

ORIGINAL RESEARCH PAPER

TO STUDY THE IMPACT OF NEW MULTIDRUG HIV REGIMEN ON PREVENTION OF PARENT TO CHILD TRANSMISSION AND ITS FETAL AND MATERNAL OUTCOME

Gynaecology

KEY WORDS: ART, Infant, CD4

Dr. Ani Chandanan

MBBS,MS Gynae & Obstetrics Ex. Senior resident G.S.V.M. Medical college,Kanpur (U.P.)

Dr. Neetu Singh

MBBS ,MS Gynae & Obstetrics Ex. Asso. Prof. G.S.V.M. Medical college,Kapur (U.P.) Asso. Prof. RMLIMS ,Lucknow (U.P.)

ABSTRACT

- Aims & Objective: Councelling & HIV testing to all pregnant females and provide HIV screening test to all pregnant females. Follow-up of HIV exposed infants and early infant diagnosis.
- Material & Method: This study was conducted from Jan 2013 to Sep 2015 at department of Obstetrics and gynaecology, GSVM Medical college , Kanpur. This is a prospective observational study. Total 7150 pregnant mothers screened.
- **Results and conclusion :** All pregnant and breast feeding women living with HIV must be provided with life long triple drug ART regardless of CD4 count and WHO clinical for both their health and reduce mother to child transmission to achieve Global target of "elimination of new HIV infections among children.

INTRODUCTION:

Human immunodeficiency virus infection and acquired immunodeficiency syndrome (HIV / AIIDS) is a spectrum of condition caused by infection with human immunodeficiency virus (HIV)^[1]. HIV is found in the body fluid of infected patient , which include semen , vaginal and anal fluids , blood and breast milk ^[2].It is fragile virus and does not survive outside the body for long.HIV cannot be transmitted through sweat or urine[3]. The initial period following the contraction of HIV is called acute HIV ,primary HIV or acute retroviral syndrome^[4,5].

India has an estimated 2.1 million people living with $HIV(2012)^{[6]}$. HIV prevalance among adult population in India has consistently declined from 0.4% to 0.27%(2011). Mother to child transmission of HIV is the primary route of transmission for HIV among children . Without any intervention the global risk of HIV from infected pregnant women to her children is estimated around 20-45%. Use of ART/ NVP reduces transmission to 10%. Multiple drug ARV regimen are now recommended and started early pregnancy. This regimen have potential to decrease HIV transmission from mother to child less than 5%. Global target of "elimination of new HIV infections among children" by 2015.

AIMS & OBJECTIVE:

Councelling & HIV testing to all pregnant females and provide HIV screening test to all pregnant females. Detection of HIV positive pregnancy .Linking HIV infected pregnant women to care ,support and treatment services. Follow infant feeding practices .Follow-up of HIV exposed infants and early infant diagnosis .

MATERIAL & METHOD:

- This study was conducted from Jan 2013 to Sep 2015 at department of Obstetrics and gynaecology, GSVM Medical college ,Kanpur. This is a prospective observational study. Total 7150 pregnant mothers screened. All HIV positive pregnant women linked to case support and treatment services
- Initiating new multidrug ART. TLE(Tenofovir 300 mg+Lamivudine(3TC)300 mg +Efavirenz 600 mg) at any gestational age .(if there is no prior exposure to NNRTIs(NVP/EFV)
- Counselling for birth planning and institutional deliveries.
- Provide syrup Nevirapine for newborn infant from birth till 6
 weeks of age.From 6 weeks to 18 weeks ,CPT was initiated
 and was linked to EID programme.

Inclusion criteria: All HIV infected pregnant women (if there is no prior exposure to NNRTIs (NVP/EFV) at any gestational age)

Exclusion criteria : Those who had previous exposure to NVP prophylaxis in previous pregnancy or NNRTI-based ART regimen such as TDF 3TC EFV .

