Conference Summaries

National STD Curriculum Podcast

Congenital Syphilis and Syphilis in Women

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Season 1, Episode 7

This episode reviews a few oral abstracts from the STD Prevention Conference, which took place in September 2020, specifically looking at topics covering congenital syphilis and syphilis in women, which is a growing national problem.

Topics:
syphilis
congenital syphilis
syphilis in women
stds
pregnancy

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[00.00] Introduction
Hello everyone. My name is Meena Ramchandani. I'm an infectious disease physician at the University of Washington in Seattle. This podcast is dedicated to a STD [sexually transmitted disease] literature review for health care professionals who are interested in remaining up-to-date on the diagnosis, management, and prevention of STDs.

[00.23] Background
In this episode, we'll review some oral abstracts presented at the 2020 STD Prevention Conference. I'd like to focus on the topic of congenital syphilis and syphilis in women, as this is a growing problem nationally. For this episode, I'd like to review a few oral sessions presented at the conference on this topic. The reason I chose this topic is that syphilis in the U.S. is increasing, not only among men who have sex with men (MSM) but also in women. As a consequence of increasing rates of syphilis in women, there has been a subsequent increase in the number of congenital syphilis cases nationwide. Congenital syphilis is a devastating illness, and it can lead to great morbidity and mortality in the infant, sometimes resulting in stillbirth. The thing is, congenital syphilis can be prevented by diagnosing and treating pregnant persons who have syphilis early on.
It's an important topic to address, and the issue is not going away, so let's get to it.

**[01.31] Oral Session #1**

Johnson C, Matthias JM, Scranton R, Bowen V. Increases in congenital syphilis: Perspectives from around the nation. Oral presentation at: 2020 STD Prevention Virtual Conference; September 14-24, 2020; Atlanta, GA. [Reference #1]

The first session I’d like to review was titled “ Increases in congenital syphilis: Perspectives from around the nation.” This was presented on September 18, 2020. Please refer to our website for details on the presenters and title of each abstract in this session. Summary points of this session:

1. Cases of congenital syphilis in the U.S. have skyrocketed. It has increased 297% from 2012-2018, and this mirrors the increasing rates of primary and secondary syphilis in women of reproductive age during this time period. And these cases are occurring around the U.S. In fact, in 2018, 41 states reported at least one case of congenital syphilis.
2. Unfortunately, racial and ethnic disparities persist, with the highest rates in the U.S. seen in women who are Black, American Indian/Alaskan Native, or Hispanic/Latinx ethnicity. Now, these rates also depend on geographic region. But rates have increased in all racial and ethnic groups and show no signs of slowing down.
3. The lack of prenatal care and inadequate maternal treatment when a pregnant person is diagnosed with syphilis—that has shown to remain the largest contributor nationally to congenital syphilis cases.
4. Among women with primary and secondary syphilis, the proportion who reported drug use, especially methamphetamine use, has increased in recent years.
5. There are missed opportunities to diagnose and treat pregnant persons with syphilis, and the speakers of this session covered data from the Southeastern U.S. This region accounts for 52% of reported congenital syphilis cases in the U.S. The first presenter discussed what's going on in Florida.

In Florida, there has been over a 400% increase in congenital syphilis cases from 2009-2018. The authors found that 49% of syphilis among women in Florida were categorized as latent syphilis, meaning these women were not diagnosed because of symptoms but were actually diagnosed on routine screening. They reviewed in detail 85 cases of congenital syphilis cases in 2019. They found that 39% of these cases were preventable, with the majority due to lack of (or late) prenatal care and missed syphilis screening opportunities if the pregnant person was actually in prenatal care. Basically, cases occurred because providers didn’t screen all patients.

In Louisiana, there has been also an increase in congenital syphilis cases statewide, and although there was a heavy distribution of cases in the metropolitan areas, the authors found that cases have extended to more rural areas of the state. They also reported health disparities among mothers who had a baby diagnosed with congenital syphilis and found that 76% were Black women compared to only 23% that were White women. Now, this is interesting. The authors found that the majority of women were actually accessing prenatal care but were not able to get timely and adequate treatment despite having government or public insurance. So, it seems as though better follow-up and making sure pregnant persons with a diagnosis of syphilis get appropriately treated was really the major issue in that state.

This was really an interesting session that reviewed what is occurring nationally with regards to congenital syphilis and included more detailed data for some of the Southeastern region of the U.S. The analysis about missed opportunities or cases that could have been prevented is really an important one to think about with regards to programmatic or policy changes, which could be implemented to help avert future congenital syphilis cases statewide.

