

Women's Attitudes Toward Their Partners' Involvement in Antenatal Care and Prevention of Mother-to-Child Transmission of HIV in Cameroon, Africa

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Introduction: Although the HIV epidemic has stabilized worldwide, it remains a public health challenge in sub-Saharan Africa. The key strategy to prevention and control of HIV remains voluntary counseling and testing. In sub-Saharan Africa, 76% of pregnant women have at least one antenatal visit. Therefore, antenatal care is a venue through which women can access HIV testing, and, if infected, obtain care for prevention of mother-to-child transmission (PMTCT). Public health organizations have promoted increasing HIV testing of men by incorporating partner testing into antenatal care. Recent studies have shown that African women may not be receptive to their partner's involvement in obstetric care secondary to cultural attitudes and traditional beliefs.

Methods: A quality improvement project surveyed women to identify their attitudes and beliefs concerning antenatal care, PMTCT, and partner's participation in antenatal care and testing.

Results: Women viewed antenatal care as important to having a positive pregnancy outcome and the primary venue through which they accessed HIV testing. Most women (83.8%) were receptive to their partners' involvement in antenatal care and identified increased partner participation over the past 5 years. Women (98.2%) said men's primary role was payment for obstetric care. Cultural and gender-based attitudes and beliefs were identified as barriers to HIV testing of men.

Discussion: Women viewed antenatal care as important to a positive pregnancy outcome with access dependent on their families' finances and their partners' ability and willingness to pay for their care. Although pregnancy has traditionally been viewed as a women's affair, the majority of women wanted their partners to participate in their care, including receiving HIV counseling and testing. Women identified men's involvement as an individual belief, saying that many in their community were not supportive of male participation in antenatal care. Multiple options, including couples testing in antenatal clinics, should be available to increase HIV testing in men.

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INTRODUCTION

In 2009, 72% of worldwide AIDS deaths occurred in sub-Saharan Africa.¹ In Cameroon, AIDS deaths have contributed to a decrease in women's life expectancy from 54 years in 1990 to 51.5 years in 2010.² Sub-Saharan Africa continues to carry the greatest burden of the epidemic, with 23 million people living with HIV.¹

Although the number of new HIV infections and AIDS deaths have stabilized, the epidemic remains challenging in many African nations, where prevalence ranges from 0.1% (Madagascar) to 25.9% (Swaziland).¹ Heterogeneous epidemic patterns have emerged within the 3 sub-Saharan regions, with the proportions of persons living with HIV ranging from 24.9% to 27% in Southern Africa, 3% to 7% in East Africa, and 2% to 5.3% in West Africa.¹ Cameroon has the highest prevalence in West Africa (5.3%).¹

For more than 20 years, voluntary counseling and testing (VCT) for HIV has enabled millions of people to know their infection status. Testing is the key strategy in the prevention and control of HIV and remains pivotal to address-

ing the epidemic, including being the critical entry point to life-sustaining care.^{3–7} Yet, widespread testing remains elusive in sub-Saharan Africa, with only an estimated 37% of women and 21% of men having had at least one HIV test and receiving the test result.⁸

In sub-Saharan Africa, 76% of pregnant women have at least one antenatal clinic visit.⁹ Therefore, antenatal care is an obvious venue through which women can access HIV testing and subsequent care for the prevention of mother-to-child transmission (PMTCT), if they are infected. In sub-Saharan Africa, 35% of pregnant women receive VCT; in Cameroon, 41% of pregnant women receive counseling and testing.¹⁰

Voluntary counseling and testing of couples provides an environment in which clear and accurate information is given, it enables couples to learn their HIV statuses together, and it allows tailoring of interventions to each individual couple, depending on their HIV statuses.^{11–13} Many public health organizations have promoted individual man and couples testing in antenatal care as one strategy to increase HIV testing in men.^{14,15} Yet, antenatal programs that have incorporated partner counseling and testing have found it challenging to obtain more than 20% participation of male partners.^{16–20}

This article reports a quality improvement study designed to identify women's attitudes and beliefs regarding HIV

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Quick Points

- ◆ This study assessed women's beliefs about antenatal and HIV care, and their partners involvement in that care.
- ◆ Most women (84%) thought it was good for men to come with them to the antenatal clinic. However, less than half (42%) had invited their partners and only one-quarter of the women (23%) have had their partner come.
- ◆ Women whose partners had been invited and did not come said the most common reason was because he did not have time.
- ◆ These findings suggest women's attitudes toward men's involvement in antenatal care is changing, and further efforts to support this involvement are warranted.

testing and antenatal care, including acceptance of partner involvement in their care. Although the intent of this project was a specific public health program improvement effort for the involved agencies, some of the findings have implications for antenatal care and PMTCT programs in Cameroon and Africa, especially concerning women's beliefs regarding antenatal care and their partner's participation. These attitudes and beliefs impact women's utilization of antenatal and PMTCT services.

