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Provider Initiated HIV Testing During Antenatal Care and Labour – Knowledge and Acceptability of Patients in a Nigeria Teaching Hospital

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Abstract: Aim: This study aimed at accessing the knowledge and acceptance of women receiving Antenatal care (ANC) at the Jos University Teaching Hospital (JUTH) to the concept of Provider Initiated HIV Testing and Counselling (PITC) during antenatal care and in Labour, as a departure from e Client Initiated Counseling and Testing(CICT) or Voluntary Counseling and Testing(VCT). Issues /Background: Nigeria has a huge Prevention of Mother to Child Transmission (PMTCT) gap and strategies need to change to identify and prevent new infections. Since voluntary HIV testing in ANC settings still has a low yield, it is necessary for health workers to initiate HIV testing and expand testing to women in labour and those that delivered. The study was aimed at assessing clients' acceptability of PITC. Methods: A structured questionnaire was administered to 170 women attending antenatal clinic in JUTH to evaluate their views about PITC. Findings were analyzed with the Epi Info Statistical Package. Results: The age range was 17-46 years, 52.9% were Christians and 47.1% were Moslems; 35.5% were housewives and 24.7% were students. One lady was single, 169 (99.4%) were married. Some 41.8% had tertiary education, 29.4% had secondary; others had primary and informal education. Pregnant women constituted 92.4% while 7.6% were post-natal. About 94.7% were aware of HCT and 87.1% had done the test. Some 93.5% affirmed benefits and 96.5% supported testing. Regarding PITC in labour, 87.9% felt it was beneficial if women had not tested before, others felt she should be left because of pains. About 74.1% indicated babies could benefit from preventive intervention if mothers tested positive in labour, 19.4% didn't know and 6.5% said the baby could not be helped. Husbands of 98.1% had approved their testing, but three (1.9%) were disallowed. About 90% felt women that previously tested negative should be retested,5% felt that it was unnecessary and 4.1% didn't know while 68.5% felt test should be discouraged regards causing marital disharmony. A total of 168 (98.5%) encouraged the test while 2 (1.5%) said they discourage people from taking the test. PITC should not be offered women faithful to spouse while 94.1% felt the test should be offered to people who don't look ill while 3.6% felt it shouldn't. Conclusion: Awareness of HIV screening in pregnancy and labour is high among our antenatal population, but not all accept HCT. There is need for continuing health education regarding PITC , male involvement and couple counseling.

Keywords: PITC, Antenatal, Labour, PMTCT, Opt Out, HIV Test

1. Introduction

In Sub Saharan Africa, about 2.9 million children were estimated living with HIV /AIDS in 2012 and about 260,000 children were newly infected with more than 90% occurring through mother-to-child transmission (MTCT) [1]. In the absence of interventions, rates of MTCT ranges from 25% to 40% but with effective interventions, HIV MTCT rates have been successfully reduced to below 2%[2-4] but Nigeria still records high pediatric HIV transmission rates [2, 5, 6].

Reductions in MTCT has been attributed to expansion of antiretroviral therapy (ART) and PMTCT services , and simplification of effective PMTCT regimens outlined in the 2013 World Health Organization (WHO) guidelines [7]. The prospect of eliminating pediatric HIV is closer than ever [8].

However gaps abound in our PMTCT Programs and in 2012, Nigeria had ARV coverage of 17%, a MTCT rate (including breastfeeding) of 30% and nearly 60 000 new HIV infections among children, which is the highest incidence in a single country globally [9].

In 2011, the Joint United Nations Programme on HIV/AIDS (UNAIDS) had announced the "Countdown to Zero" initiative, which aimed at eliminating pediatric HIV infection by 2015 [10] but PMTCT services remains suboptimal and just 62% of HIV-infected pregnant women received ARVs to reduce MTCT [11, 12]and an estimated 240,000 infants were born with HIV in 2013 [13, 14].

