer some final words of wisdom, words of encouragement. Is there anything else that you would like to say to give our listeners, especially the licensed medical professionals, any final points on this?

VM: Sure. I guess I'll say that, you know, the increase in congenital syphilis infections that we're seeing in both North Carolina but also nationally is really at crisis levels. So, this is as high as it's been in more than 30 years. And it really will take a concerted effort from providers of varied specialties in both the clinical and the non-clinical settings to make sure that women across the health care access spectrum receive the testing and treatment that they need to have healthy pregnancies and babies. And so, I will say that us here at DHHS, we really look forward to working with providers, particularly providers of women, and hope that together we can work to reverse this trend we're seeing. And I just, you know, I thank you guys for letting me join your podcast and share this information.

JFB: Of course, we are glad to have you. Thank you so much for your time and expertise, Dr. Mobley.

VM: Thank you.

Episode closing: 25:29

I know we've just thrown a lot of information at you. If you're not clear on how you can help with early identification and treatment of syphilis, particularly in pregnant women, go to our show page at www.ncmedboard.org/podcast. We have linked all sorts of information to help guide medical professionals in responding to NC DHHS's call to action. Among other things, you'll find contact information for the good folks in public health who can support you in your efforts. I'll summarize some of the key things medical providers can do. First, complete a sexual health history for all your patients and conduct STD screenings for those who are sexually active. Don't lead with, 'I want to test you for syphilis.' That's going to raise some hackles. Instead, let your patients know that such screenings are recommended for all sexually active individuals. No judgment. And if your patient is pregnant, screening is actually required by law. As Dr. Mobley noted, most pregnant women aren't getting screened for syphilis in early and mid-pregnancy. If you see a pregnant patient and that patient is not receiving prenatal care, you may be that patient's only contact with the health care system. Don't miss the opportunity to screen. Next, if a patient tests positive for syphilis, make every effort to notify that patient and get them connected with treatment. Again, fetal syphilis infection can be cured if mom gets treated. Finally, NC DHHS is asking that newborns not be discharged home from the hospital until the results of the mother's syphilis test at delivery is known. That obviously only applies to facilities that do labor and delivery. Well, that brings us to the end of 2024's first episode of MedBoard Matters. I hope you found it informative. If you have comments, concerns, or suggestions to share, please email us at podcast@ncmedboard.org. Thank you for listening and I hope you will join me again.