

ACCEPTABILITY OF ROUTINE OFFER OF HIV TESTING (OPT-OUT APPROACH) AMONG PREGNANT WOMEN IN THE WA MUNICIPALITY

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Conflict of interest: None declared

SUMMARY

Background: With the introduction of the opt out HIV testing policy in Ghana, the HIV test is offered routinely to all pregnant women unless they decline testing.

Objective: To assess acceptability of the routine offer of HIV testing antenatal clinic (ANC) clients in the Wa municipality, Ghana.

Design: Cross-sectional study of 270 randomly selected ANC attendees.

Results: More than 90% of respondents were in favour of the opt-out policy. The most commonly cited reasons were that it would help pregnant women know their status and facilitate prevention of mother to child transmission of HIV (PMTCT). About 60% of respondents had tested for HIV in the current pregnancy with more than 90% reporting that the test was offered them in a manner in which they could have refused the test. HIV testing in the current pregnancy was associated with having heard of the opt-out policy ($p < 0.001$) and awareness that the test was offered at the facility ($p < 0.001$), but there was no relationship with educational level. Out of the 112 clients who had not had HIV test in the current pregnancy, 61.8% claimed the test had not been offered to them while 82.4% expressed willingness to have the test done if offered.

Conclusion: The opt-out HIV testing policy is acceptable to the pregnant women surveyed in the Wa municipality. A well laid out process to ensure that all pregnant women are routinely offered HIV testing at the ANC may help minimize missed opportunities for utilizing PMTCT services.

Keywords: PMTCT, opt-out, testing, Wa.

INTRODUCTION

Ghana has a generalized HIV epidemic with the prevalence of HIV among pregnant women being persistently above 2 % for several years.¹ The burden of HIV in women in Ghana has implications for mother-to-child transmission of HIV (MTCT) in the country since a woman infected with HIV can pass the virus to her baby during pregnancy, delivery or breastfeeding.

It is estimated that 15% of new cases of HIV infections are as a result of mother-to-child transmission of HIV.² Counselling and testing of HIV during pregnancy constitute an important step to prevent MTCT yet voluntary testing among pregnant women has been found to be rather low in Ghana.

According to the Ghana Health Service (GHS), in 2007, only 12 % of all antenatal care registrants were counselled and tested for HIV.³ The percentage is even lower in some areas. In the Wa municipality where the prevalence of HIV among pregnant women almost doubled from 3.2 % in 2006 to 5.8 % in 2007, only 5.6% of pregnant women had HIV test in 2006.^{4,5} In response to the low HIV testing in pregnancy, the World Health Organisation (WHO) has encouraged countries to adopt the routine offer of HIV testing, also known as “opt-out”, strategy.⁶ By this strategy, the HIV test is offered routinely to all pregnant women accessing antenatal care. The emphasis has changed from client initiated as in voluntary counselling and testing (“opt-in”) to provider initiated counselling and testing. The test is still voluntary, with the right to refuse testing (opt-out).

There are speculations that routine offer of HIV testing may potentially deter pregnant women from seeking antenatal care (ANC) because of fears of being tested.⁷⁻⁹ Others have suggested that the fundamental human rights of the pregnant woman to refuse an HIV test may be infringed upon because of the way the HIV test is offered.¹⁰ Dayte reported a study in India where antenatal attendees were not informed about being tested for HIV denying them the option to opt out.¹¹ On the other hand, the usefulness of this policy is however attested to as several studies point to a significant increase in HIV test acceptance among pregnant women with the opt-out approach.^{9,12-14}

The policy of routinely offering HIV testing to pregnant women has been adopted by the National AIDS/STI Control Program (NACP) and is the basic

strategy for HIV testing for all pregnant women seeking antenatal care in Ghana.¹⁵ There is however little data to assess the acceptability or otherwise of the opt-out policy among pregnant women in Ghana. Documenting the experiences of pregnant women under this new policy is therefore important to inform its implementation. Consequently the objective of this study was to assess the knowledge of mother-to-child-transmission (MTCT) of HIV as well as the awareness and acceptability of the routine offer of HIV testing (opt-out) policy among pregnant women attending ANC in Wa.

