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Research Article

**INCIDENCE OF HIV IN LOW RISK POPULATION - RATE OF
VERTICAL TRANSMISSION AND ANTENATAL WOMEN IN
JINNAH HOSPITAL LAHORE**¹Momina Malik, ²Noor Ehsan, ³Mahreen Saeed¹Allama Iqbal Medical College Lahore, mnm.1611@gmail.com²Ehsan Ur Rehman, Allama Iqbal Medical college Lahore, Email: noor.ehsan2@gmail.com³Allama Iqbal Medical college Lahore, mahreen.saeed151@gmail.com**Article Received:** December 2019 **Accepted:** January 2020 **Published:** February 2020**Abstract:**

Background- There is a need of the evaluation of infected population through HIV as the prevalence of HIV is increasing day by day. Due to the infected pregnant women this infection inherit in neonates and thus the rate of vertical transmission is also increasing through antenatal women so this all needs thorough evaluation.

Objective- the main objective of this study is to diagnose the pregnant women coming in the tertiary health care center to determine the incidence of HIV and to observe the rate of vertical transmission in infected patients.

Material and Methods- The present study was carried out in the tertiary health care center of Jinnah hospital Lahore.

Results- out of 1000 delivery cases only 3.9 were found to be infected from HIV. 59% of the pregnant women took the complete care, in urban women the prevalence of HIV was 70% and 30% was in rural women. Around half of the infected women was belong to the age group of 21 to 25 years and 96% of them were infected through sexual transmission. In 65 patients the rate of CD4 was more than 350 and it was less than 350 for the 11 patients. In 76 patients around 35 patients had the normal vaginal delivery and in them 11% neonates were infected through the HIV and the 41 patients who were undergone the LCSC had 2% rate of vertical transmission.

Conclusion- it is required that all the pregnant women should undergo for the screening of HIV so that timely treatment can make possible and the rate of vertical transmission can be reduced.

Keywords: CD4 count, HAART, HIV

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INTRODUCTION:

One of the significant causes of morbidity and mortality is the HIV infection in antenatal and the related results in neonates. The adverse outcome in newly born babies are perinatal death, premature delivery cases, the low weight of neonates, and spontaneous abortion. This infection can also prove very dangerous to life and it can be transmitted vertically. Moreover, this study is used to enlighten the requirement that all the pregnant women should undergo for the screening of HIV so that timely treatment can make possible and the rate of vertical transmission can be reduced.

Aims and Objective:

- To diagnose the pregnant women coming in the tertiary health care center to determine the incidence of HIV and to observe the rate of vertical transmission in infected patients
- To initiate the treatment in early stages of pregnancy to reduce the prevalence in neonates

- To determine the rate of vertical transmission

METHODS AND MATERIALS:

In this study all the patient were selected who came for the antenatal care in tertiary health care center. These all selected patients were put in the screening of HIV in their first visit and repeatedly test was done in third visit. Patients who had positive results were subjected to HAART and CD4 count. At the time of labor 200mg of Nevirapine dose was given to patients. Neonates were given the dose in first 72hours of Nevirapine of 2mg/kg. The test of neonates was done in 6 weeks and 6 months and none of the neonate was breastfed.

RESULTS AND DISCUSSION:

0.39% was found prevalence of HIV in tertiary health care center. 59% of the pregnant women took the complete care, in urban women the prevalence of HIV was 70% and 30% was in rural women.

Table 1: Age distribution of women

Age	18 to 20 years	21 to 25 years	26 to 30 years	Greater than 30 years
Number	10	38	19	9
Percentage	13%	50%	25%	12%

Around half of the infected women that is 50% was belong to the age group of 21 to 25 years so it can be observed that the major women who got infection in the age of 22 to 25 years and the mean age is 22.2years.

Table 2: Mode of transmission

Mode of transmission	Sexual	Blood transmission
Number	73	3
Percentage	96%	4%

From this study it was found that 96% of them were infected through sexual transmission and according to another study 86% of HIV incidence was through sexual contacts.

Table 3 : Parity

Parity	0	1	2	3
Number	50	20	5	1
Parity	66%	26%	6.7%	1.3%

According to this, 66% of them were nulliparous.

In 65 patients the rate of CD4 was more than 350 and CD4 count was less than 350 for the 11 patients. Irrespective of the CD4 count HAART should initiate from the second trimester to onwards.

Table 5: Mode of delivery and neonatal HIV prevalence.

Mode of delivery	Normal delivery		LSCS	
	Neonate positive	Neonate negative	Neonate positive	Neonate negative
Number	4	31	1	40
Percentage	11%	89%	2%	98%

Out of 1000 delivery cases only 3.9 were found to be infected from HIV. In 76 patients around 35 patients had the normal vaginal delivery and in them 11% neonates were infected through the HIV and the 41 patients who were undergone the LCSC had 2% rate of vertical transmission.

CONCLUSION:

It can be observed that the major women who got infection in the age of 22 to 25 years and the mean age is 22.2years. Irrespective of the CD4 count HAART should initiate from the second trimester to onwards. HIV sexual transmission is very common in Urban comparatively in rural. It is required that all the pregnant women should undergo for the screening of HIV so that timely treatment can make possible and the rate of vertical transmission can be reduced. The adverse outcome in newly born babies are perinatal death, premature delivery cases, the low weight of neonates, and spontaneous abortion. This infection can also prove very dangerous to life and it can be transmitted vertically.

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