



Guest Editorial

Sexually transmitted infections among adolescents: An emerging issue

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India has seen an increase in the incidence of sexually transmitted infections (STI) in recent times. This increase is remarkably evident in adolescents, who comprise approximately 20% of the Indian population (Shashikumar et al., 2012). According to the Nation Youth Policy of India, the population belonging to the age group 13-19 years constitutes the adolescent population. Adolescents have an increased risk of contracting sexually transmitted infections (STIs) from both biological and behavioral standpoints. Behaviourally, the prefrontal cortex, responsible for executive functioning, is yet to fully develop in adolescents. It can cause behavioral disinhibition, making them more prone to engage in high-risk sexual behavior like multiple partners or sex without using the

barrier method (Steinberg, 2015; Workowski, 2015).

Moreover, unlike adults, adolescents hesitate to access and use sexual health services (Workowski, 2015). While biologically, adolescent women are especially susceptible to STIs like Chlamydia trachomatis (CT) and Human Papilloma Virus (HPV) due to lower cervical mucus production and high prevalence of cervical ectropion in this age group (Workowski, 2015). Male/ female ratio imbalance, growing urbanization, low literacy rates, poverty, and lack of comprehensive health education have also contributed to increased risk of exposure and lower diagnosis and treatment rates in the adolescent age group, making them a vulnerable section of the population (Shannon and Klausner, 2018). Data on STIs in adolescents is rather limited, even with high prevalence and morbidity. Most literature and guidelines focus on the adult sub-population (Shannon and Klausner, 2018). According to Newman L. et al. (2015), World Health Organization (WHO) in 2012 estimated approximately 357 million new cases of four curable STIs, namely chlamydia, gonorrhea, trichomoniasis and syphilis globally in the age group of 15-49 years. While

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as per the 2016 sexually transmitted disease (STD) surveillance report, Chlamydia trachomatis (CT) and Neisseria gonorrhoeae (NG) are more common among adolescents as compared to any other age group. Primary and secondary syphilis infections have also shown an increasing trend (Workowski, 2015). The prevalence of HPV (types 6 & 11 are responsible for 90% of genital warts, and types 16 & 18 are responsible for 70% of cervical cancer cases) has improved after the HPV vaccine introduction in 2006 (Markowitz, 2016). Herpes simplex virus (HSV), human immunodeficiency virus (HIV), and Hepatitis B virus infections also pose a great burden of morbidity in the young population due to unsafe sexual practices. Though some STIs are easy to treat, a few others are not. HIV/AIDS and HSV are incurable, with HIV/AIDS being the most serious and fatal. Emerging antibiotic resistance is also a concern for infections like gonorrhea and chancroid (Chugh and Gaiind, 2012).

High-risk behaviors such as having multiple sexual partners, exposure to commercial sex workers, live-in relationships, alcohol consumption, and illicit drug use at a young age have also placed adolescents at high risk of contracting STIs (Sharma and Viswakarma, 2020). Prevention efforts hold critical importance in adolescents, as sexual habits are developing. These efforts should combine traditional sources of information such as schools and parents and newer promising sources, such as social media campaigns for the targeted audiences promoting STI testing and safe sex behavior (Friedman et al., 2016). HPV vaccination remains critical for both boys and girls, and broader vaccination coverage is needed to decrease HPV-related cancer and associated morbidities. The development of effective vaccines for other STIs should be further worked upon. Rapid point-of-care diagnostic testing for STIs should be implemented to screen and treat

patients on the same day for better adherence to treatment and reduction in loss to follow-up. Affordable rapid diagnostic tests might be of great value in low and middle-income countries like India, where common STIs like CT and NG are managed through a symptom-based syndromic approach, which many times are missed due to asymptomatic nature of these infections. Das et al. have concluded, after surveying adolescent girls, that regular surveys on knowledge, sexual attitudes, and behaviors should be conducted to get a better understanding of the epidemic of STIs among adolescents (Das et al., 2010). Maintenance of adequate confidentiality and a non-judgemental attitude by healthcare providers will help alleviate the young population's apprehension in seeking healthcare. Lastly, a confidential sexual history, including all past high-risk sexual exposures and STI screening, should be included in the routine healthcare for adolescents. The latest guidelines for educating, preventing, screening, diagnosing, and managing STIs in this vulnerable age group should be used and adhered to.

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References

- Chugh, T.D. and Gaiind, R. (2012). Sexually transmitted infections. Clinics in laboratory medicine, 32(2), pp.143-158.
- Das, P., Pal, R. and Pal, S. (2010). Awareness on psychosomatic health among adolescent girls of three schools in north Kolkata. Indian journal of psychiatry, 52(4), p.355.
- Friedman, A.L., Kachur, R.E., Noar, S.M. and McFarlane, M. (2016). Health communication and social marketing campaigns for sexually transmitted disease prevention and control. Sexually transmitted diseases, 43, pp.S83-S101.
- Markowitz, L.E., Liu, G., Hariri, S., Steinau, M., Dunne, E.F. and Unger, E.R. (2016). Prevalence of

HPV after introduction of the vaccination program in the United States. *Pediatrics*, 137(3).

Newman, L., Rowley, J., Vander Hoorn, S., Wijesooriya, N.S., Unemo, M., Low, N., Stevens, G., Gottlieb, S., Kiarie, J. and Temmerman, M. (2015). Global estimates of the prevalence and incidence of four curable sexually transmitted infections in 2012 based on systematic review and global reporting. *PloS one*, 10(12), p.e0143304.

Shannon, C.L. and Klausner, J.D. (2018). The growing epidemic of sexually transmitted infections in adolescents: a neglected population. *Current opinion in pediatrics*, 30(1), p.137.

Sharma, S.K. and Vishwakarma, D. (2020). Transitions in adolescent boys and young Men's

high-risk sexual behaviour in India. *BMC Public Health*, 20(1), pp.1-14.

Shashikumar, R., Das, R.C., Prabhu, H.R.A., Srivastava, K., Bhat, P.S., Prakash, J. and Seema, P. (2012). A cross-sectional study of factors associated with adolescent sexual activity. *Indian Journal of Psychiatry*, 54(2), pp.138-143.

Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends in cognitive sciences*, 9(2), pp.69-74.

Workowski, K.A. (2015). Centers for Disease Control and Prevention sexually transmitted diseases treatment guidelines. *Clinical Infectious Diseases*, 61(suppl_8), pp.S759-S762.