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MAKING COMMUNITY AND CLINIC-BASED PMTCT SERVICES MORE ACCESSIBLE: THE ROLE OF A COMMUNITY HEALTH INSURANCE SCHEME: A NIGERIAN COTTAGE HOSPITAL EXPERIENCE

EHIGIEGBA, A. E.°; ADIBE, N. C.*; EKOTT, M°; FAKUNLE, B°. AND FAJOLA, A°.

ABSTRACT

In 2010, Shell Nigeria working in collaboration with River State Government of Nigeria, a CBO, (Shell Industrial Area Community Development Foundation), and an HMO, Health Care International, launched the first Community Health Insurance Scheme (CHIS) in the Niger Delta. The preferred provider, Obio Cottage Hospital (OCH) located in Port Harcourt and owned by the government, had earlier been rehabilitated by SPDC in preparation for the scheme take off. The annual premium payable is about $46.25. Indigenes of the community, who are the primary target of the initiative, pay 50% of that – subsidy funds provided by SPDC to the community. CHIS is a Health Systems Strengthening (HSS) programme which objective is to increase community access to affordable quality assured health care. The focus is on maternal and child health. Prior to CHIS, the Obstetric service in the facility was rudimentary, with few deliveries, supervised by Community Midwives and a part-time Medical Officer.Within a few months of the commencement of the scheme, service utilization quadrupled with average deliveries jumping from below 20 to about 180 per month. PMTCT, Family Planning services, Immunization and Cervical and Breast Cancer Screening programmes are all included in the scheme benefit package. We present the results of the evaluation of the PMTCT program between Jan 1, 2011 and Dec.31, 2011. The laboratory and obstetric data of the clients who registered for the PMTCT programme during the period under review were collated and analyzed.

All the 2839 Clients accepted the VCT at the first ANC visit and were tested. 88 (3.1%) were HIV positive. The nulliparous ladies (about 36% percentage of the study population) constituted over 60% (55/89) of the HIV positive group. The 25-29yr age group had the highest number (39.3%), followed by the 30-34 age group (29.2%). 37 babies have been delivered and of these, only one baby (2.7%) tested positive to the virus.The role of the CHIS in encouraging pregnant women to book early for ANC, exposing them to VCT opportunities, enhancing compliance and the utilization of the PMTCT program is discussed. A sustainable health financing scheme like Obio CHIS, established all over the Nigerian Communities will benefit more urban and rural dwellers that are presently left out of the massive Federal Govt. PMTCT initiatives, which tend to be concentrated at the big tertiary hospitals in the urban cities.

INTRODUCTION

HIV/AIDS is the worst health crisis the world is facing and is regarded as a serious public health issue.[1]. In 2010, Nigeria had about 3,000,000 persons living with HIV/AIDS.[2] There were 370,000 new paediatric infections in sub Saharan Africa in 2009, and over 90% of infection in children is reported to have been acquired through Mother- to –Child Transmission (MTCT)[1]. Each year around 75,000 babies in Nigeria are born with HIV.[3] It is estimated that 360,000 children are living with HIV in this country, most of who became infected from their mothers. This has increased from 220,000 in 2007.[4]

Mother to Child infection transmission can occur during pregnancy, labour and delivery or breast feeding. The World Health Organization and many countries in both the developing and developed world have spent a huge amount of their resources in the prevention of this mode of transmission. The importance of this investment is borne out of the Sentinel survey data which indicate that HIV prevalence among pregnant women attending ante-natal clinics (ANC) had increased from 1.8% in 1991 to 4.4% in 2005, with about 210,000 pregnant women living with HIV/AIDS in 2010[5]. Nigeria's programme to prevent the transmission of HIV from mother to child (PMTCT) started in 2001 in six tertiary health facilities.[6] Despite efforts to strengthen PMTCT interventions, by 2007 only 5.3 percent of HIV positive women were receiving antiretroviral drugs to reduce the risk of mother-to-child transmission. This figure had risen to almost 22 percent by 2009, but still remained far short of universal access targets which aim for 80 percent coverage.[6]

