Hi, I'm Deboki Chakravarti, I'm a science educator, and today we're going to talk about sexually transmitted infections.

There's a saying that goes, "There's no such thing as a new idea." And while it may seem cynical, it can feel a little true sometimes. Like when we consider that paper and pens were used by ancient Egyptians in 3000 BCE. Or that chocolate dates back to the Maya, Aztec and Toltec peoples of Mesoamerica.

Unfortunately, some less delightful things have also been around for thousands of years, and that includes sexually transmitted infections or STIs. In fact, a Chinese emperor described a disease that sounded an awful lot like gonorrhea way back in 2600 BCE.

Thankfully, we've learned a lot about STIs over the past millennia -- like the fact that they're caused by microscopic organisms like viruses and bacteria. And the fact that they're transmitted through sex, but that some can be spread through blood, and many spread from parent to child during pregnancy.

Plus, we have come up with some new ideas to deal with the age-old problem of STIs. Like antibiotics and public health interventions that have made screenings and treatments more accessible.

Today, the three most common bacterial STIs in the world -- chlamydia, gonorrhea and syphilis -- are curable. And the symptoms of viral STIs, like HIV and herpes, can be controlled better than ever.

But despite all these improvements, new STI cases in the U.S. reached an all-time high in 2019, for the sixth year in

a row.

Part of the issue is that STIs often don't show symptoms, so it's hard to know if you have one or have been exposed to one.

Consistent screenings can help spot infections, but not everyone has access to that sort of preventative care. In fact, because of social factors like racial inequality and marginalization, groups with the highest rates of STIs often have the most limited access to the resources needed to treat them -- like health insurance or proximity to a clinic. These groups include BIPOC Americans, people in rural communities and young people between 15 to 24.

Plus, the stigma around STIs can also make it harder for people to get the care they need.

Our ideas about sex and STIs are influenced by religion, politics and pop culture -- and are often riddled with misconceptions. Like the idea that you can get herpes from sitting on a public toilet seat -- which you almost certainly won't. The herpes virus, like many STIs, starts to die about 10 seconds after it's exposed to air.

Then there's the notion that STIs are shameful, or the consequence of some moral wrongdoing.

The stigma against STIs often discourages people from getting preventive care and can make people less likely to use protection.

Even health care providers can hold their own biases about STIs. Some providers have been found to judge or even fear people living with HIV. And if a patient feels judged by their doctor, they may not want to attend follow-

up appointments.

So addressing STIs means dismantling stigma, and replacing old ideas with new ones.

Better education is one way to do that. There's no perfect curriculum, but studies show that when sex ed covers medically accurate information and safe sex, it can reduce the rates of STIs and unprotected sex.

But sex ed can't just talk about anatomy and disease. It needs to cover topics like consent, too. After all, research shows that people whose early sexual experiences involved coercion or peer pressure were more likely to have an STI as adults.

So some educators have developed sex ed programs that show participants how healthy relationships work. These programs were found to be five times more likely to lower rates of STIs and unwanted pregnancies than other programs.

Education is just one part of this twisty public health puzzle, though -- access to care is still an issue even if you know everything there is to know about safe sex.

That's why the Centers for Disease Control and Prevention recommends opening express clinics for STI tests, treatments and follow-ups, especially where they would serve groups that are most affected.

Health care providers could also include STI screenings as part of routine care for adolescents and young adults. That would help identify infections and make talking about STIs less awkward.

So we've made a lot of strides in STI treatment, but the work is far from over. Today, the fight against STIs is a

fight against shame, stigma, and barriers to care. And when we address those issues by spreading information and access to care, we can all move toward a healthier future.

Thanks for watching! This video is part of a series created by Complexly and the American Public Health Association to shed a little light on the important work that public health does. To learn more, visit apha.org.

Selected sources

https://www.history.com/news/8-inventions-we-owe-to-the-ancients

https://jsstd.org/gonorrhea-historical-outlook/ https:// www.ncbi.nlm.nih.gov/pmc/articles/PMC6106780/https:// www.who.int/news-room/fact-sheets/detail/sexuallytransmitted-infections-(stis) https://www.cdc.gov/nchhstp/ newsroom/2021/2018-STI-incidence-prevalenceestimates.html https://www.cdc.gov/media/releases/2021/ p0413-stds.html https://www.healthypeople.gov/2020/ topics-objectives/topic/sexually-transmitted-diseases https://www.nytimes.com/2019/08/13/style/sti-stigmasexual-transmitted-infections.html https:// www.plannedparenthoodaction.org/planned-parenthoodadvocates-arizona/blog/std-awar eness-stigma-andsexually-transmitted-diseases https://www.thelancet.com/ journals/eclinm/article/PIIS2589-5370(21)00044-4/fulltext https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4334654/ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6410696/ https://www.acog.org/clinical/clinical-guidance/committeeopinion/articles/2016/11/comprehensiv e-sexuality-education

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2156059/https://www.npr.org/sections/health-shots/2015/05/17/407063066/sex-ed-works-better-when-it-addresses-power-in-relationshipshttps://www.ncbi.nlm.nih.gov/pmc/articles/PMC5856484/