BACKGROUND

The Cameroon Baptist Convention Health Service (CBCHS) is a private, faith-based health care system consisting of 5 hospitals, 24 health centers, and 43 primary health centers. Mbingo Baptist Hospital (MBH) is a referral center in the northwest region of Cameroon, providing outpatient and inpatient services. The inpatient care includes 250 surgical, medical, obstetric, pediatric, orthopedic, and Hansen disease beds. The obstetric unit has 20 beds, with 650 to 700 births yearly. The MBH provides outpatient care for a local population of approximately 8500 people who live in the Boyo Division, Fundong Health District. The outpatient care includes primary care, urgent care, emergency care, and multiple specialty clinics. Antenatal clinics are held twice a week, with an average of 250 women registering yearly.

In 2000, the Elizabeth Glaser Pediatric AIDS Foundation provided a grant to initiate a PMTCT program. This program was begun in 2 CBCHS hospitals and has grown to serve more than 400 government, private/occupational, other nongovernmental, and additional Baptist Convention facilities in 6 of the 10 regions in Cameroon. The antenatal clinics have integrated PMTCT into routine care in all facilities. In 2010, 102,179 women received HIV counseling, with 97.8% of women accepting testing and 5.5% testing positive for HIV.

The MBH PMTCT program staff consists of 9 counselors and support staff. This staff provides on-site services as well as support services to 71 additional facilities within 100 km of MBH. The program has always made HIV testing available to the pregnant woman's partner. In 2005, the CBCHS received funding from the United States Agency for International Development Action for West African Region (AWARE) Project, with one of the conditions being to increase male HIV testing through antenatal care (Men as Partners).^{21,22} Although multiple strategies were instituted to increase the number of men participating in antenatal care and having HIV tests, their involvement did not exceed 20%.

In 2009, a quality improvement study was done to identify barriers to male participation in antenatal clinic and HIV testing.²³ The published report was presented to the MBH staff in September 2010. In general, the study findings were confirmed and supported by the staff. Yet, many staff suggested that women themselves may not approve of or accept partner involvement or wish that their partners be involved in their antenatal care. In this study, cultural and traditional beliefs were shown to be barriers to male participation, but the men did not identify women's personal attitudes to be barriers. The number of staff who espoused this view and the passion of their belief was concerning. Their comments are further supported by recent publications presenting African women's cultural attitudes as barriers to HIV testing in pregnancy and their partner's involvement.^{24–27} After discussing the staff's comments, it was thought important to expand the previous quality improvement initiative to delineate women's perceptions and beliefs.

METHODS

This study was conducted in Mbingo Village, consisting of 2300 individuals living within 5 km of MBH. Mbingo Village inhabitants primarily belong to the Kom kingdom. A kingdom is ruled by a fon, the head of the traditional government. Villages are self-governing and presided over by a village head, who is assisted by a council of elders.

For comparability and consistency, women were surveyed in the same village areas where the men's survey was conducted. The men's survey questionnaire was modified to address common women's health data. A literature search was done to identify similar studies and review study questions and questionnaires with additional modifications based on these references. The study questionnaire was then reviewed by multiple consultants, staff, and community members for technical and cultural input. After all input was incorporated, the questionnaire was evaluated by a focus group of local women and PMTCT staff. Final modifications were made with the input of these focus groups. The questionnaire consisted of both closed and open-ended questions, with answers categorized into probable responses, an "other" answer space, and a "did not wish to answer" variable.

