

# Syphilis 100 years later: Another lost opportunity?

ACCORDING TO A REPORT from the US Centers for Disease Control and Prevention (CDC) on the incidence of sexually transmitted diseases (STDs), “Total combined cases of chlamydia, gonorrhea, and syphilis reported in 2015 reached the highest number ever”<sup>1</sup> since the CDC was founded in July 1946.

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Nearly 24,000 cases of primary and secondary syphilis were reported in 2015, a 19% increase from the previous year. And Dr. Jonathan Mermin, director of the CDC’s National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, reported, “We have reached a decisive moment for the nation. STD rates are rising, and many of the country’s systems for preventing STDs have eroded. We must mobilize, rebuild, and expand services—or the human and economic burden will continue to grow.”<sup>1</sup>

Dr. Mermin stressed the need to rebuild services because, “In recent years more than half of state and local STD programs have experienced budget cuts, resulting in more than 20 health department STD clinic closures in one year alone. Fewer clinics mean reduced access to STD testing and treatment for those who need these services.”<sup>1</sup>

The CDC also reports that STD treatment costs the US healthcare system nearly \$16 billion each year.

The CDC has identified several players whose engagement is necessary to stem the tide of this epidemic:

- **Providers** must make STD screening a standard part of medical care, especially in

pregnant women, and integrate STD prevention and treatment into prenatal care and other routine visits.

- **People** need to talk openly about STDs, get tested regularly, and reduce risk by using condoms or practicing mutual monogamy if sexually active.
- **Parents and providers** need to offer young people safe, effective ways to get information and services.
- **State and local health departments** should continue to direct resources to people hardest hit by the STD epidemic and work with community partners to maximize their impact.<sup>1</sup>

## STD CAMPAIGNS 100 YEARS AGO

This message sounds familiar. Let’s go back 100 years to World War I. The book *No Magic Bullet* by Allan M. Brandt<sup>2</sup> provides fascinating details about this period in America’s battle against venereal diseases. While the book is well worth reading in its entirety, I will attempt here to summarize the pertinent facts.

In the late 1910s, antivenereal campaigns were in full swing, with publicly shown movies such as “Fit to Fight” to train soldiers about STD symptoms and prevention to keep them physically healthy for fighting in the war. Similar information was widely available stateside for both men and women in open, matter-of-fact formats to encourage STD prevention.

After the war ended, the national sentiment became split between sexual revolution and social moralism. “Social hygienists” blamed the widespread increase in promiscuity on the newly introduced sexually explicit philosophy of Sigmund Freud, the widespread availability of automobiles (ie, a mobile, pri-

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vate, backseat location for sex), popular “vulgar” dances, and social feminism, among many others. The sexual revolution clearly led to an increased risk of STDs. But the antivenereal campaigns that had been appropriate in wartime came to be considered amoral and unfit for public consumption, and a period of silence about venereal diseases ensued.

By the 1930s, the situation had worsened:

- Approximately 1 out of every 10 Americans suffered from syphilis.
- Each year, Americans contracted almost half a million new syphilis infections (twice as many cases as tuberculosis, and 100 times as many cases as polio).
- 18% of all deaths from organic heart disease could be attributed to syphilis.
- Up to 20% of all mental institution inmates suffered from tertiary syphilis.
- 60,000 children were born each year with congenital syphilis.<sup>2</sup>

Although penicillin was still a decade or more away from discovery, syphilis could be treated, though likely not cured, with arsenic compounds. A course of treatment from a private physician, however, could cost from \$300 to \$1,000. Many patients who could not pay these exorbitant prices turned to public clinics for help. However, funding for the Venereal Disease Division of the Public Health Service, originally \$4 million in 1920, was cut to less than \$60,000 by 1926.<sup>2</sup> Some hospitals refused to admit patients with syphilis and other venereal diseases, deeming them “morally tainted and less deserving of care.”<sup>2</sup>

Things couldn’t get much worse.

Dr. Thomas Parran was the New York State health commissioner in 1930, at the start of the Great Depression. Realizing that arguments for moral responsibility to prevent and treat venereal diseases were not effective, Dr. Parran and other public health officials turned to financial arguments. Among the most persuasive arguments, “More than \$15 million was spent annually for the ambulatory care of venereal patients...Experts argued that syphilis costs taxpayers between \$40 and \$50 million each year for the institutional care of the insane, paralyzed, and blind.”<sup>2</sup> The American Medical Association calculated that “8 to 10 million workers lost 21 million working days each year at an average of \$4 a day as a result

of infection with these conditions.”<sup>2</sup> The cost was estimated at more than \$100,000,000 annually.<sup>2</sup>

But the general public was not a part of the larger conversation regarding treatment and prevention of syphilis, thanks to the social hygienists. In November 1934, Dr. Parran was scheduled to give a radio broadcast on future goals for public health in New York. Notified that he would not be able to mention syphilis or gonorrhea by name, he refused to give the speech. Dr. Parran went on to lead the charge to reduce the moral cloud that blocked the ability to address syphilis openly and scientifically. With his extensive experience in public health, he proposed plans that had been effective in controlling other infectious diseases as measures to control the spread of syphilis. He outlined the following:

- Identify cases of syphilis. Offer free diagnostic centers where individuals could obtain confidential blood tests.
- Offer prompt therapy for identified cases.
- Identify, locate, and test all contacts of infected patients, and treat them if they are infected too.
- Make blood testing mandatory before marriage and early in all pregnancies.
- Educate the public concerning syphilis.<sup>2</sup>

Do these approaches sound familiar?

Appointed US Surgeon General in 1936 by President Franklin Delano Roosevelt, Dr. Parran published “The next great plague to go,”<sup>3</sup> an article focusing on the medical approach to treating syphilis and other venereal diseases, while refusing to address the moral and social issues.<sup>3</sup> This was widely acclaimed by the public and the press. Two years after he was blocked from mentioning syphilis and gonorrhea on the radio, he was pictured on the cover of *Time* magazine for his groundbreaking work.

With the advent of penicillin, syphilis became not only treatable but curable. Over the next decades, the number of patients infected with syphilis and the morbidity it caused continually declined until the 1990s, when there were even whispers of eradication in the United States. This likely came in part due to the AIDS epidemic and the increased public discourse on safe sex.

However, the 1990s saw a new rise in cases

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of syphilis. This clearly could not be blamed on the social hygienists; rather, it was likely due to apathy and a decline in public health spending. We are now in a period of rapid rise in STDs.

We have the benefit of antibiotics. We have the benefit of hindsight. What we need

is to heed the call to arms of Dr. Mermin, to be inspired by the wisdom of Dr. Parran, and to act. Identify the case of syphilis, offer treatment, educate the public. Drs. Coleman, Fiahlo, and Brateanu have accomplished all of these in their article in this issue of the *Journal*.<sup>4</sup>

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