As the HIV epidemic continues to grow, women are increasingly and disproportionately affected and HIV prevalence among women now exceeds half of the total prevalence in many countries.[15] If women are to take advantage of all the available PMTCT measures to reduce transmission, they need to know their HIV status through HIV counseling and testing (HCT). HCT is the gate way of PMTCT and it is only when HIV infected women have been identified that efforts at interventions are available to reduce mother to child transmission.[16]Pregnancy-related services, including antenatal, delivery and postpartum services, constitute an important entry point for HIV testing.[15]

HCT is recognized as a public health priority and cost-effective preventive measure, particularly in high prevalence communities. It is a means to destigmatize HIV and enhances the capacity of health systems to deliver appropriate services. HCT of pregnant women also promotes testing among the non-pregnant and can contribute to preventing HIV-positive women from becoming pregnant[17]

HCT is an integral part of HIV/AIDS services consisting of Pre-test counseling which assesses risk levels, and helps clients prepare for the test and anticipate results. It prevents vertical and horizontal spread of HIV, allows positive persons access medical care and live positively without infecting others. The National Agency for the Control of AIDS (NACA) is using all strategies to increase access to HCT. The Provider Initiative HIV testing and counseling (PITC) strategy is being introduced to most government funded hospitals to ensure that all patients that come in to health facility have access to HCT services at no cost.[18]

Models of HCT have evolved in response to changes characteristics of the epidemic as well as access of clients to Voluntary Counseling and testing which in most cases waits for the client to present for HIV Counseling and testing. However considering HIV prevalence among Antenatal groups, new HIV infections and Nigeria's PMTCT burden, it became imperative that strategies had to be changed to improve the uptake of HIV testing among pregnant women in our ANC settings. This among others is what is informing the Provider Initiated Testing and counseling and this would be offered both at ANC as well as during labour and delivery.

The National Demographic Health Survey of 2013 still indicates there are gaps in HCT access and uptake in Nigeria. On the overall, 60 percent of women and 71 percent of men know where they can get an HIV test, one in four women have been tested for HIV and received the result of the last test,. 70% women and 78% of men have never been tested for HIV. Among women and men tested for HIV in the past 12 months, only 10 percent each received their test results. Coverage ranged from 4% in the NorthWest to 17% in the South South among women while less than 1 percent of men know their status. This is therefore a call for PITC for persons who have cause to access the health facility.[19]

Global policy statements until recently promoted only client-initiated VCT within and outside of health care settings, insisting on the three Cs of consent, counseling and confidentiality.[20] but many now claim this an insufficient approach to HIV testing and practitioners have called for approaches to scaling up HIV testing in health care settings that would make HIV testing more 'routine'.[21]

PITC refers to HIV testing and counseling which is routinely recommended by health care providers to persons attending health care facilities as a standard component of medical care.[1] especially in areas of high HIV prevalence. PITC is distinct from CITC model—often referred to as voluntary counseling and testing (VCT)—in which individuals seek HIV testing and counseling services on their own initiative. PITC may include both opt-in and opt-out approaches. but the pre- and post-test counseling in PITC is often briefer than in CITC, and pre-test counseling in PITC focuses on importance of testing and informed consent rather than individual risk assessment. In all cases, HIV testing remains voluntary and is never mandatory. In 2007, WHO issued guidelines recommending that countries and organizations adopt PITC to increase HIV testing rates. The health and human rights of pregnant women must be a primary consideration in how HIV testing is implemented; they can benefit greatly from PITC but only if it is carried out appropriately. Thus assessing the acceptability of PITC is important.[23]

In August 2006, the WHO and the Joint United Nations Programme on HIV/AIDS (UNAIDS) issued a statement promoting PITC in health facilities.[24] A few months later they released global guidance on PITC in health facilities,[25] to ensure the health and rights of pregnant women in the context of PITC. The WHO/UNAIDS guidance stated scaling up

PITC was to ensure 'the timely HIV detection, transmission prevention, and subsequent access to prevention, treatment, care and support services. Ethics and human rights issues are focused upon in resource-poor countries with generalized HIV epidemics like Nigeria, where maternity services are important health facilities for PITC implementation.The guidance states that all women attending these services should receive information on MTCT and HIV testing.[26]

Considering PITC benefits, it is imperative to access its acceptability of this service among ANC populations who were going to be the first set of clients to be offered this service.

