



Syphilis Outbreak in Japan, an Emerging Concern

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Dear Editor,

Syphilis is a sexually transmitted disease (STD), caused by *Treponema pallidum*. It is known for its invasiveness and ability to defy the immune system, which may result in a wide range of clinical signs.¹ Although, this is a curable disease with treatment, due to lack of awareness, screening and education, this disease is still causing high mortality worldwide. Yearly, approximately 6 million new cases are coming worldwide in the persons aged 15 to 49 years.² Syphilis may also be passed from mother to child during pregnancy or delivery.

Japan is now experiencing a severe syphilis epidemic, with a record number of cases reported in 2021. According to the Japan's National Institute of Infectious Diseases, as of October 23, 2022, 10 141 cases of STD had been documented in Japan that year, making it the first year that infections surpassed 10 000 using existing data collection techniques.³ This is a significant increase over previous years, emphasizing the critical need for public health actions to tackle the disease. When it comes to the number of diseases recorded by prefecture, Tokyo has the most with 2880 as of October 23, 2022, followed by Osaka with 1366, Aichi with 573, and Hokkaido with 443. This demonstrates that the outbreak is affecting the whole country.³ According to Japan's National Institute of Infectious Diseases, the number of Syphilis patients are 5164 in 2023. (Reported on May 14, 2023)⁴

It is critical to emphasize that one of the challenges in preventing the spread of syphilis is that some people with the disease may not display any symptoms or may have symptoms that disappear quickly. Furthermore, symptoms may mimic the symptoms of other illnesses.⁵ As a result, individuals may unintentionally spread the disease. Furthermore, those who have syphilis while pregnant have a higher risk of stillbirths and miscarriages, emphasizing the need for early detection and treatment. Congenital syphilis is known to cause a variety of health issues, including skin rashes, bone deformities, and hearing loss. If left untreated, this may result in severe physical and cognitive disabilities, as well as death. As a result, it is critical that pregnant women be tested for syphilis on a regular basis and that healthcare providers exercise caution while diagnosing and treating the infection in pregnant women.⁶ Untreated syphilis may cause serious health problems such as brain, heart, and organ damage, as well as an increased risk of

contracting other STDs such as HIV. Furthermore, untreated syphilis may have major long-term implications, including damage to the nervous system, cardiovascular system, and brain. As a result, it is critical for those who suspect they have been exposed to syphilis or have symptoms of the disease to seek medical attention as soon as possible.⁷

Since 2013, there has been a steady rise in syphilis cases in Japan. This is most likely due to a combination of factors, including increased casual sexual activity, decreased condom uses and increasing kissing. An official with Tokyo Metropolitan Infectious Disease Surveillance said "One of the major causes is thought to be an increase in opportunities for sexual encounters."⁸ While it is permitted to hire a companion in Japan,^{9,10} sexual encounters are prohibited with the rented partner, but in this case, a strong surveillance is needed.

Screening and education are very important preventive measures against STDs such as syphilis. "Safe Sex" concept and practice should be taught in the Japanese schools and colleges. Social media platforms could be used for spreading awareness. Also, screening and follow-up are important. All sexually active individuals should go through a mandatory STD screening procedure. This program can be conducted at high school level, college level, community level. A database can be created where health care workers can upload their data. Also, early tracing and treatment are important. Government policymakers should provide strict guidelines on "Rented Partners" and "Dating Apps." The registered people should upload their STD screening reports regularly. Surveillance at the red light areas are also very important. Government should provide adequate amount of testing kits and medications in the hospitals where the case loads are high. Syphilis and other STD testing should be a part of a normal prenatal screening panel. If the mother is positive to syphilis, then proper care should be taken as per guidelines. Researchers are working to develop an effective vaccine against syphilis.¹¹ For STDs, early detection, followed by strategic interventions are important.¹² So, global support for this research is essential. Vaccines will significantly reduce the wild wide burden of these STDs.

Increasing public awareness and education about syphilis, as well as increasing access to testing and treatment are crucial. It is also crucial to identify at-risk individuals and implementation of effective treatments.



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