

Transcript Details

This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: <https://reachmd.com/programs/focus-on-global-medicine/treating-stds-global-lessons-for-care-in-the-us/3969/>

ReachMD

www.reachmd.com
info@reachmd.com
(866) 423-7849

Treating STDs: Global Lessons for Care in the US

TREATING STDs: GLOBAL LESSONS FOR CARE IN THE U.S.

Change and challenge is in the wind as 2008 comes to an end. The same is true when examining this month's ReachMD XM160 special series Focus on Global Medicine. We take a look at both the changes and the challenges impacting global medicine.

There are 340 million cases of curable sexually transmitted diseases each year around the world. In developing countries, STDs and their complications are among the top 5 disease categories for which adult seek healthcare. How do STD rates worldwide compare with rates in the United States and what medical advances in our country might help patients with STDs across the globe? You are listening to ReachMD, The Channel For Medical Professionals. Welcome to a special segment focussed on global medicine. I am your host, Dr. Jennifer Shu, practicing general pediatrician and author. Our guest is Dr. Jill Grimes, practicing board-certified family physician in Austin, Texas, Associate Editor for the 5-Minute Clinical Consult textbook, and Author of Seductive Delusions: How Everyday People Catch STDs.

DR. JENNIFER SHU:

Welcome Dr. Grimes.

DR. JILL GRIMES:

Thank you for having me.

DR. JENNIFER SHU:

A worldwide sexually transmittable disease is a very broad subject. Why don't we break it down by disease category to begin with and start with the curable STDs?

DR. JILL GRIMES:

Sounds good. Okay. The major curable STDs include the bacterial infections such as chlamydia, gonorrhea, and syphilis as well as the

parasitic infection trichomonas.

DR. JENNIFER SHU:

And how prevalent are these diseases worldwide? Are they really a significant factor in world health?

DR. JILL GRIMES:

Absolutely. As you mentioned in your opening, there are 340 million new cases of these curable STDs each year in men and women aged 15 to 49. The world health organization states that in developing countries STDs and their complication are among the top 5 disease categories for which adult seek healthcare. In woman of childbearing age, the STDs excluding HIV are second only to maternal factors as causes of disease, death, and healthy life lost. The question arises why is it worse in developing countries? Well, I think the primary answer there is simply access to care whether this is allocated health dollars or proceed important. If you are in a small village and have to travel several days possibly by foot to seek healthcare, symptoms that come and go such as those present with most STDs that's not what's going to be bad enough to make you willing to walk those miles to seek medical attention.

DR. JENNIFER SHU:

So, have you found out there is a concentration of STD cases in geographic areas where there is poor access to care?

DR. JILL GRIMES:

Yes. The largest number of new infections occurred in South and Southeast Asia, in the Sub-Saharan Africa, in Latin America, and the Caribbean.

DR. JENNIFER SHU:

I understand that chlamydia is the most common treatable bacterial STD. What can you tell us about chlamydia globally?

DR. JILL GRIMES:

Our global statistics are back from 2001, but it was estimated at that time that there was 92 million chlamydial infections that year being split with about 50 million in women and 42 million in men. Here in the United States as a comparison our recent 2006 statistics revealed that for the first time, we had over 1 million cases diagnosed with an estimated true incidence of 3 million assuming that many of those went undiagnosed. The real significance of chlamydia, and this is true for gonorrhea as well, is the sequelae from the untreated infection. It is estimated that 40% of untreated infections will progress to pelvic inflammatory disease and 20% of those PID cases lead to infertility and another 20% of the same PID cases will cause chronic pelvic pain. If you realize then that for every 1 million cases of chlamydia that are treated, you can prevent 60,000 cases of PID, 8000 cases of chronic pelvic pain, and roughly 7000 cases of infertility, you can start to see the enormous impact that detection and treatment of this just 1 subset of STDs could create.