2. Issues Background

Considering that good innovations must be acceptable to people for them to utilize and recommend them to others, this study was aimed at assessing the knowledge and acceptability of pregnant women at the antenatal clinic to Provider Initiated HIV testing and counselling both in antenatal care as well as during labour and delivery.

Considering that efforts are being made to scale up HCT as well as improve the uptake among pregnant women using the PITC. It is imperative to know what the opinion of the end users would be, since this will inform health education messages that will enhance acceptance of the initiative by the women.

3. Methods

A structured questionnaire was developed[25] and pre administered at a primary Health Centre in Jos. The questions were closed ended and options were provided for respondents to pick from. The questionnaire sought biodata including age and marital status, religion, occupation and level of education. It asked questions to seek the awareness of HIV testing, if they had received the HIV test and if they felt there were benefits of HCT and PITC. Their impression of PITC to women in labour was also sought and knowledge of the benefits to the baby. Considering our society, the need for husband/Spousal approval as well as if it impacted on whether the clients could accept PITC at the ANC clinic was also sought as well as the perceived contribution to marital disharmony. The attitude of the women to PITC to other people perceived to be low risk was also assessed and this included the women who were faithful to their spouses as well as those who didn't look ill. The questionnaires were administered using a convenience sampling technique until the maximum that could be recruited was achieved and there were no more willing women. The patients were informed about the study during the health talk and those who consented were enrolled and administered the questionnaire. Inclusion criteria were women who were currently receiving antenatal or post-natal care who were willing, while exclusion criteria were unwillingness and persons not in antenatal or postnatal period. More details were provided to the enrollees regarding what was expected while none participants were reassured that this would not mitigate against the quality of care they would receive at the facility. The questionnaires were filled by correctly by 170 women attending ANC/PNC clinics of JUTH. Interpreters were selected among the doctors, nurses, records staff and competent attendants who administered the questionnaires to those who were unable to read or write or understand English. This was to evaluate their views about Provider Initiated HIV testing and counseling in ANC and Labour and delivery. The findings were analyzed with the Epi Info Statistical Package.

4. Results

A total of 170 women were interviewed and the 170 questionnaires were well filled and were thus analyzed. The age range was from 17 to 46 years, with 52.9% (90) of them Christians and 47.1% (81) were Moslems. Total of 35.5% (60) of them were housewives while 24.7% (42) were students, 11.2% (19) were teachers and 10% (17) were traders. It was only one of them that was single while the remaining 169 (99.4%) were married women.

Some 41.8% (72) of the women had various forms of tertiary levels of education, while 29.4% (50) had secondary, 14.1% (24) had primary and 2.4% (4) each had no education or received various forms of informal education. About 92.4% (158) of the respondents were pregnant women while 7.6% (13) had come for post-natal care.

With reference to awareness of HIV testing among the enrollees, 94.7% (161) of them were aware of HIV and the remaining 9 said they did not know about the HIV testing. A further 87.1% (148) had received the HIV test during the course of antenatal care and they were offered to go and carry out the test by the nurses at the antenatal clinic.

While 93.5% (159) of the women affirmed that there were benefits of pregnant women accepting HIV testing offered them by care providers and counsellors, those who felt that women should agree to test when asked to by the health workers were 96.5% (165). Concerning health care providers offering HIV testing to women who were in labour, 87.9% (149) respondents felt it was beneficial to test the women who had not tested before, while the remaining 21.1% (21) felt the woman in labour should be left alone because she would be in great pains. Approximately 74.1% (126) of respondents felt that the babies could get beneficial intervention if the mother was accepted testing in Labour and as then found to be HIV positive only during the process of Labour, while 19.4% (33) didn't know if there was any benefit, the remaining 6.5% (12) felt it was too late and the baby could not be helped if the mother was only found to be HIV positive while she was already in Labour.

About 98.1% (167) of the women had indicated that their husbands had given their approval and consented to them being tested, but three of them (1.9%) indicated they were not permitted by the husbands to receive the HIV test.