Three study assistants were trained to obtain informed consent, administer the survey, and record the responses. The survey was verbally administered in English and Cameroon Pidgin English. Although not the official language, Cameroon

Pidgin English is the daily language spoken in the homes, markets, and churches in the northwest region. Responses were not prompted, and the participants were not given options for selection. No PMTCT or obstetric staff participated in the survey. A convenience methodology was used, with the study assistants going house to house and farm to farm from January through March 2011. The study was explained, and each woman was interviewed for eligibility to participate. The eligibility criteria included: 1) being aged 18 years and older and 2) being currently pregnant or previously pregnant.

Women who met the eligibility criteria were invited to participate. It was explained that no identifying information would be collected, there would be no penalty for nonparticipation, and questions could be answered or not answered as the woman wished. No incentives were given to the participants. All participants gave verbal consent, and no woman declined to participate. Based on village population estimates, 90% of eligible women participated in the survey.

The study proposal was approved by the CBCHS institutional review board. Permission to perform the study also was sought and received from the CBCHS director, the Fundong district medical officer, and the village head and elders. Data were entered into Epi-info software (Centers for Disease Control and Prevention) and Microsoft Excel for analysis.

RESULTS

A total of 395 women participated (Table 1). The average age was 33 years, with half having attended or completed secondary or a higher level school. Twenty-seven of the 32 women with no schooling were aged 40 and older, and all were farmers.

The mean number of pregnancies was 3.7. All but 2 of the nonpregnant women had attended antenatal clinic during a previous pregnancy. Ninety-one percent of the currently pregnant women were enrolled in antenatal clinic. The average age of nonpregnant women was 34.8 years compared to 29.2 years in the pregnant women ($P < .001$).

The participants identified the following pregnancy outcomes: 271 (69.0%) had not had a pregnancy loss, and 113 (28.8%) identified at least one pregnancy loss. Nine (2.3%) had given birth to twins. There were 1244 live births, with 3 women saying a child had died after being born alive.

Only 5 women gave birth prior to 1990, with none identifying their partner's involvement in antenatal clinic. The proportions of women identifying their partner's participation by the year of last birth are as follows: 1990 to 1999, 16%; 2000 to 2005, 16.9%; 2006 to 2008, 28.6%; 2009 to 2011, 27.9%. Prior to the Men as Partners initiative, the percentages of men attending antenatal clinic remained stable from 1990 through 2005. Although the women identified that the percentages of their partners' participation in antenatal care have increased since the Men as Partners initiative began, these increases were not statistically significant.

Table 2 presents the women's attitudes and beliefs concerning antenatal care. The 2 primary reasons women attended clinic were to identify and treat health problems (97.5%) and to monitor fetal viability and growth (96.7%). Almost 98% of women identified liking the lectures (group health education and drama presentations given by staff

Table 1. Demographic and Obstetric Characteristics of Women in Cameroon Africa who Participated in a Survey of Attitudes to Antenatal Care (N = 395)

Demographic and Obstetric Characteristics	n (%)
Age, y	
18-19	14 (3.5)
20-29	123 (31.1)
30-39	156 (39.5)
40-49	93 (23.5)
50-55	9 (2.3)
Education, y^a	
None	32 (8.1)
6 and less	144 (36.5)
7-11	205 (51.9)
12 and over	14 (3.5)
Religion	
Baptist	242 (61.3)
Catholic	95 (24.1)
Presbyterian	38 (9.6)
Other	14 (3.5)
None/traditional	6 (1.5)
Occupation	
Farming	188 (47.6)
Health care worker	73 (18.5)
Business	69 (17.5)
House help	21 (5.3)
Student	12 (3)
Teacher	8 (2)
Other	24 (6.1)
Marital status	
Married	289 (73.2)
Single	76 (19.2)
Widowed	16 (4.1)
Divorced	11 (2.8)
Polygamous	3 (0.8)
Number of times pregnant^b	
Primigravida	3 (0.8)
Missed entry	1 (0.3)
1	51 (12.9)
2-4	240 (60.8)
5 and over	100 (25.3)
Year of last birth	
No previous birth/missed entry	4 (1)
1980-1989	5 (1.3)
1990-1999	25 (6.3)
2000-2005	77 (19.5)
2006-2008	135 (34.2)
2009-2011	149 (37.7)

^aPrimary school (class 1-6) is compulsory for children aged 6-13 years, with government funding. Secondary school and higher are entered after passing written examination and are funded by families.

^bDoes not include current pregnancy.