RESULT & OSERVATION:

TABLE-1

	Total no of HIV positive (ANC)		Indoor testing	HIV indoor	
13.312	39	.54%	7150	5	.069%

PREVELANCE OF HIV POSITIVITY AMONG ANC AT OUR CENTRE IS .21%. PREVELANCE DOCUMENTED IN INDIA IS .27% (2011)

TABLE-2 DEMOGRAPHIC PROFILE OF HIV POSITIVE PREGNANT FEMALES

AGE	NUMBER	%
20-25	21	47.72
26-31	15	34.09
31-36	4	9
GRAVIDITY		
Primi	11	25
G2-G3	28	63.63
>G3	4	9
Occupation	39	100
Education		
Illiterate	15	34.09
<5 class	15	34.09
5-12	8	18.18
>12	6	13.63

TABLE-3: HUSBANDS PROFILE:

HUzSBAND STATUS	NUMBER	%
Positive	38	97.4
Negative	5	12.8
Occupation		
Labour	25	64.1
Government job	3	7.6
Private job	11	28.3
Education		
Illiterate	13	34.21
<5 class	7	18.4
5-12 class	12	31.5
Graduation and above	8	21.21

TABLE-4 ROUTE OF TRANSMISSION

ROL	JTE OF TRANSMISSION	NUMBER	%
	Sexual route	34	77.27
	Blood transfusion	2	4.5

TABLE-5 CD-4 COUNTS

NUMBER	CD4 COUNTS	%
25	>350	56.81
18	<350	40

TABLE-6 INTRAPARTUM MANAGEMENT

MODE OF DELIVERY	NUMBER	%
Normal delivery	36	81.81
Cesarian section	7	15.90
Total delivery	41	
Intrapartum ART	5	11.3
Safe delivery techniques in all	41	100

TABLE-7

FEEDING	NUMBER	%
Exclusive breast feeding	30	68.18
Top feeding	13	29.94

TABLE-8

ART REGIMEN

Tenofovir (TDF) (300 mg) Lamivudine (3TC)(300mg) Efavirez (EFV)(600 mg)

(If there is no prior exposure to NNRTIs (NVP/ EFV) at any gestational age.

ANTEPARTUM	39	88.63
INTRAPARTUM	5	11.36

TABLE-9 SIDE EFFECT OF ART

CLINICAL FEATURE	NO OF PATIENTS	%
Nausea	З	6.8
Vomiting	2	4.5
Gi disturbance	З	6.8
Oliguria	-	-
Hypersensitivity	-	-
Hallucination	-	-
Night mares	-	-
Lipodystrophy	-	-
Hyperlipidemia	-	-

CONCLUSION:

All pregnant and breast feeding women living with HIV must be provided with life long triple drug ART regardless of CD4 count and WHO clinical for both their health and reduce mother to child transmission to achieve Global target of "elimination of new HIV infections among children".

REFERENCES:

- Desai M ,lyer G , Dikshit RK , Atiretroviral drugs: critical issue and recent advances, Indian J Pharmacol 2012;44(3):288-98.

 Lundgren JD ,Mocroft A , Gatell JM et al . A clinically prognostic scoring system for patients receiving highly active anti retroviral therapy : results from the EuroSIDA study.J.Infect. Dis. 2002;185(2):178187.
- Egger M ,May M ,Chene G et al .Prognosis of HIV -1 infected patients starting highly active antiretroviral therapy : a collaborative analysis of prospective studies. 3. Lancet 2002;360(9327):119-29.
- Mellors JW ,Munoz A, Giorgi JV et al : Plasma viral load and CD4 lymphocytes as prognostic marker of HIV-1 infection.Ann. Intern. Med. 1997;126(12):946-54. 4.
- MacLennan CA, Liu MK, White SA et al: Diagnostic accuracy study. BMJ 2007; 335
- UNAIDS global report 2013 and NACO HIV estimated 2012.