

Shanker Heights Responds to a Resurgence of Syphilis

In March 2002, a major metropolitan newspaper reported that Shanker Heights topped the national list for primary and secondary (P & S) syphilis cases in the previous year. This news came after an historic low in reported cases of P & S syphilis in 1998 motivating the Centers for Disease Control and Prevention (CDC) to inaugurate a national plan to eliminate the disease.

The Shanker Heights City Health Department was subsequently dismayed at the recent resurgence of syphilis in its community. In late summer 2001, the City Health Department identified alarming increases in reported cases of early syphilis occurring in the general population and, to a greater extent, in a sub-population of men who have sex with men (MSM). The Director of the City Health Department, concerned by recent national recognition of the syphilis outbreak, directed his staff to assess the current outbreak and develop a plan for effective intervention.

Shanker Heights was a large metropolitan city of 2 million people. In 2001, the population was comprised of 30% Hispanic, 10% African Americans, and 55% whites, including students, business professionals, service workers, and laborers. Residents enjoyed a lower than national average unemployment rate, however, many families remained below the poverty line and resided in subsidized housing projects. A significant portion of the population were multi-generational residents; with newcomers representing a diversity of cultures. Within certain, centrally located neighborhoods sexually transmitted disease (STD) rates were excessively high. This was due in large part to a preponderance of the residents engaging in behaviors such as intravenous drug use and MSMs participating in unprotected sex, which placed them at increased risk for the acquisition and transmission of STDs and Human Immunodeficiency Virus (HIV).

Political Climate

The Mayor of Shanker Heights was unhappy about the negative publicity directed toward the city. He called a meeting of top health department and city officials to find a quick solution to the embarrassing situation, namely, that his city reported the highest number of primary and secondary syphilis cases nationally in 2001.

The Mayor was also concerned about the image of the City Health Department, fearing a perception of an inappropriate allocation of federal syphilis elimination funds. The CDC was likewise perplexed due to the fact that the Shanker Heights City Health Department, along with 27 other counties and cities in the country, were given continuing federal grant funds beginning in 1998 for the express purpose of eliminating syphilis by 2003.

Scenario

Shanker Heights City Health Department Director, Mr. Paul Pox had a 20-year career in public health, the last ten in his current position. He had an authoritarian management style which did not favor well with his staff. Mr. Pox was feeling extreme pressure from the Mayor and county and state health officials to put an end to the outbreak. At the time, there were numerous accusations directed at individuals for the syphilis outbreak, and staff members were not inclined to assume responsibility for explaining reasons for the outbreak. Nor was there a cogent plan for managing the outbreak.

Cases of syphilis in Shanker Heights had skyrocketed in the MSM population. Data from the State Department of Public Health demonstrated a three-fold increase in primary and secondary syphilis cases in 2001 compared to 2000 for MSMs. Health officials were alarmed by the fact that approximately 50% of primary and secondary syphilis cases were co-infected with HIV. The presence of syphilis lesions facilitated the transmission of HIV from one partner to another. Therefore, an upsurge in new HIV infections could be anticipated. Health officials were also concerned that 70% of the syphilis cases were diagnosed in the secondary stage, approximately six months after acquisition of the disease. Individuals were not being identified in the primary stage of the disease, the most infectious stage. This was due to either a lack of recognition of the primary chancre by infected individuals or deficiencies in the manner in which health departments elicited and notified partners.

Procedures

The passive syphilis surveillance system at the Shanker Heights City Health Department had been in place for years with no concern for updating or innovation. Furthermore, upon investigation, there had been a breakdown in the follow-up of reactive syphilis serologies due to a shortage of surveillance staff and a lack of motivation. Two primary reasons were identified in the breakdown of the syphilis surveillance system:

- 1) Upon receipt of a reactive serological test result from a weekly laboratory report, surveillance staff were remiss in promptly contacting physicians to determine if the patient had been appropriately diagnosed and treated; and
- 2) Reactive bloods requiring follow-up by field staff (case workers) for treatment and/or counseling to elicit sexual partners were not assigned to field staff expeditiously - at times there had been delays of more than a month before case workers were given the investigation.