Table 2. Women's Attitudes and Beliefs Regarding Antenatal Care (N = 395)		
Women's Antenatal Care Attitudes		n (%)
Women's reasons for antenatal care attendance		
Health problems are identified and can be treated	385	(97.5)
To help determine if the fetus is alive and growing well	382	(96.7)
To build up a good body and child	305	(77.2)
To have more knowledge on self and type of diet	291	(73.7)
Other	13	(3.3)
No reason given	3	(0.8)
What do you like best about antenatal care?		
Good lectures	386	(97.7)
Good check-up	371	(93.9)
The staff are kind and supportive	154	(39)
Clean environment	93	(23.5)
Other	8	(2)
Being with other pregnant women	7	(1.8)
Unable to identify anything good	1	(0.3)
What do you like least about antenatal care?		
Unable to identify anything I don't like	221	(55.9)
Long wait	143	(36.2)
Other	39	(9.9)
Staff are rude and not helpful	23	(5.8)
Dirty toilets	10	(2.5)
Men checking women	8	(2)
Did not wish to answer question	2	(0.5)

Note: Results do not sum to 100% as multiple responses to these questions were permitted.

before the obstetric examinations begin) as the best part of clinic, with having a normal obstetric and fetal evaluation (94%) being equally important. When asked what they liked least about antenatal clinic, many women (56.2%) said they could not identify anything they did not like. The primary complaint was a long wait (36.2%).

A series of questions was asked regarding men's involvement in antenatal care (Table 3). Women were first asked, "Is it good for a man to go to antenatal clinic with their partner?" Almost 84% of women responded "yes," with only 12% responding "no" ($P < .001$). Women were then asked to identify reasons for their responses. The women responding "yes" identified having HIV couples testing (72.9%) and increasing a man's knowledge of clinic activities (71.9%). Conflicts with men's work was the reason given by 41.7% of the women responding "no." One-third of the "no" responding women identified gender beliefs and cultural conflicts as their reason men should not come to antenatal clinic.

Those women whose partners had come to clinic with them were asked how the men's participation made them feel. All but one said that this made them happy, because the

Table 3. Women's Beliefs about Male Participation in Antenatal Care (N = 395)	
Responses to Questions About Women's Beliefs	n (%)
Is it good for a man to come to antenatal clinic with his partner?	
Yes	331 (83.8)
No	48 (12.2)
Other	3 (0.8)
Did not wish to answer question	13 (3.3)
Why is it good for a man to come to antenatal clinic?	
Both can have HIV testing and know status together	288 (72.9)
To increase his knowledge of antenatal activities	284 (71.9)
In case of infection they can be treated together	220 (55.7)
It shows real love and faithfulness for each other	219 (55.4)
It makes her happy and feel she is supported	198 (50.1)
The man will benefit from first hand information	166 (42)
Other	12 (3)
No reason	11 (2.8)
Did not wish to answer question	3 (0.8)
Why is it not good for a man to come to antenatal clinic?	
Many men do not have time to come	20 (5.1)
Pregnancy is a woman's affair	16 (4.1)
It is not our culture	16 (4.1)
Other	9 (2.3)
No reason	6 (1.5)
The woman may be ashamed and uncomfortable	6 (1.5)
The health workers may not welcome him	5 (1.3)
His other wives will be jealous	1 (0.3)
Did not wish to answer question	7 (1.8)
What do most women in your village think about men who come to antenatal clinic?	
It is normal	234 (59.2)
It is not normal	92 (23.3)
The man is jealous and overprotective	112 (28.4)
It is an act of responsibility and true love	145 (36.7)
It is a sign of weakness in the man	80 (20.3)
Other	42 (10.6)
Did not wish to answer question	6 (1.5)

Note: Results do not sum to 100% as multiple responses to these questions were permitted.

partner's participation showed true love (88.9%), support in case of any difficulty (85.6%), and provided HIV information and testing to the man (76.7%). The women also were asked how men in their village commonly supported their pregnant partners. Responses included provide money for antenatal care, basic necessities, and the birth (98.2%); assist in cooking and caring for the family (80.0%); and help in farm work (73.4%). When asked if they thought that this support was enough, almost 70% said "yes." However, this question had the highest percentage of women selecting not to respond (9.7%). Those women responding "yes" were asked why this was enough support. Most women (80.2%) felt that was all the partner could provide, and 33.0% responded this is what the hospital staff recommended. Most of the women responding "no" to this question said that more support was required in pregnancy (83.8%), with 81.1% saying they had no explanation.