METHODS

The study was conducted in two centres in the Wa Municipality of Upper West Region of Ghana from June to July 2008. In the previous year, Wa recorded the second highest HIV prevalence among pregnant women out of 40 HIV Sentinel sites in the country.⁴ The study population consisted of pregnant women seeking antenatal care at Busa Health Centre and the Upper West Regional Hospital, the only public institutions providing HIV counselling and testing in the Wa Municipality at the time of the study.

To be eligible for inclusion in the study the pregnant woman had to be within the age group 15 to 49 years irrespective of having tested for HIV in the current pregnancy. Women who were not pregnant and those who were pregnant but refused to give consent for participation in the study were excluded. During the study period, ANC clients registered on each clinic day were assigned numbers. Five to ten numbers were then randomly selected by balloting. The corresponding pregnant women in the register who fell within the age criteria and gave consent were recruited to take part in the study. The selection process was carried out on each clinic day until the sample size of 270, representing about 10% of the expected pregnancies in the two facilities, was obtained. All those approached consented to participate in the study. A structured questionnaire which had been previously pre-tested and subsequently finalized after modification was used to elicit the following information from the study participants: socio-demographic data, knowledge of MTCT of HIV, awareness and acceptability of the "opt-out" HIV testing and experience in HIV testing in the current pregnancy.

It was explained to the participants that "opt-out" HIV testing was a new approach in which every woman visiting the antenatal clinic is counselled and tested for HIV unless she declines the test. Research assistants who had been trained in the administration of the questionnaire in the local language conducted the interviews. The data was entered into EPI INFO (version

3.2.2, 2004 Center for Disease Control, Atlanta Georgia) and exported to SPSS (version 16, 2007 Chicago Il) for analysis. The data was analysed by generating frequencies and cross tabulations. Chi square analyses were performed to investigate associations between socio-demographic factors and knowledge of MTCT and HIV testing in the current pregnancy. The study was approved by the Ghana Health Service Ethics Committee and the Upper West Regional Health Directorate.

RESULTS

Socio-demographic characteristics

Sixty seven percent (182) of women investigated were below 30 years and almost all were married (99%).

Table 1 Socio-demographic characteristics of respondents (n=270)

Characteristics	Respondents	Percent
Age group		
15-19	11	4.1
20-24	64	23.7
25-29	107	39.6
30-34	53	19.6
35-39	31	11.5
40+	4	1.5
Parity		
0-2	212	78.2
3-5	53	19.6
6+	5	1.9
Number of ANC visits		
One visit	42	15.6
Two visits	78	28.9
Three visits	49	18.1
Four visits and more	101	37.4
Marital status		
Married	266	98.5
Single	4	1.5
Type of marital union		
Polygamy	55	20.4
Monogamy	211	78.1
Others	4	1.5
Religion		
Christian	98	36.3
Moslem	169	62.6
Traditional	3	1.1
Occupation		
Farmer	14	5.2
Housewife	25	9.3
Formal employment	43	15.9
Trader	98	36.3
Apprentice	37	13.7
Unemployed	20	7.4
Others	33	12.2
Education		
No education	90	33.3
Primary education	84	31.1
Secondary education	61	22.6
Tertiary education	34	12.6
Others	1	0.4

Majority of the respondents (78%), were in their first or second pregnancy while more than half had at least three antenatal visits at the time of the interview (Table 1).

Table 2 Reasons for testing for HIV in current pregnancy

Reason for testing	Number (%)
Because the nurse asked me to test	25 (15.8)
Don't trust my husband	2 (1.3)
Just to know my status	84 (53.2)
To prevent my child from acquiring HIV if am found to be positive	43 (27.2)
Others	4 (2.5)
Total	158 (100)

Knowledge of Mother-to Child Transmission

About 80% of the respondents knew that a pregnant woman infected with HIV could transmit the virus to her baby. On when the HIV transmission occurs, the following were cited respectively: 79% during preg-

nancy; 24% during labour and delivery and 19% during breastfeeding.