DR. JENNIFER SHU:

So, what might developing countries be able to learn from us regarding chlamydia? Is that that we are better at detecting and treating and then preventing those complications that you mentioned?

DR. JILL GRIMES:

I think that we are certainly increasing awareness, but again I think it is more about access to care and some of that is cultural and religious. I can tell you that I had an international patient who came in with some pelvic complaint and her husband who has remained in the room with her would not allow her to undress. So, I couldn't even examine her.

DR. JENNIFER SHU:

So, there are some cultural issues that we might see in this country from international patients.

DR. JILL GRIMES:

Exactly.

DR. JENNIFER SHU:

What about gonorrhea in the US compared with globally?

DR. JILL GRIMES:

The world data from 2001 showed about 62 million cases of gonorrhea. The international prevalence rate vary from the low of only 1% in China and Vietnam to nearly 8% in South Africa. The 2006 United States statistics gave an estimate of about 700,000 cases in our country though only half the number was reported. Again, now I want to emphasize that it is primarily gonorrhea and chlamydia together that lead to the pelvic inflammatory disease.

DR. JENNIFER SHU:

Let's talk about syphilis, which to me seems like it is becoming much less common in the United States. Have you seen the same progress across the world?

DR. JILL GRIMES:

Well, you are right. Syphilis is now the least reported sexually transmittable disease in the United States with less than 10,000 cases of primary and secondary syphilis documented in 2006. If you also include latent and tertiary syphilis, the number increases to roughly 37,000, but you can see this is nowhere in the magnitude of the millions that we see with chlamydia and gonorrhea. Worldwide data showed that over 12 million cases, however, with an overall decline in syphilis in Western Europe, but there was still a significant

increase with an Independent States of the Former Soviet Union. The main emphasis with syphilis though I think is the hope for global elimination of congenital syphilis by increasing universal access to prenatal and newborn screening programs. We are very fortunate that the penicillin will still cure the vast majority of potential congenital syphilis if the mother's disease is diagnosed and treated while the baby is still in utero.

DR. JENNIFER SHU:

Regarding the non-congenital cases of syphilis, what has made the United States successful in reducing the number of cases here?

DR. JILL GRIMES:

Again, I think it's better access to care and global screening on STDs. We know that there is a link between syphilis and HIV. So, if people are tested for HIV, it is a simple test to add on to the serum to check for syphilis as well.

DR. JENNIFER SHU:

So, these are things that may be developing countries could start doing once they have better health systems in place.

DR. JILL GRIMES:

I believe so, yes.

DR. JENNIFER SHU:

Now, 1 parasitic infection that we don't always think about when considering STDs is trichomonas. What can you tell us about trichomonas?

DR. JILL GRIMES:

Well, the first thing is that we should think of it more because here in the United States, we have over 5 million cases of trich infection per year which makes it the most common non-viral STD. There is over 170 million cases annually across the globe. While trich once its diagnosed is fairly easily treated, there is a 2-fold issue with trich. The first is that it can be hard to diagnose partly because it is usually asymptomatic, in fact, no symptoms occur in 90% of men who have trich, but also partly because our tests to detect trich often has very low sensitivity. The second issue though and the more important one is that trichomonas is associated with the 3 to 5-fold increase in the transmission or acquisition of HIV disease. So, while trich itself is often more of a medical nuisance, it can predispose patients to catching an incurable disease.

DR. JENNIFER SHU:

Lets move on now to STDs that we can treat, but not cure such as viral sexually transmitted diseases likes herpes, HPV, and HIV.

DR. JILL GRIMES:

Americans were pretty surprised than shocked at the 2006 CDC Study Statistics when we realized that 1 in 4 American women aged 15 to 24 have genital herpes and so you might say how does that compare across the globe. Well, Americans are not alone with the high prevalence of herpes. More than half a billion people are infected with HSV type 2, the virus strain that causes the majority of genital herpes including nearly 24 million new cases per year. 563 million people aged 15 to 49 are infected which works out to about 16% of the people in that age range. The HSV-2 prevalence was higher among women than men and varied across different world region. Western European men have the lowest prevalence rate at 13% and women in the Sub-Saharan Africa have the highest at 70%.