Table 4. Women's Perception of Men's Attendance at Antenatal Clinic (N = 395)

Responses to Questions About Men's Attendance at Antenatal Clinic		n (%)
Has your partner ever come with you to antenatal clinic?		
Yes		91 (23)
No		304 (77)
Have you ever asked your partner to come to antenatal clinic?		
Yes		167 (42.3)
No		228 (57.7)
When you asked, did your partner accept?^a		
Yes		90 (53.9)
No		77 (46.1)
If he did not accept, what did he say?^b		
He did not have time		53 (68.8)
He said, "I do not have anything to do there"		20 (26)
He said, "It is not me who is pregnant"		6 (7.8)
He did not wish to answer me		5 (6.5)
Other		13 (16.9)
Did not wish to answer question		1 (1.3)
Why have you never asked your partner to come to antenatal clinic?^c		
I know he will never accept to come		83 (36.4)
He does not have time		55 (24.1)
He is not always around		47 (20.6)
He does not have anything to do there		45 (19.7)
His presence will make me feel uncomfortable		6 (2.6)
Other		63 (27.6)
Did not wish to answer question		5 (2.2)

^aNumber = 167.

^bNumber = 77. Note: Results do not sum to 100% as multiple responses to this question were permitted.

^cNumber = 228. Note: Results do not sum to 100% as multiple responses to this question were permitted.

The women were asked what their partners could specifically do for them during pregnancy; responses included "provide me with nice food" (86.8%), "help me with house work" (77.7%), "show me more love" (74.4%), "go with me to the farm" (58.2%), "give me more money" (58.2%), and "visit clinic with me" (52.7%).

Table 4 presents the women's perceptions about men's participation in antenatal care. Only 23% of the women reported that their partners had come to clinic with them. But most women (57.7%) said they had never asked, assuming that he would not want to come. Among those who asked, many (53.9%) said that their partners accepted. The primary reason the man did not come was "he did not have time" (68.8%).

Finally, a series of questions was asked about HIV (Table 5). Almost all women (99.5%) had heard of HIV, and 85.0% had been tested at least once in pregnancy. Over half of women said that their partner had at least one HIV test; however, 35.4% did not know if their partners had been tested. Almost 93% of women had HIV counseling during pregnancy and were asked how they felt about the counseling; responses included being happy with the counseling (52.7%) or being uncomfortable/scared or afraid (33.2%). Other feelings,

Table 5. Women's Knowledge and Use of HIV Care (N = 395)

Responses to Questions About Women's Knowledge and Use of HIV Care		n (%)
Have you heard of HIV/AIDS?		
Yes		392 (99.2)
No		2 (0.5)
Missed entry		1 (0.3)
Have you had PMTCT counseling in antenatal care?		
Yes		366 (92.7)
No		22 (5.6)
Did not wish to answer question		7 (1.8)
Have you had an HIV test?		
Yes		334 (84.6)
No		61 (15.4)
When did you have the HIV test?^a		
Only during pregnancy		100 (29.9)
Only when not pregnant		46 (13.8)
When pregnant and when not pregnant		184 (55.1)
Other		3 (0.9)
Did not wish to answer question		1 (0.3)
Has your partner ever had an HIV test?		
Yes		210 (53.2)
No		41 (10.4)
I do not know		140 (35.4)
Did not wish to answer question		4 (1)

Abbreviation: PMTCT, prevention of mother-to-child transmission.

^aNumber = 334. Note: Results do not sum to 100% as multiple responses to this question were permitted.

including that the counseling was “normal” and fear of testing positive, were reported by 18.6% of women.

Almost all women (97.5%) said that they had been told of ways to avoid HIV and identified the following (multiple responses accepted): limit sex to one faithful partner (92.4%), abstain from sex (84.6%), use only sterilized sharps (82.0%), use condoms (67.4%), and avoid risky places like drinking spots (19.3%).

DISCUSSION

The primary goal of this study was to identify women’s attitudes and beliefs regarding HIV and their partners’ involvement in antenatal care. The results show that the majority (83.6%) of women wanted their partners’ participation, with 12% not supportive of their partner’s involvement. This is a recent change in social and cultural attitudes, with the women identifying increasing numbers of men coming to clinic since 2006 coinciding with the Men as Partners initiative. Many women giving birth prior to 2000 said they had no knowledge that this was a role or option for their partner.