Regarding retesting of women who had tested HIV negative earlier on in Pregnancy, (153) 90% of respondents were of the opinion that women who had tested negative previously during the antenatal care would benefit from repeat testing and

could be offered repeat testing while 5% (9) felt that it was not necessary so health providers need not initiate this with the women and (7) 4.1% didn't know the implications. On account of causing marital disharmony, 68.5% (117) of the women felt that the test should be discouraged strictly because people felt it could cause marital disharmony while 23.5% (40) felt it should not be done if it would cause marital problems. A total of 168 (98.5%) women encouraged people to test when offered by health providers while 2 (1.5%) said they discourage people from taking the test for various reasons. While 6.5% (11) of the respondents felt the test should not be offered to those who are faithful to their spouse, (153) 90% felt it should be offered even to those who were faithful to their spouses. Regarding offering the test to people who didn't look like they were suffering from any form of ailment, 94.1% (160) felt the test should be offered to people who don't look ill, (6) 3.6% felt it shouldn't be offered to people who appear to be well and (4) 2.4% didn't know if it had any implications.

5. Discussion

It is known however that even when PMTCT is available, not all pregnant women will choose to undergo HIV testing even though this is a good opportunity to test .[27] This study in Jos showed that 87.1% of ANC attendees had accepted HCT during the course of the Antenatal care period which meant that about 11.9% had not tested for HIV during the index pregnancy and this was cause for concern in view of the opportunities that exist in this group for Mother to Child transmission of HIV. Recent studies have also shown a relatively high uptake of HIV testing when offered as part of antenatal care services where PMTCT services were available; ranging from 70–97%.[28]**.** This means that 3–30% of women declined to be tested for HIV and known reasons include: fear of the test itself, fear of the consequences of a positive test result, knowledge that antiretroviral therapy is not available, and the need to consult her partner before testing.[29]**.** In this study, it was identified that some women were prevented from having the HIV test by their spouse's refusal.

In a study involving 400 ANC attendees in Ibadan, HCT was reported by 71% of respondents, but 89.7% understood the HIV related health education provided, 85.2% felt timing was appropriate, 89.2% felt the nurses' approach was unacceptable and 34.0% felt the test was forced upon them. [16]Majority of the respondents in the JUTH study understood the health talks, except that 68.5% felt that HCT should be discouraged on account of marital disharmony. The attitude of the health workers as a factor in HCT uptake was not assessed in this study however.

In a study in Addis Ababa, it was observed Education of the mother, knowledge of MTCT and VCT and partner participation were important factors of VCT acceptance. In this study, most of the women had to notify their husbands of the test ahead of carrying it out and 1.9% indicated they could not receive HCT because their husbands prevented them from carrying out the tests.[30]

Another case-control study was conducted at Teklehaimanot Health Center and Gandhi memorial Hospital in Addis Ababa City. Factors that determine VCT acceptance were women's perceived ability to cope with a positive result, perceived favorable reaction of husband's after sharing positive test result, stigma and discrimination, perceived positive community response and perceived ability to get continuous medical care if found out to be positive. Therefore, this made the health workers to commence engagement of policy makers and increase efforts to promote couple counseling.[31]

In implementing PITC, studies have observed that there still exist gaps in the HIV prevention information as observed in a study in Botswana, where HIV testing is routinely 'offered'. It showed that 68% of participants believed that they could not refuse the test.[32] It is assumed that women's self-perceived inability to refuse an HIV test will be further exacerbated by gender dynamics that make it difficult for women to say no in this context.[33]This indicates that the aspect of Pretest counseling and giving clients opportunities to opt out must be well communicated in PITC services.