The risk of MTCT can be reduced to less than 2% by interventions that include antiretroviral medications (ARVs), either as prophylaxis or treatment, given to women in pregnancy, labour and breastfeeding and also the infant receiving ARV prophylaxis[3]. This is in addition to other important clinical measures in obstetric/midwifery procedures which are usually observed in other to achieve PMTCT. These include procedures such as delaying artificial rupture of fetal membranes, avoiding instrumental deliveries, episiotomies and external cephalic version, etc. However, most PMTCT programmes in Nigeria tend to be concentrated at the big cities and in tertiary health institutions. Rural and semi-urban dwellers tend to be left out.

THE COMMUNITY HEALTH INSURANCE SCHEME (CHIS)

In 2010, Shell Nigeria working in collaboration with River State Government of Nigeria, a CBO, (Shell Industrial Area Community Development Foundation), and Health Care International - a Health Maintenance Organization (HMO), launched the first Community Health Insurance Scheme (CHIS) in the Niger Delta. The preferred provider, Obio Cottage Hospital (OCH) located in Port Harcourt and owned by the government then as a Primary Health Centre, had earlier been rehabilitated and upgraded by Shell Nigeria in preparation for the scheme take off. The annual premium payable is about $46.25. Indigenes of the community, who are the primary target of the initiative, pay 50% of that – subsidy funds provided by Shell Nigeria to the community.

KEY WORDS:

* *Counseling Department, Obio Cottage Hospital, Port Harcourt.*
°*Community Health Department, SPDC, Port Harcourt*

Corresponding Author:
Ehigiegba, A. E.
Department of Obstetrics and gynaecology University of Benin
Department of Obstetrics and gynaecology University of Calabar
Ehigiegba@hotmail.com; A. Ehigiegba@shell.com.

CHIS is a HSS programme which objective is to increase community access to affordable quality assured health care. The focus is on maternal and child health. Prior to CHIS, the Obstetric service in the facility was rudimentary, with few deliveries, supervised by Community Midwives and a part-time Medical Officer. Within a few months of the scheme, service utilization more than quadrupled with average deliveries jumping from below 20 to about 120 per month.

PMTCT, Family Planning services, Immunization, Cervical and Breast Cancer Screening programmes are all included in the scheme benefit package. The PMTCT programme includes Pre - test Counseling, HIV testing and Post – test counseling all at the first Antenatal visit. Thereafter, the HIV positive mothers are introduced to PMTCT prophylaxis.

Follow–up counseling for the positive mothers continued thereafter and the women are monitored so that mothers that are compliant with the PMTCT programme and those that are not are easily identified.

OBJECTIVE OF STUDY

This study was undertaken to assess the implementation of the PMTCT programme at a semi-urban cottage hospital in Rivers State, Nigeria, with active community participation through the active utilization of the Community Health Insurance Scheme.

METHODOLOGY:

The medical details (antenatal and laboratory) of all pregnant women who registered for ANC between Jan. 1, 2011 and December 31st 2011 were assessed. Those who tested positive for the HIV virus had their pregnancy and neonatal details further scrutinized to assess the age, parity and acceptance/compliance with the prescribed medications. The pregnancy outcome and result of the 6week infant assessment of the HIV status were also noted.

RESULTS

During the period under review, 2839 ANC clients consented to group counseling and individual testing. Group counseling made for group compliance; thus none of the clients refused doing the test but were eager to know their status.

Of the 2839 ladies, 88 clients (3.1%) tested positive. Of these, 78 accepted the PMTCT programme, with the active participation of the Support Group, (Fig I) All the 37 babies delivered to the positive group have been screened and only 1 tested positive. The mother of this positive baby defaulted in her AVR treatment before her pregnancy because her Pastor had prayed and convinced her she was cured. She recommenced her AVR four years later and at 25th week of this pregnancy. Although she had her ANC at OCH, she was delivered at the State Hospital. The baby was said to have had the usual prophylaxis.

