

## Prevalence of HIV Infection in Neonates Born to Infected Mothers in Federal Teaching Hospital Gombe, Gombe

Tarfa MP\*

Federal Teaching Hospital Gombe, Pcr Laboratory, Gombe, Gombe State, Nigeria

### \*Corresponding author:

Mustaphar P. Tarfa,  
Federal Teaching Hospital Gombe, Pcr  
Laboratory, Gombe, Gombe State,  
Nigeria, Tel: 08065707152;  
E-mail: tarfampeter@gmail.com

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### 1. Short Commentary

Mother to child transmission continues to be a significant problem in Nigeria, despite the intervention by the government. It is a known fact that, there are thousands of children born to infected mothers every day in the world. This is to determine the prevalence of HIV infection among Neonates born to infected mothers in Federal Teaching Hospital, Gombe (FTHG). This is a hospital based study with the use of already generated data known as retrospective study. The gold standard method of HIV testing of neonate was adopted and used for this study (HIV qualitative DNA and RNA PCR using Cobas Ampliprep/ Taqman 96 analyzer). Retrospective is a type of study that does not require the use of questionnaire. 103 of 3252 infants were PCR positive given an overall prevalence of 3.1% which is high compared with 2.5% in Kano. This study concluded that antiretroviral prophylaxis in mothers and babies has contributed greatly to the reduction in MTCT rate. This study recommends awareness on strict adherence to the use of antiretroviral drug and feeding mode as given by W.H.O.

The intervention to prevent transmission of HIV is called Prevention of mother to child transmission (PMTCT). The principle on which PMTCT is built is based on providing life-long antiretroviral drug to all pregnant and breastfeeding women irrespective of their CD4 cell count or clinical stage of the infection especially during the transmission risk period. This study shows that there is an overall transmission rate of 3.1% of HIV infection in Gombe which is slightly high when compared with a study in Kano and

Cote d'Ivoire but can be said to reduce when compared to a study in Ibadan. The intervention can be said to be effective in this study although not 100% according to WHO that says with intervention the prevalence rate can be reduce to 2% and where there is no intervention can be as high as 45%.

### 2. Conclusion

It remains unclear why some infants become infected while others do not despite significant exposure to HIV in Utero, during delivery and while breastfeeding. The prevalence of MTCT of HIV in this study can be prevented if compliance, adherence and more awareness of PMTCT intervention are improved.

The DBS DNA PCR assay for HIV is invaluable in early diagnosis of HIV in babies born to infected mothers, as seen in the study that the age testing matters and most babies that are positive are between the age of 6months to one year.

Antiretroviral prophylaxis in mothers and babies gave a great reduction in MTCT rate.

Exclusive breast feeding conferred a superior protection against Mother to child transmission, but the fact that mothers are counseled on infant feeding yet we cannot be too sure if mixed feeding has not been taken place among the cohorts on Exclusive breast milk due to stigmatization and social pressure from relatives and breadwinner which are contending factors that may pressurize a woman to mix feed her baby and this increases the risk of HIV transmission.

### 3. Recommendation

The following recommendations are proffered on the basis of the finding and conclusion.

1. In early 2015, it is said that Etisalat rolled out SMS messages to its subscribers about PMTCT and where people could seek HIV services. It is hoped that large scale communication like this will encourage women to come forward for testing to prevent their babies from being infected with HIV.
2. The government should create awareness and health education on women coming for antenatal and the use of health facility for delivery in order to take measure precaution when giving birth without infecting their babies through social media.
3. This study recommends also awareness on strict adherence to the use of antiretroviral drug and mode of feeding as given by WHO.
4. Government should create awareness on free antiretroviral drugs they are given through radios, television to enable the society have access to the drug easily.
5. Non- Governmental Organization should fully come to the aid of the community in regard to Prevention of HIV.
6. Government should pass a law to prohibit vaginal delivery for all known HIV pregnant women.

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