Table 3 The single most important factor that will encourage those who had not tested in the current pregnancy to test

Factor	Number (%)
If I am tested with my husband	11 (10)
If I am sick and the doctor suspects it	19 (17)
If health workers will treat me well if I am positive	18 (16)
If no one will find out about my test results	52 (46)
If there is enough privacy	12 (11)
Total	112 (100)

Forty-two percent of respondents knew about the existence of a special drug that could be used to prevent MTCT of HIV. Those with at least primary education were more knowledgeable about MTCT than those with no formal education ($\chi^2=11.08$, p-value=0.001).

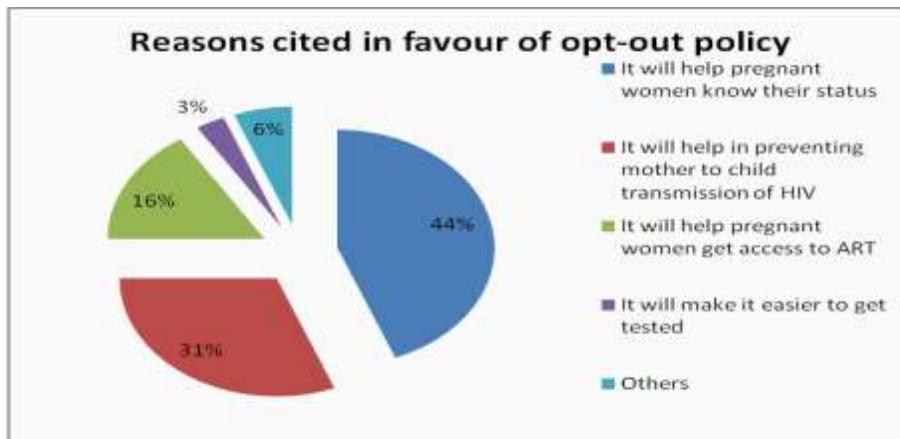


Figure 1 Reasons cited by pregnant women in favour of the opt-out policy

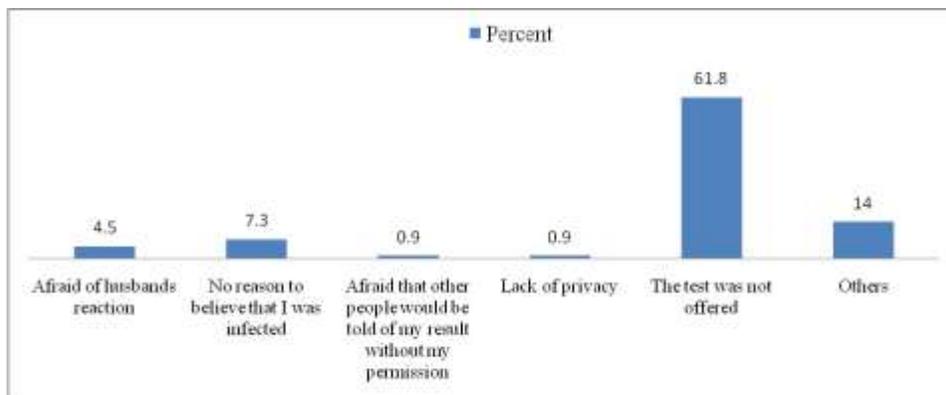


Figure 2 Reasons for not testing for HIV in current pregnancy

Awareness and impression of pregnant women about the opt-out HIV testing approach

Majority of respondents (82%) had heard of the opt-out testing policy and 79% knew it was being implemented in their respective facilities. Two hundred and forty-five clients (91%) said they were in favour of the policy with the most commonly cited reasons being that it would help pregnant women know their status and prevent mother to child transmission of HIV (Figure 1).