In addition to weaknesses in the core function of assessment, namely the surveillance system, deficiencies were noted in case management activities. Although case workers and nurses were well trained in the medical management of syphilis, training in the areas of case worker/client interaction, counseling/interview techniques, and sex partner elicitation and referral were desperately needed. Poor intervention outcomes as a result of deficient counseling skills contributed significantly to the increasing syphilis case numbers in Shanker Heights. Syphilis case management consisted of case workers (counselors) asking a series of detailed questions pertaining to the client's behavioral risks followed by an elicitation of information pertaining to exposed sexual partners. The case worker explained to the client the necessity of having his/her partners examined and treated in order to interrupt the spread of the disease and prevent medical complications should the partner be infected. However, if the client produced no sex partner information, the counselors were at a loss as to how to convince or motivate the client to participate in partner referral. Upon review of primary and secondary syphilis cases, more than 50 % had no initiated sexual partners and another 20 % had no

infected partners identified.

Counseling the MSM population was difficult. Often, they were unwilling to acknowledge their own risk and were unable or unwilling to provide partner information. The interview process itself was labor intensive requiring that caseworkers contact infected clients, arrange a confidential meeting place for counseling, and conduct field notifications for initiated sexual partners. Other barriers to effective case management, besides deficient counseling skills, included counselor homophobia and overtaxed caseworkers. Case overloads were caused by unfilled vacancies; an inability to re-assign caseworkers to areas of the city with the greatest syphilis morbidity due to union rules; and the need for caseworkers to assume other activities, such as clerical tasks.

After a thorough investigation of the STD program, Mr. Pox determined that the syphilis outbreak had multiple causes. These included: surveillance system inadequacies; caseworker counseling skill deficiencies; staffing shortages; lack of knowledge on the part of infected populations regarding the signs and symptoms of the disease; and failure of individuals at high risk for acquiring syphilis to acknowledge their risks and employ safe sex practices.

Mr. Pox conducted a news release in the major daily metropolitan newspapers and two smaller weekly papers targeted primarily toward the MSM population. The news release described the outbreak and the affected population, delineated the signs and symptoms of the disease, and provided a list of Shanker Heights STD clinics, their locations and hours of operation. Mr. Pox also sent a letter to physicians alerting them of the outbreak and requesting their cooperation in promptly reporting infected individuals to the health department for follow-up.

Meanwhile, in response to the alarming numbers of syphilis cases in Shanker Heights, the state health department had alerted the CDC. The CDC responded in mid-February by dispatching an emergency response team to the Shanker Heights City Health Department for one month. The team consisted of a surveillance expert, a community specialist, two case manager specialists and two team leaders. The team identified weaknesses in the surveillance system and provided recommendations for improvement. The team also scheduled caseworker training sessions aimed at enhancing counseling skills; provided guidance on case analysis; and recommended collaboration with community groups who were working with affected populations.

After completion of its assessment, the CDC provided Mr. Pox with the following written recommendations:

- Hiring an additional 10 case workers and training of current and new case workers to enable them to interview clients more effectively and overcome the obstacles they face in obtaining sexual partner information.
- Health promotion directed towards the high risk MSM population - focusing on signs and symptoms of syphilis, safe sex practices, and screening in venues identified as contributors to the outbreak.
- Hiring and training an additional five surveillance specialists to manage reported reactive laboratory test results for sexually transmitted diseases enabling the surveillance program to contact providers within 48 hours of receiving reactive test results to ascertain diagnosis and treatment status and referring cases as

necessary for follow-up to case managers within 24 hours of initiation.

- Surveillance staff visits to laboratories that report reactive blood test results for syphilis recommending telephonic reporting to Shanker Heights City Health Department to expedite follow-up.
- Collaboration with community based organizations providing services to MSMs to identify and implement additional strategies to curtail the current syphilis outbreak.

The suggestions of the CDC led Mr. Pox to the conclusion that the core functions of assessment and assurance must be improved within the STD program. He also realized that funding to implement the CDC recommendations, specifically for additional surveillance and case management staff and training, presented a formidable challenge. Facing the possibility of further media attention, a lack of funding and increasing case numbers, Mr. Pox resolved to lobby the county and state health departments for financial and technical assistance.

Questions

1. What outreach strategies could the Shanker Heights City Health Department implement to educate the high risk groups?
2. What role could the media play in changing the perspective of the public on sexually transmitted diseases?
3. Identify the challenge involving sex partner elicitation encountered by case workers conducting client interviews.
4. What types of training and resources would result in more positive and productive outcomes from client/case worker interviews?
5. How did the political leaders and public health officials respond to the outbreak?
6. What other interventions could the Shanker Heights City Health Department implement to resolve the syphilis outbreak?
7. What assessment standards could be developed to avert future outbreaks?