Of the 10 clients who defaulted, 7 had moved out of Port Harcourt, 3 were convinced by their Pastors that they have been cured while one of these claimed she tested negative somewhere else.

The clients who were having their first pregnancy constituted 62% of the HIV positive group (Table 1). The percentage of the pregnant population with same parity was 36.

The women whose age ranged 25 – 29 constituted the highest number (39.3%) among those with HIV infection. (Fig.2). In terms of their occupational status, women who gave their occupation as house wives represented 30.3%, followed by the Hair Stylists (22.5%) while the Public servants and Tailors were lowest with 15.7 and 12.4% respectively. (Fig 3)

FIG 1: PMTCT UPTAKE AND NEONATAL OUTCOME

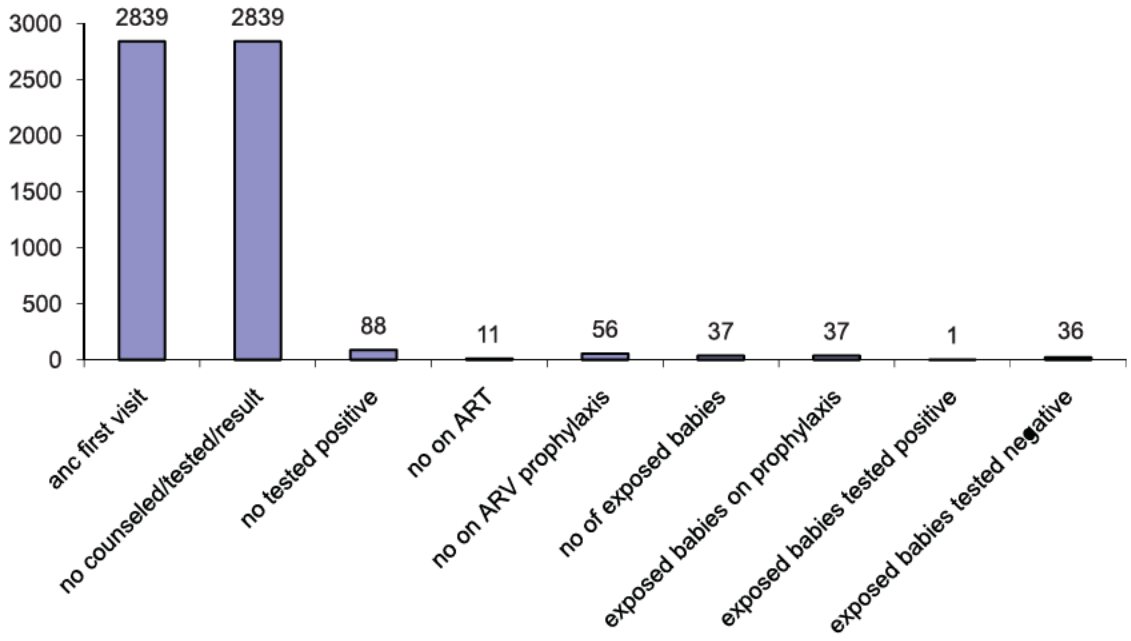


TABLE 1: PARITY DISTRIBUTION IN HIV POSITIVE AND NEGATIVE MOTHERS

PARITY	HIV -VE MOTHERS (%)	HIV +VE MOTHERS	^{2} (P Value)
0	1022 (94.9)	55 (4.1)	10.08 (0.001)*
1	681 (97.4)	18 (2.6)	0.37 (0.543)
2	568 (98.3)	10 (1.7)	2.89 (0.089)
3	273 (98.9)	3 (1.1)	3.37 (0.067)
4	409 (99.8)	1 (0.2)	10.57 (0.001)*
5 and Above	114 (99.1)	1 (0.9)	1.78 (0.182)
Total	**2839 (97.0)**	**88 (3.0)**	