Out of the 25 (9%) women who were not in favour of the new policy, eighteen (6.6%) were concerned it could result in their premature death, two (0.7%) stated it amounted to forcing people to test against their will, while one person said it would lead to violence from husbands and the rest gave no reason.

Even though more than half of the respondents, 157 (59%), thought the opt-out policy could prevent some pregnant women from seeking antenatal care, less than one fifth, 47 (17%), knew someone who had refused to seek antenatal care because of fear of being tested for HIV.

HIV testing in current pregnancy

A total of 158 (60%) of the pregnant women interviewed had tested for HIV in the current pregnancy. The most frequent reason cited for accepting the test was to know their HIV status (Table 2). Out of these 158 women who had tested, one hundred and fifty-three (97%) and one hundred and fifteen (73%) received pre-test and post-test counselling respectively. Most of the women, 144 (90%) reported that the test was offered them in a manner in which they could have refused the test if they did not want to test. Based on their experience undergoing the HIV test, 152 (96%) said they were willing to encourage other people to test.

Testing for HIV in the current pregnancy was not associated with educational status. Having had a test for HIV was however associated with having heard of the opt-out policy ($\chi^2=48.25$, $p < 0.001$) and awareness that the test was offered at the facility ($\chi^2=60.3$, $p < 0.001$). Those who had not tested for HIV in the current pregnancy numbered 112, 42% of the study participants. Out of these 112 who had not been tested, 68 (62%), stated it was because the test had not been offered to them. Fifty-four out of these 68 women (79%) had been for at least 2 antenatal care visits. Almost all of them, 66 (97%) said they would continue attending ANC while 56 (82%) expressed willingness to be tested for HIV.

The other reasons given by remaining 44 respondents who had not been tested for HIV in the current preg-

nancy are shown in Figure 2. Thirty-seven out of these 44 (84%) stated they were still willing to attend ANC even though they knew the opt-out policy was being implemented.

Confidentiality was an important concern among those who had not yet tested in the current pregnancy. Almost half, 52 (46%), said the most important thing that would encourage them to test for HIV would be if no one would find out about the test results (Table 3).

DISCUSSION

This study was a facility based study conducted to determine the acceptability of routine offer of HIV test as a strategy for the prevention of mother-to-child transmission of HIV in the Wa Municipality. It also highlighted knowledge of HIV transmission from mother to child among the study participants.

The level of knowledge of special drugs reducing MTCT in our study (42%) was lower than that reported for pregnant women (54%) in the 2008 Ghana Demographic Health Survey (GDHS).¹⁶ In comparing the two figures however it is important to note that the GDHS is a nationwide survey and the figure being reported from the GDHS is from polling pregnant women across the country.

It is worthy of note that similar to findings from other studies of pregnant women in Ghana and Sudan, our study showed educational level was associated with knowledge about mother to child transmission.^{17,18} Perhaps the pregnant women polled in the GDHS had a higher educational status that is why they were more knowledgeable about MTCT compared to our study population. Unfortunately this cannot be verified as that data on the educational status of the pregnant women in the GDHS is not available.

Never the less it is possible that some of the pregnant women in our study were not being exposed to education on PMTCT or the information being given to them was inadequate. There is therefore a need to ensure completeness of PMTCT information given to all pregnant women so they can make informed choices to prevent viral transmission to their babies.¹⁶

Almost all our study participants (91%) favoured the new policy and from the reasons they gave, it might be because they appreciated the benefits of testing for HIV in pregnancy. This is similar to a study conducted among ANC clients in the Zimbabwe in which almost 90% of the respondents considered routine HIV testing for pregnant women to be useful.¹³

In a study from Kumasi in Ghana, Holmes et al suggested that the high acceptability of HIV testing among pregnant women could have been influenced by the offer of treatment to prevent vertical transmission of HIV and long term HIV care.¹⁹

It is unfortunate to note that most (76%) of those who were not in favour of the routine offer policy had misconceptions about it. This is similar to findings from Perez's study in Zimbabwe in which there were fears related to knowing one's HIV status.⁷ There is therefore a need for more education to reassure such people about the availability of PMTCT services and effective antiretroviral drugs that can prolong and improve their quality of life if they are found to be HIV positive.