Social and cultural change in communities is neither quick nor simple, and time is required for general community acceptance. The results exhibit cultural and social attitudes in transition. Although most women were individually supportive of their partners’ involvement, almost one-third identified community barriers to including men in their care, only one-fourth of women identified that their partners had come with them, and not quite half had ever even invited their partners. Many women did not invite their partner because they assumed he would not accept, but over half of the men did come when asked. Finally, almost 10% of women declined to respond to the question regarding men’s support being adequate, which may indicate continued indecision and ambivalence toward men’s participation.

About 70% of the women identified that paying for antenatal care and childbirth was adequate partner support and is all the community expects from the father. This is consistent with the findings of the study of men’s attitudes and indicates that the community is not fully supportive of men’s active involvement in antenatal care.

Women did not identify negative attitudes and beliefs regarding antenatal care. As with other African populations,^{28,29} these women considered antenatal care to be important to a good pregnancy outcome. The belief in antenatal care was so positive that just over half of women could not identify anything they did not like about clinic. The women’s association of a “good” clinical examination with a positive pregnancy outcome is supported by their responses regarding their own obstetric outcomes. Almost 30% of women had at least one pregnancy loss, with only 3 women having a child die after birth. Therefore, a child will probably survive if born alive. In this community, child survival may be improved because of the ready access, availability, and use of medical care. The MBH is within an hour walk, and medical care is available 24 hours per day and 7 days per week. Additionally, patients will be seen with urgent and emergent conditions without prepayment for care.

Education also has been associated with increased use of antenatal care.^{30,31} These women’s literacy rate (91.9%) was

greater than that of women in Cameroon (67.8% for women aged 15 years and older), with over half having some secondary and higher education. This higher educational level certainly contributes to these participant’s use of and positive attitudes toward antenatal care.

The women expressed satisfaction with the antenatal care they received. Over 95% of women specifically mentioned liking the group education sessions, with 40% identifying that the staff was kind and supportive. Many responses concerned diet, with 75% viewing antenatal care helping them to “build up a good body and baby” and gain knowledge on diet. In the group teaching, there is emphasis on nutrition in pregnancy, with individual counseling available on an as-needed and requested basis. It is probable that these responses reflect the success of this education. The women’s concern about an adequate diet also was shown when 86.6% said their partners could help them by providing “nice food.”

The women’s primary complaint was that the clinic wait was too long, which they also identified as a barrier to their partners’ participation in antenatal care. Additionally, the men identified the long clinic wait as a barrier to their involvement in antenatal clinic. Long waits have been shown to be a primary complaint of African women.^{32–34} Addressing waiting time will be challenging because of facility constraints (one small examination room) and the often limited number of staff available to conduct clinic. Yet, an effort will be made to encourage the staff to identify creative ways to reduce waiting time without eliminating the provision of any antenatal care component.

Financial barriers have been shown to impact women’s access to antenatal care in some African countries.^{35–39} In Cameroon, men control the family’s finances, which can impact a women’s access to medical care. The obstetric care women receive is often dependent on the man’s ability and willingness to pay for the care. In both studies, payment for obstetric care was identified as the primary male role. Yet, there was a gender difference between men’s and women’s beliefs, with women (98.0%) identifying this role as being significantly higher than men identified it (73.4%) ($P = 0.001$).

The difficulty in payment for obstetric care is additionally complicated, because many health professionals and facilities require immediate payment for health services. Even with emergent obstetric conditions, women may not receive care because of their family’s inability to pay.⁴⁰ The MBH treats all obstetric patients with urgent/emergent conditions, regardless of ability to pay. This policy contributes to the high proportion of women (65%) presenting to MBH for childbirth with no antenatal care at MBH and often with complicated conditions.

Finally, the man’s responsibility to pay for obstetric care is viewed within the context of marriage. Therefore, the woman or her family must pay for care when there is not a committed relationship. In this community, over one-fourth (26.4%) of women were single, widowed, or divorced. If pregnant, there is not only this financial burden but a greater risk of HIV exposure because of often unstable relationships. Yet, although most families must struggle to settle these pregnancy-related bills, each child is welcomed, with their birth considered a joyous occasion. The CBCHS can continue to promote abstinence unless married, to encourage men to assume responsibility for the children they father, and to provide

nonjudgmental care for those women, their families, and the children born in these circumstances.