*Significant

FIG 2 : AGE RANGE OF HIV POSITVE MOTHERS IN OCH (MARCH 2011 - JANUARY 2012)

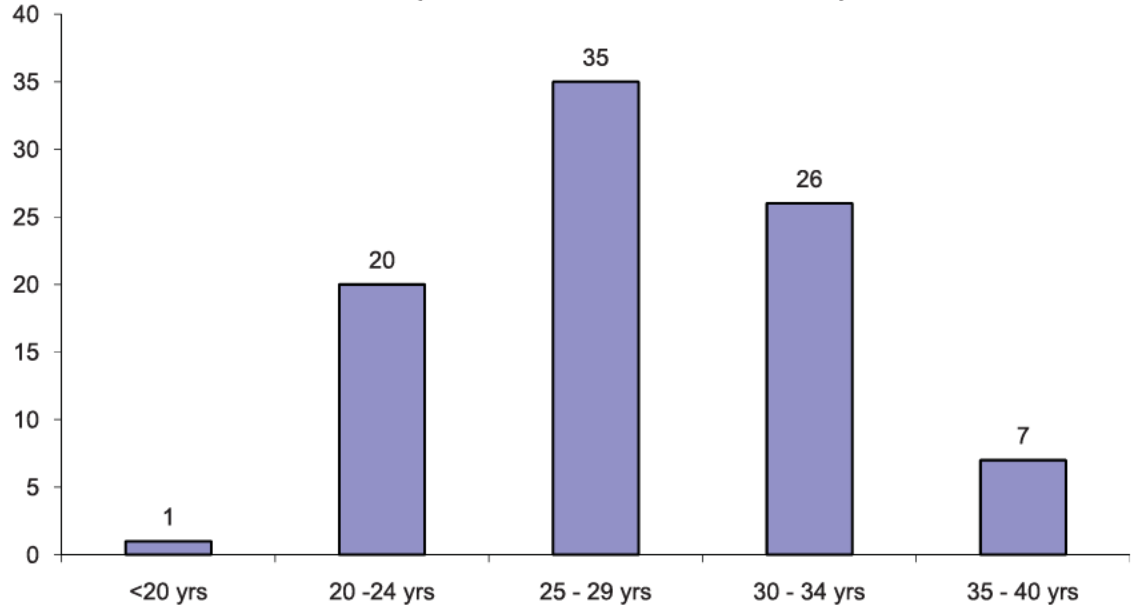
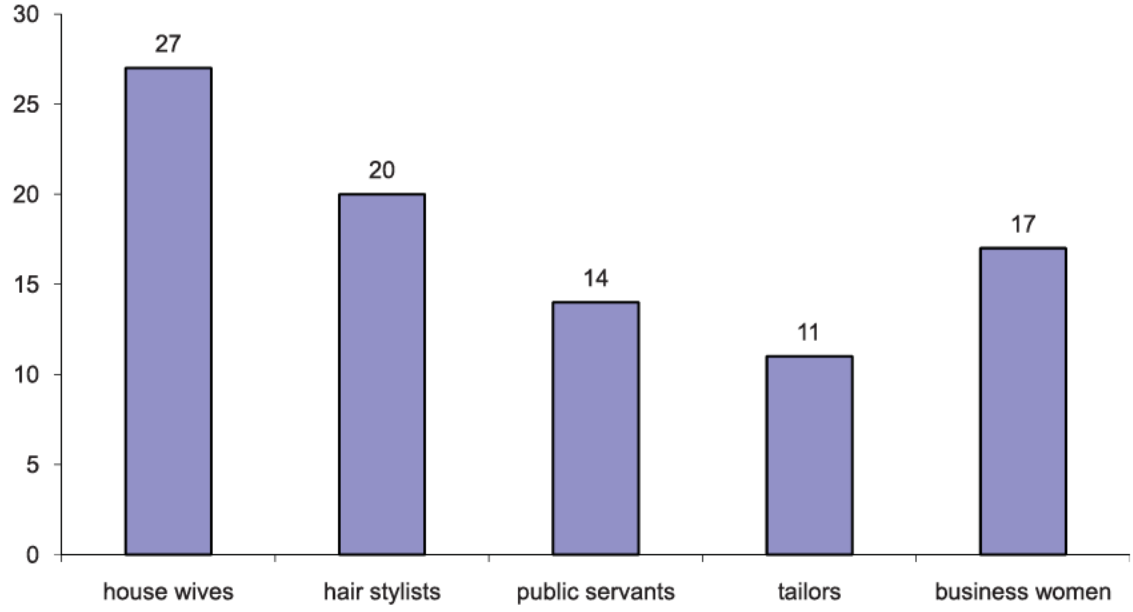