The proportion of our study respondents who had tested for HIV in the current pregnancy in our study (62%) was lower than the 99.9% reported from a study in Zimbabwe by Chandisarewa and colleagues.¹³ In this Zimbabwean study, community sensitization by PLHIV, highly motivated clinic staff and the probable perception of routine HIV testing as standard of care were thought to contribute to the uptake of testing.

It is encouraging to note that in our study, among those who said the test was not offered to them at ANC, most of them expressed willingness to get tested. These findings are consistent with several studies conducted in other countries that showed high acceptability of the opt-out HIV testing among pregnant women.^{7,9,13,14} The high acceptability of the opt-out policy is good news for PMTCT programs in the Wa Municipality as it would lead to uptake of HIV testing and PMTCT interventions.

It, however, appears that there could be missed opportunities in the prevention of MTCT of HIV. This is because of those who had not yet been tested in the current pregnancy, more than half had not been offered the test even though the majority had attended ANC at least twice in that pregnancy. While the reason was not ascertained in this study, it is possible that the human resource constraints could be a contributory factor to the above finding.⁷ Training all staff at the ANC as PMTCT counsellors and setting up to a well laid out process to ensure that all pregnant women coming through ANC are routinely offered HIV testing may help minimize the missed opportunities for utilizing PMTCT services.

On concerns that routine HIV testing might discourage people from seeing a health care provider, our study showed that even though more than half of the study participants thought that HIV testing would prevent some women from coming to ANC, less than a fifth

reported knowing someone who was not coming for ANC for fear of being tested. In the study by Perez et al, barely 1% of pregnant women indicated that they would they would not attend ANC and find alternate delivery service if the opt-out strategy was implemented in their ANC.⁷

Indeed in our study almost all those who refused to test and practically every one of those who said the test was not offered to them were still willing to attend ANC despite the implementation of the policy. This may be an indication that the women did not feel threatened by the routine offer of HIV testing at the ANC and perhaps did not perceive the testing as mandatory. The implication is that instituting the routine offer of HIV testing has not necessarily been a deterrent to ANC attendance.

Having heard of the opt-out test and awareness that the opt-out test was being performed in the facility were found to be associated with HIV test acceptability. Along those lines, Fernandez showed that acceptance of HIV testing was related to beliefs about the benefits of testing and knowledge of MTCT.²⁰ This suggests that prior sensitization about routine HIV testing and education about its benefits and the need to prevent MTCT may be useful in promoting acceptance of testing.

This study is limited by being facility based and therefore eliminating pregnant women who did not patronize the services in the participating facilities. The findings therefore preclude generalization to all pregnant women in Wa Municipality indicating a need for further study of the acceptability of the opt-out test using a more representative sample of pregnant women in the country. Despite this limitation, the study provides useful information that will inform the implementation of opt-out approach to PMTCT in Ghana.

CONCLUSION

The study highlights the point that the opt-out HIV testing policy is acceptable to the pregnant women interviewed in this study and there is willingness to attend ANC even with the knowledge that HIV testing would be routinely offered. It is therefore being recommended that all ANC staff should be trained as counsellors and a system should be put in place to ensure, that every pregnant woman who comes to the ANC is offered the test. The use of pregnant women who have already tested for HIV in sharing their experiences with their colleagues who are afraid to test, should be considered as this could allay some of the fears other pregnant women may be harbouring about having an HIV test.

ACKNOWLEDGEMENTS

The authors wish to thank Madam Basilia Salia and the antenatal clients and staff of Busa Health Centre and Wa Regional Hospital for their participation and assistance in the study and the WHO Country Office in Ghana for funding the study.

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