

## Prevention of HIV infection in children: Challenges of PMTCT in Nigeria

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The sub-Saharan Africa is most affected with the burden of HIV. It accounts for more than 90% of the global burden.<sup>1</sup> The Current sero-prevalence rate in Nigeria is 4.6%<sup>1,2</sup> and 9.7% in Nnamdi Azikiwe University Teaching Hospital, Nnewi and uptake rate of 96.8%<sup>3</sup> vertical transmission accounts for over 90% of transmission and this has posed a major challenge to prevention of mother to child transmission (PMTCT).

The components of PMTCT include prevention of infection in women of the reproductive age, prevention of unintended pregnancy in HIV positive women, prevention of HIV infection in infants of HIV positive women and Provision of care and support for infected mothers and children.<sup>1</sup> It is imperative to note that multi-disciplinary approach is important as the components cut across Paediatrics, Obstetrics and gynaecology, Social care/support, adult medicine etc.

More of PMTCT services should be provided at the rural health care levels that serve a major proportion of the population in Africa. Much of these services are rendered at the secondary and tertiary levels that may not be accessible to rural population due to financial reason or poor road network. Since the exposed children are to be followed up for a period, it may not be feasible for the rural population to assess the care in a remote centre. Safe delivery practices require proper integration in deliveries conducted in the rural areas by the traditional birth assistants. The integration of maternal newborn health and PMTCT at the rural level is important.

More challenges are found in the infant feeding options. This represents a major challenge to the preventive measures.<sup>1</sup> The options are infant formulas and breast feeding for a period of three to six months with abrupt cessation and commencement of cereal based feed. These interventions mitigate against the benefits of exclusive breast-feeding for both the child and family. A major proportion of mothers who opt for infant formula cannot afford it as there is no steady supply of free infant formula in most centres. Some resort to mixed feeding which is a major risk factor in post natal transmission of the virus. The dangers of malnutrition and diarrhoea become imminent once a good feeding option is not adopted. It is important to note that these two diseases are the major causes of under-five mortality in the tropics. Whatever the option adopted it must be affordable, feasible, available, safe and

sustainable to the mother and child. Moreover, it is important to avoid the burn out syndrome that may arise in such poor families that channel and exhaust all their meagre resources towards one child. Feeding with infant formula confers more protection than breast feeding. WHO recent adoption of breast feeding for 12 months in developing nations is another option provided the mother is on Highly Active Anti-retroviral Therapy (HAART) throughout the breast-feeding period.<sup>4</sup> This provides an option for the poorer nations who may not have access to infants' formula and its requirements. Whatever the choice opted for, an informed counselling is crucial in helping mothers overcome the difficulties of initiating and maintaining the option. Social care visits are necessary for these mothers.

Infant diagnosis represents another major challenge in terms of its distribution in our health facilities. Polymerase chain reaction which is the pivot of infant diagnosis<sup>2</sup> is only available in major tertiary health centres and rarely in secondary centres. Most specimens are sent to such centres for diagnosis. Transportation and communication thus, are major factors. Much pressure to meet with these burden thus, become prevalent in the tertiary centres.

More awareness has to be created at the private sector and rural areas on the benefits of anti-retroviral prophylaxis for the exposed infants. The majority of the deliveries occur outside the hospital settings with these infants not benefitting from these interventions.

Numerous multi-national agencies are involved in the PMTCT programmes having their parallel interventions with little if any collaboration with each other. Little appear to be done on Orphaned and vulnerable children who require long term social support. Though religious institutions have their specific programmes, more interventions are required, especially in the areas of home based care.

In conclusion, PMTCT plays a crucial role in the control of burden of vertical transmission. It is important to strengthen the existing components of the programme at all levels of care in the tropics.

### REFERENCES

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