Gender barriers in communications have been identified in African studies.^{29,41} Many women spoke of love and emotional support from their partners. Almost 75% said that men should show women more love when they are pregnant, and over 50% of women thought that men's attendance at antenatal clinic exhibited their partners' care and concern. These responses reflect the women's wish for improved communication with their partners, which is consistent with the findings of the men's study. Changes in communication patterns can come only with community discussions, acceptance, and encouragement of a changing role of men and women.

The women's responses identified that they consider HIV counseling and testing to be an important component of antenatal care. When the PMTCT program was begun, HIV counseling and testing was integrated as a routine and expected part of antenatal activities.⁴² This decision was supported by most women, responding that counseling and testing was an expected part of antenatal care. Antenatal clinic was the primary venue through which most women accessed HIV counseling and testing. The women also extended this expectation to couples counseling, with 72.8% saying that the couple should have HIV counseling and testing as part of antenatal care. Yet, gender barriers also were evident in the women's responses about men's testing. Many women did not know if their partner had had an HIV test. This was also a finding in the men's study, with men saying they need to know their partners' test results, but that the woman does not have a right to know the man's HIV status. An emphasis on couples counseling began with the Men as Partners initiative, and it is hoped that the couples counseling will assist in promoting communication between partners, including the sharing of HIV test results.

Antenatal HIV counseling is provided in group sessions and individually. An important component of this counseling includes providing information on avoiding HIV infection. The impact and acceptance of this counseling is supported by 96% of women able to identify one or more ways to avoid HIV infection.

Study Limitations

The traditional and cultural barriers identified by study participants probably would be identified in all Cameroon communities. But, these attitudes and beliefs may be more prevalent in rural versus urban communities. Although this community would commonly be considered a rural area, the women's responses are more consistent with an urban population. The study findings may or may not be representative of other Cameroon communities because the women surveyed are mostly of one tribal group, Christian, and have been educated with accessible, available, and acceptable medical services. Finally, this study addressed antenatal care, and it cannot be assumed that these attitudes extend to giving birth. There have been recent African studies showing that men's participation in antenatal care is acceptable but involvement in labor and birth is not.^{25,43–45}

SUMMARY

This study showed that women view antenatal care positively and are supportive of their partners' involvement. Pregnancy and antenatal care have traditionally been viewed as a woman's affair, but with education and encouragement this attitude is changing. Although the women identified that their individual beliefs were supportive of men's involvement in their antenatal care, many believed that their community did not support this change in men's role.

As in the men's study, gender barriers in communication were identified by the women. Although 83% of women supported their partners coming to clinic with them, only 42% had ever invited their partners. Almost 85% of women had HIV testing, yet 35% of women did not know if their partners had had an HIV test. Similar gender patterns in communication were identified in a recent Tanzania study.⁴⁶

This study displays the positive impact of the PMTCT program and obstetric staff in providing HIV counseling and testing. Antenatal clinic is the primary venue these women use to access HIV testing. The PMTCT and obstetric staff must be encouraged to continue their efforts to provide quality, acceptable, and integrated antenatal and PMTCT care.

The effort to support men's involvement in antenatal care should continue. The women identified the acceptability and positive aspects of men's participation and couples counseling. Yet, as found in recent studies,^{47,48} providing HIV testing to men through antenatal care is only one venue, and additional options must be made available to men to increase the numbers having HIV testing.

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CONFLICT OF INTEREST

The authors have no conflicts of interest to disclose.

