SYPHILIS OUTBREAK IN BRAHMA COUNTY

Indiana Pacesetters
(A.k.a. A Rooster, Three Hens, & a Chick)

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Introduction

From 1996 to 1999, Brahma County went from 25th to 1st in the number of syphilis cases reported nationally. Beginning in the second quarter of 1998, the number of syphilis cases, which had been increasing slowly, suddenly took a sharp upturn. Syphilis cases reported in Brahma County during 1999 represented a 160% increase over cases reported in 1998. With very little warning, Brahma County was now facing what was being called a syphilis epidemic. Local, state, and federal officials had to decide what actions to take to stop the epidemic by identifying the problem, assessing the extent of resources and their effectiveness, and utilizing the data to promote positive health outcomes.

Determining the Outbreak

Numbers for syphilis in Brahma County had reached an all-time high in 1999. Based on reports from Brahma County Health Department (BCHD), the Centers for Disease Control and Prevention (CDC) determined the numbers exceeded the norm. Once the CDC had analyzed the reports, they immediately contacted the BCHD. Through this assessment, an effort was made to determine what problems existed and how to rectify them to lower the high incidence of syphilis. At the time of the Brahma County outbreak in the state of Minorca, the CDC had no official criteria for defining an epidemic. This also meant there were no set criteria on how to eliminate syphilis.

Background

Before describing the case in detail, it is important that the problems faced by BCHD be addressed. These included funding, testing, reporting and notification, staffing, and community involvement.

Funding

It had been over 20 years since syphilis had been considered a public health problem in Brahma County and funding had been re-directed to other health programs. The reduction in funding to the BCHD reduced the scope of the operation at Camona Clinic, which handled screening and treatment of this county's residents for sexually transmitted diseases. Several conditions caused by reduced funding came together setting the stage for the epidemic:

- reduced dollars for syphilis screening, testing, and treatment;
- lack of visits by Disease Intervention Specialists (DIS) to infection control staff at health facilities and physician offices regarding syphilis, and;
- delays in partner notification, education, and risk reduction of syphilis cases by DIS.

Additional problems resulting from the reduction in funding included not reporting syphilis cases in a timely fashion and ineffective surveillance of cases.

Testing

Another contributing circumstance to the spread of the disease in Brahma County was the lack of early diagnosis and subsequent treatment. Because the diagnosis of the condition was not made in the early stages when symptoms

were presented, treatment was frequently delayed, causing possible detrimental effects to the individual or potential sex partners. Not only could treatment be delayed, some private practices would test for, but not treat syphilis, and some private practices did not notify patients of their results.

Reporting & Notification

Additional problems included not reporting syphilis cases in a timely fashion and not notifying partners. There was no enforcement of timely reporting and penalties were not assigned for late reporting by physicians. Notification is essential in stopping the spread of syphilis. BCHD and Camona Clinic depended on their DIS field workers. DIS are trained health professionals who practice sexually transmitted disease (STD) intervention at the impact point with patients, sex partners, and others suspected of having STDs. Most DIS have two major responsibilities. The first responsibility is interviewing patients with STDs; the second is to perform investigative activities to locate and refer for examination and/or treatment of people who are suspected of having STDs. Camona Clinic's problems stemmed from untimely reporting by infection control staff in health facilities and physicians regarding syphilis. This, in turn, created delays in partner notification, education, and risk reduction of syphilis cases by DIS.

Surveillance

Ineffective surveillance of cases was the next issue at hand. During 1998, the BCHD staff was not conducting effective surveillance for syphilis cases due to previously low prevalence rates. More syphilis cases were being treated in private practice throughout the county than at Camona Clinic; however, the surveillance reports, which could be mailed or phoned in from those physicians, usually arrived at Camona Clinic two weeks beyond the mandated time span of 72 hours. The clinic sent sexually transmitted disease reports to the BCHD monthly, and the Minorca State Department of Health (MSDH) and CDC received reports on a quarterly basis**.** Camona Clinic was using non-electronic means to analyze the reports. However, CDC was using electronic means to analyze the reports being sent in by the clinic. This led to CDC's determination that there was a syphilis outbreak in Brahma County prior to BCHD or the clinic being aware of the problem. In the second quarter of 1998, the number of syphilis cases began to increase**.** Camona Clinic formed a syphilis team to begin to assess the magnitude of the problem so that the number of cases could be brought under control. Screenings were started in high-risk areas.

Communities effected by the Syphilis outbreak in Brahma County

Sexually transmitted diseases, in particular syphilis, tended to be higher in communities of color across the U.S., Minorca, and even Brahma County. African Americans made up more than 80% of the primary and secondary cases of syphilis reported. In 1999, of the 416 cases reported, 362 (87%) of them were African Americans. It is important to note that these cases were mostly from three census tracts, known as hot zones. Within the African American community, males aged 30-39 were the group most affected. Important factors

contributed to the outbreak in that group including poverty, lack of access to quality health care, recreational drug use, and high-risk sexual behaviors (e.g. trading favors for sex and males having sex with males [MSM]). Another place syphilis was on the rise was in the jails, predominately in the male correctional facilities.