DR. JENNIFER SHU:

Do you think there might be some lessons we can learn from Western Europe and how they are able to have lower prevalence rates in men?

DR. JILL GRIMES:

I am sure that there are. We don't have a lot of studies in adults, but there was a recent international team survey that reflected that condom use is much higher in Western Europe.

DR. JENNIFER SHU:

And how about human papillomavirus? You mentioned that condom use can decrease the HSV-2 transmission, but I would also imagine with how about HPV and what about new vaccines that are available that could decrease this disease?

DR. JILL GRIMES:

One of the tricky things about HPV is that it is transmitted by skin-to-skin contact and that exceeds well outside the area of the penis which is obviously the only area that's covered with the condom. So, condom use does not dramatically impact the HPV transmission. I think that it is going to be fantastic to see what the new vaccines can do. In the United States, we predict that 11,000 women will be diagnosed with invasive cervical cancer from HPV and roughly 4000 of these women will die from this disease in this year in 2008. There are over 500,000 cases of cervical cancer worldwide though and the interesting thing is that over half of those women will die from it. 80% of the deaths from cervical cancer occur in developing countries and we think that is due to lack of Pap testing and therefore lack of early detection. The vaccines target type 16 and 18 which cause 70% of cervical cancer. So, if vaccination could be expanded globally, we could potentially see enormous reduction in morbidity and mortality from this disease. Remember too that HPV not only causes virtually all cervical cancer, but is predicted to cause 90% of anal cancer, 40% of external genitalia cancer such as vulvar, vaginal, and penile, and at least 12% of oropharyngeal cancer. So, there is a hope that we would see reduction in these diseases as well. I think if you look at the success we have with the polio vaccine not only here in the United States with eliminating polio, but the World Health Organization have goals for global eradication of polio and they do this through events such as national immunization days, then they have a mop-up targeted vaccinations where cases of the wild virus are persisting. Can you imagine this, we were able to do that with the HPV vaccines and what an amazing accomplishment to see the complete eradication of the disease such as either 1 of these through vaccinations.

DR. JENNIFER SHU:

You know any time there is a new vaccine available there can be patient concerns about possible adverse reactions. Do you have any concerns about the safety of the HPV vaccine and what are some of those issues that people might be thinking about?

DR. JILL GRIMES:

Well, there was a lot of media hype about a month ago about some concerns of actually death from the HPV vaccine. Happily, we just received the 2-year-safety check on the Gardasil vaccine here in the United States and as a reminder to our listeners; the Gardasil vaccine immunizes against the 2 strains 16 and 18 that caused cervical cancer as well as the 2 strains that cause 90% of genital warts. In any rate, the safety studies were released last night and the bottom line is that the various safety monitors detected no major safety problems with the vaccine. The media hype about the potential hazards related to Gardasil were born out in these independent evaluations and very specifically there was no signal that linked Gardasil to problems such as blood clots, allergic reactions, strokes, seizure, or Guillain-Barre syndrome.

DR. JENNIFER SHU:

I would like to thank our guest, Dr. Jill Grimes. We have been discussing sexually transmitted diseases around the world.

I am Dr. Jennifer Shu. You have been listening to a special segment Focus on Global Medicine on ReachMD, The Channel For Medical Professionals. Please visit our website at www.reachmd.com., which features on-demand pod casts of our entire library. Thank you for listening.

Thank you for listening to our special series Focus on Global Medicine. As we celebrate this annual holiday season, every one at ReachMD wishes you and your family a happy holiday and a successful New Year.

Free CME on ReachMD is now easier. Link to ReachMD's free-custom application for your iPhone at reachmd.com.