Studies have considered the effectiveness of Provider-Initiated HIV Testing and Counseling Interventions, and the Kennedy et al. systematic review evaluated the impact of PITC in low- and middle-income countries on HIV risk behaviors and treatment seeking behaviors of participants before and after the intervention and/or as compared to those who were not exposed to the intervention. This reported an increase in both the proportion of pregnant women who tested for HIV and the proportion of these women who chose to receive their HIV test results, an increase in the willingness of pregnant women to test for HIV after receiving PITC and another showed that HIV testing uptake was 95-98% when either on-site referral for testing or routine PITC was used. In comparison, referral to an off-site VCT center resulted in a significantly lower level of uptake of HIV testing (68.5%). 34

This therefore strengthens the need to integrate PITC into existing ANC services, scale up PITC and even decentralize them into the various areas where Maternal, Newborn and Child health services are rendered at health facilities considering that implementing the PITC is likely going to increase the uptake of HCT in ANC settings. However this is capital intensive and must be well articulated by National Programs to ensure expected outcomes. This includes creating an enabling environment and strengthen referral networks..[35]

PITC is an important and needful innovation as surveys in sub-Saharan Africa have continued to show that a median of just 12% of men and 10% of women had been tested for HIV and received the results. The Nigeria Demographic Health Survey 2013 also corroborates that Seven in 10 women and 78 percent of men have never been tested for HIV. Among women and men tested for HIV in the past 12 months, only 10 percent each received their test results.[19] This therefore shows a national gap that needs to be closed for us in Nigeria as a country especially in the face of Nigeria's HIV burden. Increased access to HIV testing and counselling is essential in working towards universal access to HIV prevention, treatment, care and support and this has to be considered

among our ANC populations and other persons who access thehospital to seek health interventions. WHO and UNAIDS strongly support the continued scale up of client-initiated HIV testing and counselling, but recognize the need for additional, innovative and varied approaches. Since the health facilities represent a key point of contact with people who are in need of HIV prevention services, evidence from both industrialized and resource-constrained settings suggests that many opportunities to diagnose and counsel individuals at health facilities are being missed and that provider-initiated HIV testing and counselling facilitates diagnosis and access to HIV-related services.[36] This will be a way to consider for health care providers in the Nigerian Health sector in order to close some of the gaps that abound especially with regards to PMTCT. Concerns about the potential coercion of patients and adverse outcomes of disclosure underscore the importance of adequate training and supervision for health care providers and the need for close monitoring and evaluation of provider-initiated HIV testing and counselling programs.

The document recommends an "opt-out" approach to provider-initiated HIV testing and counselling in health facilities, including simplified pre-test information, consistent with WHO policy options developed in 2003 and with the 2004 UNAIDS/WHO Policy Statement on HIV Testing. With this approach, an HIV test is recommended for all patients, irrespective of epidemic setting, and an "opt-in" approach to informed consent may merit consideration for highly vulnerable populations.

6. Lessons Learnt Conclusion

The awareness of HIV screening in pregnancy and labour is high among our antenatal population, but there still exist some information gaps. The uptake of HCT in pregnancy still has some gaps but many patients welcome the idea of PITC to women in ANC and Labour Ward. The need to scale up HIV testing is beyond doubt, and the offer of PITC to pregnant women in health facilities presents a potentially important mechanism to contribute to this goal.

Positive outcomes are most likely when HCT is confidential and accompanied by informed consent, staff are adequately trained, the person undergoing the test is offered or referred to appropriate follow-up services and an adequate policy is in place to prevent discrimination.[36] Pregnant women, due to their level of interaction with health services, and the priority given to pregnancy-related services in the scaling up of PITC since they stand to benefit enormously from increased access to needed services.

The findings from this questionnaire based survey informed the decision of the Hospital to align with expanded strategies to improve the uptake of HIV testing in ANC and have commenced PITC in ANC settings. A HCT center is now integrated into the ANC Clinic and all women are offered Provider initiated HCT at the booking clinic and women are provided testing in Labour Ward as well as Post-natal wards. The same counselor providing group pre-test counseling, same point testing and individual post-test counseling. This has translated to same hour testing and getting results among the ANC attendees. This eliminated laboratories testing and made testing in the ANC Clinic by nurses possible. Following the adoption of this initiative at the Maternity units in JUTH, the ANC registers now indicate that the percentage of women accepting HCT in ANC has increased from 87.1% as found in this survey to 99% of those assessing ANC and delivery services in JUTH. The unit continues to work on other strategies like Couple HCT which is expected to help people know their HIV status.

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