Taking Action

During this time, it is important to remember that there were several incidents and events taking place. Nationally, CDC was in the process of forming a syphilis elimination plan. On the local front there was a need for an assessment to improve local efforts.

An assessment of the MSDH syphilis program by CDC in 1999 was satisfactory, but CDC indicated it could be improved. Among the items suggested by CDC were to:

- Increase surveillance;
- Provide access to testing and treatment;
- Implement a jail program to diagnosis and treat syphilis cases, and;
- Identify areas as high morbidity areas to obtain financial support for staff/programs to combat syphilis.

Funding

CDC provided funding to the MSDH for a demonstration project for a national syphilis elimination program. The State then provided funding to Camona Clinic. Demographic information on the residents diagnosed with syphilis needed to be studied to determine where efforts should be emphasized. CDC recommended that the MSDH and Camona Clinic begin using electronic means to summarize the data collected on the syphilis cases. The MSDH and Camona Clinic were now able to hire additional manpower to combat the increase in syphilis cases. They were also able to obtain services of a lab to run tests on the additional blood samples they received. Computers were now utilized to study the cases.

The number of syphilis cases peaked in December 1999, though the number of syphilis cases in January 2000 was still high.

Staffing

In April 2000, CDC provided DIS to Camona Clinic. Most of the DIS were formerly employed with the MSDH or BCHD and were familiar with the county and programs already in place. BCHD County provided funding to hire additional DIS to work on syphilis elimination. This was done while CDC DIS were working in the county. As a result of increase in DIS, morale increased, more patients were seen, and work toward stopping the crisis was done at a faster pace. The veteran CDC DIS enthusiasm and motivation in turn motivated the experienced DIS of Camona Clinic.

Testing, Reporting, and Notification

Ninety percent of those diagnosed with syphilis or at risk for syphilis were interviewed within one week, most within three days. DIS provided education about treatment and also obtained names of partners to contact for testing and treatment. In-home testing to interested individuals was also offered.

A number of syphilis cases were reported from the Brahma County Jail. A meeting was held between the sheriff, the health officer of the BCHD and medical personnel who cared for inmates to coordinate efforts at the jail in diagnosing and treating syphilis cases. Manpower and funding was provided to accomplish this. Jail screenings also included chlamydia and gonorrhea.

Community Involvement

Community organizations in Brahma County had not supported syphilis elimination programs in the past. Staff from the MSHD, the BCHD and Camona Clinic began to seek participation from community organizations through collaborative efforts. Community organizations were eligible to apply for grant funding from the BCHD for syphilis control/elimination projects.

To address the problem of syphilis, the BCHD was awarded one of three national grants from the CDC to work with approximately 25 community-based organizations toward eliminating syphilis.

The Pluck Out Syphilis (POS) Coalition was formed. The coalition was formed in late 1999 to address the epidemic of syphilis occurring in Brahma County. BCHD's health officer was instrumental in bringing community groups together around the issue. Because of her extensive experience in the STD field and through effective working relationships with local, state and federal health staff, the BCHD's health officer provided the credible public health link to the community. Through the POS Coalition, community members and organizations were notified when the BCHD would be coming out to test, screen and educate residents about syphilis. The BCHD asked for participation from the various community organizations with the understanding that this was not a requirement.

The POS Coalition has four committees: faith & outreach, communications, men having sex with men, and evaluation. It also has a Woman to Woman program based in a casual setting to discuss STDs, protection and how to have conversations about STDs with their spouse/partner.

In April of 2000, the BCHD, along with the POS Coalition, formulated and launched a multidimensional media campaign to address health care access issues, education, and communication. Member organizations reached out to the community, identifying risks for contracting syphilis, and attempting to remediate the problems that were occurring in this community. Billboards, bus placards, brochures, posters, community forums, and radio ads were used through funding

from the MSHD. BCHD handled all media contacts and kept the state department of health informed.

The first wave of the campaign delivered the message that syphilis does not discriminate, and urged residents to get tested. The target audience was the residents of the three census tracks comprising the “hot zones,” which were predominantly African American neighborhoods. The second wave was broadly delivered to all races, ad those of Hispanic origin in Brahma county urging residents to get tested and treated. Feedback on message effectiveness was provided through focus groups. A professor of social work from the local university was involved in implementing this evaluation process.

Conclusion

Syphilis remains an important public health issue because of its potential for elimination as a STD, possible transmission to infants and as a risk factor for HIV infection. This case study points out that with or without the existence of a disaster plan for epidemics, stumbling blocks such as funding, testing, reporting, notification, and surveillance can hinder even the best plans and policies. And, in a crisis situation, the power of community action working in conjunction with the programs responsible for disease containment can never be underestimated.

Due to this epidemic, many contributory factors led to a successful decline in syphilis cases in Brahma County. These factors included increases in funding as well as staffing, better testing, reporting and partner notification, and collaboration between the community organizations resulting in an increase in community awareness and knowledge. It is projected with continued successful management and collaboration Brahma County should soon be downgraded from their epidemic status. CDC guidelines determined that when Brahma County has 20 or less cases of syphilis reported in a year, the outbreak will be regarded as over.