Prevalence of HIV among pregnant women in Jalandhar district of Punjab

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ABSTRACT

Background: Estimating the HIV seroprevalence in a low-risk population such as pregnant women provide essential information for monitoring trend of HIV in the general population and assist in prevention from mother-to-child transmission.

Aim and Objectives: To assess and compare the prevalence of HIV among pregnant women during the past 5 years in Jalandhar dist. of Punjab (2016–2021).

Materials and Methods: All pregnant women coming to Antenatal Clinic in urban and rural areas, in Government health institutions were tested for HIV as a mandatory procedure, to prevent transmission of HIV from mother to child. The results of these tests were taken from HIMS reports of rural and urban health institutions in Jalandhar district, from local health authority for the past 5 years (2016–2021), after taking permission from Institutional Ethics Committee. Comparison of year-wise positivity was done after statistical analysis. It was a retrospective cross-sectional study of rural and urban population.

Results: The data shows that HIV prevalence among pregnant women in Jalandhar District for the past 5 years shows a decreasing trend. Prevalence which was 0.17% in 2016–2017 was reduced to 0.11% in 2020–2021.

Conclusion: Prevalence of HIV among pregnant women has shown a decreasing trend in Jalandhar district during the past 5 years (2016–2021).

KEY WORDS: Human Immunodeficiency Virus; Pregnant Women; Prevalence; Punjab

INTRODUCTION

India has a large population of HIV-infected individuals with prevalence ranging from high in states such as Tamil Nadu, Andhra Pradesh, Telangana, and Karnataka to low to mid prevalence in other states.[1] Mother-to-child transmission of HIV is the most common cause of transmission of HIV in children. As per UNAIDS percentage of pregnant women living with HIV who were taking antiretroviral therapy for preventing mother-to-child transmission of HIV has increased from <5% in 2005 to 14% in 2008, and the number of pregnant women needing antiretroviral treatment is estimated to be around 35,000 in 2015.[2,3] Thus, estimating the prevalence of HIV in pregnant women would aid in developing and prioritizing prevention of parent-to-child transmission of HIV (PPTCT) programs, and hence this study.

Aims and Objectives

To assess and compare the prevalence of HIV among Pregnant Women during the past 5 years in the Jalandhar district of Punjab (2016–2021).

MATERIALS AND METHODS

All pregnant women coming to Antenatal Clinic in urban and rural areas, in Government health institutions were tested for...
HIV as a mandatory procedure, to prevent transmission of HIV from mother to child. The results of these tests were taken from HIMS reports of rural and urban health institutions in Jalandhar district, from local health authority for the past 5 years (2016–2021). Permission from Institutional Ethics Committee was taken before proceeding further. Comparison of year-wise positivity was done after statistical analysis. It was a retrospective cross-sectional study of rural and urban populations.

**RESULTS**

Table 1 shows that in the year 2016–2017, out of total prevalence of 0.17% HIV cases per hundred pregnant women examined, 0.14% were in rural areas and 0.20% in urban area. During 2017–2018, out of total prevalence of 0.10% HIV cases per hundred pregnant women tested, 0.07% were from rural area and 0.13% were in urban area. During 2018–2019, out of total prevalence of 0.09% HIV cases per hundred pregnant women tested, 0.06% were from rural area and 0.12% were in urban area. During 2019–2020, out of total prevalence of 0.12% HIV cases per hundred pregnant women tested, 0.10% were from rural area and 0.15% were in urban area. During 2020–2021, out of total prevalence of 0.11% HIV cases per hundred pregnant women tested, 0.11% were from rural area and 0.15% were in urban area.

The bar chart [Figure 1] clearly shows that year-wise prevalence is more in urban area as compared to rural area probably due to less surveillance and testing in rural areas than in urban areas.

**DISCUSSION**

The total prevalence of HIV cases among pregnant women for 5 years from 2016 to 2021 was 0.12% out of which rural were 0.11% and urban were 0.12%.

In the study by Nayak et al.\textsuperscript{[4]} out of 1600 pregnant women, eight found to be HIV-positive with seroprevalence rate of 0.5%. Our study shows a decreasing trend in the prevalence of HIV among pregnant woman during the past 5 years (2016–2021) which is consistent with the findings of Anupama et al.\textsuperscript{[5]} in which seroprevalence of HIV was 0.9% in 2013 decreased to 0.7% in 2017.

**CONCLUSION**

The prevalence of HIV among pregnant women has shown a decreasing trend in Jalandhar Distt. during the past 5 years (2016–2021). However, surveillance of HIV is constantly needed among pregnant women to ensure that epidemic remains under control and repeat testing may also pick up newly infected patients with effective counseling, education, and awareness about HIV, prevalence among HIV infection among pregnant women can be controlled and with PPTCT mother-to-child transmission of HIV can be further decreased.

**REFERENCES**


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