FIG 3: OCCUPATION OF HIV POSITIVE MOTHERS (MARCH 2011 - JANUARY 2012)



DISCUSSION

Nigeria has the second highest number of HIV infections in sub-Saharan Africa, with an estimated 3.5 million Persons Living with HIV & AIDS (PLHA).[4.]

The incidence of HIV among the pregnant ladies at this centre was 3.1%. This is lower than the National HIV prevalence of 4.4% among pregnant mothers, and the Rivers state HIV prevalence of 6.0 %.[4.] From Fig 2, it can be observed that the women under the age bracket of 25 – 29 years had the highest number of HIV infection. (p=0.001). Conversely, those with 4 or more babies had a significantly low number of HIV positive figures. This significant finding is similar to the result of Sagay et al, who reported that women aged 20-29 years had more than 4-fold increased risk of HIV.[7] Similarly, nulliparous ladies constituted more than 60% of these women. This is probably a reflection of the fact that these are younger mothers in the above age group.

The intervention of serious partners (Shell Petroleum Development Company and FHI), coupled with the engagement of dedicated staff transformed what was initially a primary health centre into a busy cottage hospital. Of course the local community authority and the State Government retained their stake in the new setup and were the main 'owners'. In Rwanda, increased community involvement made the proportion of male partners tested for HIV during prenatal care with their pregnant wife increase from 46 to 100% in a Health Center between 2007 and 2010.[8..] One of the key lessons learnt from the UNICEF Rwanda project was that partnerships with local authorities and local organizations are critical in ensuring that communities fully participate in the planning process and support the implementation of the PMTCT program[13]. This is the situation in the reported series.

The introduction of a novel Community Health Insurance scheme, laced with the package of PMTCT, Immunization and cervical and breast cancer awareness increased the utilization of the facilities. The introduction of these 'Health Systems Strengthening activities' had been suggested by the WHO as a means of sustaining the PMTCT program.[8.] The overall driving force for the improved utilization of the PMTCT services in this centre is the availability of these other services, a fact recognized by Ekoevi et al[9.] Poor access to Antiretroviral Therapy (ART) is a major problem in tackling the menace of the disease, especially in the rural setting in Nigeria and is further compounded by poor community participation in the provision of HIV/AIDS care and support [10]. Thus the setting of this series with a well coordinated health package of Family Planning, Mother and Child care support (immunization, cancer screening, etc) made for a good utilization of the services and better access to ART was guaranteed by the partnership of Shell Nigeria and Family Health International. Almost 90% of the HIV positive mothers in this series had free access to PMTCT, compared with the national figure of 21.6%[11.] It is therefore not unexpected that the Mother to Child Transmission in this series will be very good, about 2%, compared with the national figure of 29.1%[11].

It must be emphasized that the driving forces for these near excellent results are the Community Health Insurance Scheme, run with active community participation, a well funded PMTCT programme which is a part of a PPP (Public, Private, People) health package and dedicated care

providers. This sustainable health self-financing scheme, if established in many communities in Nigerian will transform health care delivery in the rural communities

CONCLUSION

This novel community experiment with reported good results in terms of compliance with the PMTCT programme and community acceptance because of the Community Health Insurance Scheme can be replicated in most communities in rural or semi-urban Nigeria.

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