EDITORIAL

Sexually Transmitted Infections Surveillance in Pakistan

Sharaf Ali Shah,[1] Arshad Altaf[2]

Sexually transmitted infections (STIs) are transferred from person to person by unsafe sexual contact. Some STIs can also be transmitted through transfusion of unscreened blood during pregnancy, childbirth, and breastfeeding.[1] Untreated STIs can lead to serious health consequences, including human immunodeficiency virus (HIV) and infertility, and can complicate pregnancy.[1]

The World Health Organization (WHO) estimates that more than one million infections are transmitted every day worldwide, and the majority of them are asymptomatic.[2] Every year, approximately 400 million new STI infections are detected, including the four treatable STIs, each of which is curable. These are chlamydia, gonorrhoea, syphilis, and trichomoniasis.[2] A significant proportion of people between 15-49 years age are estimated to have herpes simplex virus (HSV or herpes) infection of the genital area.[3] STIs can also lead to lifelong stigma.[2] Hepatitis B virus (HBV) can also be transmitted through unsafe sexual contact and lead to cirrhosis and hepatocellular carcinoma.[2]

According to a WHO estimate, in 2016, about 1 million new STIs were acquired every day for the common treatable STIs (chlamydia, gonorrhoea, syphilis, and trichomoniasis), and 90% of the infections occurred in low-and middle-income countries (LMICs).[4]

There is a dearth of reliable data for STIs in Pakistan because of a non-existent STI surveillance system, even though syphilis, gonorrhoea, and HIV are notifiable diseases.[5] Jamshed et al., in their scoping review, commented that routine cervical screening and the option of laboratory diagnosis for a common woman in Pakistan have been unsatisfactory for decades.[6] STI patients in Pakistan mostly consult dermatologists, gynaecologists, urologists, infectious diseases specialists, general practitioners, and Outpatient Department (OPD) medical officers working in public sector health facilities. The majority of STI care providers in Pakistan do not document and report STI cases. Diagnostic tests for most STIs are either unavailable or very expensive. Therefore, asymptomatic STI cases remain undiagnosed and untreated. A significant number of STI patients consult the informal sector for STI diagnosis and treatment.[7]

Small-scale STI prevalence studies conducted among high-risk and low-risk populations suggest a high prevalence of STIs in the country. A study in Punjab province of Pakistan investigated prevalence of common STIs among transgender persons (TGs) between 2019-2021. The serological result records of 1562 TGs were reviewed out of which syphilis was recorded among 324 (20.7%), HBV 26 (1.7%) and HIV 69 (4.4%). HIV infected TGs were co-infected syphilis (63.2%).[8] A cross sectional study among STI patients was done from 2006-2009 in a hospital in Pakistan. Out of 1532 study participants, males were 1276 (83.3%) and 256 (16.7%) were women. Syphilis was reported among 452 (29.5%), gonorrhea 200 (13%), chlamydia 72 (4.7%), herpes simplex-2 among 49 (3.2%) and chancroid 20 (1.3%).[9]

It is notable to mention that five national rounds of Integrated Behavioural and Biological Surveillance (IBBS) conducted in the country from 2004 to 2016 provide a comprehensive picture regarding the prevalence of HIV among key populations and epidemiological trends over time. The results of the last IBBS survey conducted in 26 major cities of Pakistan among people who inject drugs (PWIDs), transgender sex (TGs), men who have sex with men (MSM) and female sex workers (FSWs) suggest a concentrated HIV epidemic in the country. The highest prevalence of HIV was found among PWIDs 38.4%, followed by hijra (TGs) 7.1%, MSWs 5.4% and FSWs 2.2%.[10]

To successfully address the high prevalence of STIs in Pakistan, a comprehensive and integrated STI surveillance system is required to accurately assess the burden of STIs, identify vulnerable population groups which are at most risk, determine antimicrobial resistance in STI pathogens, and assess specific etiologies of STI syndrome to update treatment guidelines. Considering resource constraints, and weaknesses in health delivery system in the country, multiple surveillance strategies can be suggested. Surveillance strategies include STI case reporting on a syndromic and etiologic basis, Periodic STI prevalence studies in high-risk and low-risk populations (pregnant women), studies to assess specific etiologies of STI syndromes and studies to determine antimicrobial susceptibility of STI pathogens. This can easily be built on

[1]Bridge Consultants Foundation, Karachi, Pakistan, [2]Independent Consultant, Karachi, Pakistan

Correspondence: Sharaf Ali Shah Email: drsharafshah@yahoo.com

existing infrastructure. Chaudary et al studied the prevalence and acceptability of STI screening among pregnant women in routine antenatal care. When explained the importance of STI screening along with its safety, all 1001 women agreed to undergo the procedure.[11]

At the global level, WHO recommends setting up a research agenda for STIs, developing vaccines and diagnostic tests and newer drugs for treatment of gonorrhoea and syphilis. At the national level, WHO advises countries to develop national strategies and guidelines, increase integration of STI services within primary healthcare, scale up availability of condoms and its use, create an environment to discuss STIs, adopt safe sex practices and seek treatment.[2]

DOI: https://doi.org/10.47391/JPMA.24-80

References

1. World Health Organization. Health topics: sexually transmitted infections 2023 [Cited on 25 Nov 2023]. Available from: https://www.who.int/health-topics/sexually-transmitted-infections#tab=tab_1.
2. World Health Organization. STIs Factsheet 2023 [Cited on 25 November 2023]. Available from: https://www.who.int/news-room/fact-sheets/detail/sexually-transmitted-infections-(stis).
3. C. James, Harfouche M., Welton N. J., Turner K. M., Abu-Raddad L. J., Gottlieb S. L., et al. Herpes simplex virus: global infection prevalence and incidence estimates, 2016. Bull World Health Organ. 2020;98:315-29.
4. World Health Organization. Accelerating the global Sexually Transmitted Infections response: report on the first informal Think-Tank meeting. Geneva.; 2021.
5. Regulation and Coordination Ministry of National Health Services, Pakistan. Notifiable Priority Diseases. In: MNHSRC, editor. Islamabad2017.
6. B. Jamshed, Javed M., Zaki S., Khalid H., Idrak S., Naseem N. Challenges in screening of sexually transmitted viral infections of the female genital tract: Where do we stand? - A scoping review. J Pak Med Assoc. 2022;72:940-6.
7. S. A. Shah, Kristensen S., Memon M. A., White H. L., Vermund S. H. Syndromic management training for non-formal care providers in Pakistan improves quality of care for sexually transmitted diseases STD care: a randomized clinical trial. Southeast Asian J Trop Med Public Health. 2007;38:737-48.
8. H. Javed, Bano A., Fatima W., Khan R., Akhtar A. Sexually transmitted infections and associated risk factors among the transgender population of Pakistan. BMC Infect Dis. 2023;23:618.
9. M. A. Maan, Hussain F., Iqbal J., Akhtar S. J. Sexually transmitted infections in Pakistan. Ann Saudi Med. 2011;31:263-9.
10. National AIDS Control Program. Integrated Biological & Behavioral Surveillance (IBBS) in Pakistan. 2017.
11. A. E. Chaudry, Chaudhri R., Kayani A., Hayes L. W., Bristow C. C., Javaid K., et al. Acceptability and feasibility of screening pregnant women for sexually transmitted infections in Rawalpindi, Pakistan. Int J STD AIDS. 2021;32:940-5.