**[05.07] Oral Session #2**
The second session was titled “Congenital syphilis (interventions and response focus)” that was presented on September 18, 2020. This session highlighted a few practical interventions that improved syphilis treatment for women and helped to prevent congenital syphilis in different places of the U.S. Again, please refer to our website for details on the presenters and title of each abstract. Here are some interesting points of this session:

1. In San Francisco, there has been a 174% increase in syphilis cases in cisgender women from 2017-2019—from 2017 to 2019, so only two years—with a corresponding increase in congenital syphilis cases. They started a program in San Francisco called Team Lily, which was a multidisciplinary team to address syphilis in pregnant persons who had barriers to medical care. Many of the women in this analysis experienced homelessness, had substance use disorders, and were pregnant with a diagnosis of syphilis. The Team Lily included an Ob-Gyn medical provider, a case manager, and a navigator. They collaborated with other entities, such as (for example) emergency rooms, sexual health clinics, and methadone clinics, to provide syphilis treatment and/or syphilis testing for these women wherever they showed up. They also focused on improving access to housing and substance use treatment, thereby providing trauma-informed pregnancy care to a group of women who have been historically marginalized.

2. In Louisiana, they also started a unique program for pregnant persons with syphilis. Actually, they started two unique programs, which I thought were pretty cool. They found pregnant persons were accessing prenatal care but not receiving timely or adequate syphilis treatment. So in 2014, they instituted an “opt-out” syphilis and HIV testing program for all pregnant persons at the first prenatal visit, in the third trimester, and at delivery. In 2017, they used funding from the CDC to implement a workgroup to address congenital syphilis, including two congenital syphilis case managers and a nurse educator. They hosted two conferences on congenital syphilis to help increase awareness and education for medical providers and health care staff. What I found really interesting is that they piloted two different penicillin G benzathine treatment delivery programs—penicillin G benzathine is also known as Bicillin. One program was a home-observed treatment program, and the other provided penicillin G benzathine to Ob-Gyn providers who didn’t keep the medication in stock, which I do find is a pretty common problem. These programs helped decrease barriers for pregnant persons to get recommended syphilis treatment (for example, those who have difficulties with transportation or couldn’t come to the clinic for another reason). I thought it was a pretty cool program that they described.

3. Now, in a different city, New York, public health performed a detailed analysis of 109 congenital syphilis cases from 2010 to 2019. What they were trying to find out is if there could be programmatic or policy changes that could be implemented to prevent further infections. The team found multiple missed opportunities to prevent congenital syphilis. For example, some women did not receive prenatal care; some received prenatal care but were not tested for syphilis; some had a first negative test but then were infected with syphilis late in pregnancy, so they seroconverted during pregnancy; some did not receive treatment or the treatment was not adequate for their syphilis stage; and lastly, some providers just missed retesting at delivery. Due to this analysis, the authors looked into the acceptability and feasibility of mandating third-trimester testing for syphilis in pregnant persons in New York City and found this was well received by medical providers. It sounds like a proposal for mandatory repeat syphilis testing in pregnancy is being worked on in that city.

So, this was a great session that presented different interventions to improve syphilis testing and treatment in pregnant persons and help reduce congenital syphilis cases in various parts of the U.S. according to what those risk factors are. It will be interesting to see outcomes of these innovative programs in the next few years. Something that consistently came up was the fact that racial and ethnic health disparities seen with regards to congenital syphilis and syphilis in women was prevalent. This is important to recognize because
lack of diagnosis and treatment of syphilis is going to potentially exacerbate health disparities going forward. If you’re interested, the session titled “Swimming Upstream: How can we improve outcomes for female and congenital syphilis,” that was presented on September 21, 2020, was another great session on this topic.

[09.47] Summary
To conclude, I’d like to summarize some key points from this session:

1. First of all, congenital syphilis and syphilis in women and pregnant persons is increasing throughout the U.S.
2. While congenital syphilis has increased among all ethnicities, health disparities do exist, with the highest rates of congenital syphilis in the U.S. occurring in women who are Black/African American, American Indian/Alaska Native, or Hispanic/Latinx ethnicity. And I attribute these health disparities to social determinants of health.
3. There are opportunities to prevent congenital syphilis. Screening and adequate treatment of syphilis in pregnancy is really the key to prevention, and I can’t say that enough.
4. Innovative ways to address congenital syphilis and syphilis in pregnant persons are being explored in different parts of the U.S. And, it will really be interesting to see the outcomes of these different programs.

In summary, congenital syphilis is a preventable disease, and timely identification and adequate treatment of syphilis in pregnancy is really the key to prevention.

[10.51] Credits
This podcast is brought to you by the National STD Curriculum, the University of Washington STD Prevention Training Center and is funded by the Centers for Disease Control and Prevention.

Transcripts and references for this podcast series can be found on our website, the National STD Curriculum, at www.std.uw.edu. Thank you for listening, and have a great day.

Additional References:
women