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REFERENCES

1. Joint United Nations Programme on HIV/AIDS. Global report: UNAIDS report on the global AIDS epidemic 2010: www.unaids.org/global_report/Global_report.htm. 2010. Accessed July 28, 2011.
2. United Nations Population Fund. UNFPA: Cameroon-Country Profile: www.unfpa.org/public/cache/offence/home/sitemap/countries. 2011. Accessed July 28, 2011.
3. American Congress of Obstetricians and Gynecologists. HIV and women: new approaches to screening and gynecologic care. *ACOG today*. Washington D.C. December 2010.
4. WHO. Global Health Sector Strategy on HIV/AIDS 2011-2015. who.int/hiv/topics/vct/en/ (publication 9789241501631). Accessed March 12, 2011.
5. UNAIDS. HIV voluntary counseling and testing: a gateway to prevention and care. 2002. data.unaids.org/publications/IRC-pub02/sc729-vct-gateway-cs_en.pdf. Accessed March 12, 2011.
6. Horizons. HIV voluntary counseling and testing: an essential component in preventing mother-to-child transmission of HIV. www.popcouncil.org/pmtctvct.pdf. Accessed March 12, 2011.
7. CDC. New hope for stopping HIV, Testing and Medical Care Save Lives. CDC Vital Signs. December 2011. www.cdc.gov/vital-signs/HIVtesting/index.html. Accessed January 17, 2012.
8. WHO, UNICEF and UNAIDS. Towards universal access—scaling up priority HIV/AIDS interventions in the health sector. Progress report 2009. www.who.int/hiv/topics/universalaccess/en/index.html. Accessed September 15, 2010.
9. United Nations Children's Fund (UNICEF). Progress for children: achieving the MDGs with equity (No. 9). www.unicef.org/publications/index_555740.html. Accessed September 1, 2010.
10. WHO, UNICEF and UNAIDS. Towards universal access—scaling up priority HIV/AIDS interventions in the health sector. Progress report 2008. www.who.int/hiv/pub/2010progressreport/en/. Accessed September 15, 2010.
11. Center for Communication Programs. Get together know together: couples HIV counseling and testing in Uganda. November 30, 2010.
12. Rwanda Zambia Research Group (RZHRG). *Couples HIV counseling and Testing*. AIDSTAR-ONE. 2009. aidstar-one.com/promising-practices/database/g3ps/couples_hiv_counseling_and_testing. Accessed January 17, 2012.
13. Centers for Disease Control and Prevention. *Couples HIV Counseling and Testing Intervention and Training Curriculum*. Atlanta, Georgia: CDC; 2007.
14. World Health Organization. *Engaging men and boys in changing gender-based inequity in health: evidence from programme interventions*. Geneva, Switzerland: World Health Organization; 2007.
15. Joint United Nations Programme on HIV/AIDS. Global report: UNAIDS report on the global AIDS epidemic 2010. www.unaids.org/global_report/Global_report.htm. 2010. Accessed July 28, 2011.
16. Katz DA, Kiarie JN, John-Stewart GC, et al. Male perspectives on incorporating men into antenatal HIV counseling and testing. *PLoS One*. 2009;4(11):e7602.
17. Tsara BE, Zvinavashe M, Kasu CM, Gundani HV. Adherence to the PMTCT programme and perceived family support. *African J Midwifery Womens Health*. 2011;5(1):5-8.
18. Becker S, Mlay R, Schwandt HM, Lyamuya E. Comparing couples' and individual voluntary counseling and testing for HIV at antenatal clinics in Tanzania: a randomized trial. *AIDS Behavior*. 2010;14:558-566.
19. Farquhar C, Klarie JN, Richardson BA, et al. Antenatal couple counseling increases uptake of interventions to prevent HIV-1 transmission. *J AIDS*. 2004;37(5):1620-1626.
20. Theuring S, Mbezi P, Luvanda H, Jordan-Harder B, Kunz A, Harms G. Male involvement in PMTCT services in Mbeya Region, Tanzania. *AIDS Behavior*. 2009;June 13 1(suppl):92-102.
21. Peacock D, Levack A. The Men as Partners Program in South Africa: reaching men to end gender-based violence and promote sexual and reproductive health. *Int J Mens Health*. 2004;3(3):173-188.
22. Ditlopo P, Mullick S, Askew I, et al. Testing the effectiveness of the Men as Partners Program (MAP) in Soweto, South Africa. Engender health and hope worldwide. November 2007. www.popcouncil.org/frontiers/FR_FinalReports/SA_MAP.pdf. Accessed July 28, 2011.
23. Nkuoh GN, Meyer DJ, Tih PM, Nkfusai J. Barriers to men's participation in antenatal and prevention of mother-to-child hiv transmission care in Cameroon, Africa. *J Midwifery Womens Health*. 2010;55(4):363-369.
24. Orne-Gliemann J, Tchendjou P, Miric M, et al. Couple-oriented prenatal HIV counseling for HIV primary prevention: an acceptability study. *BMC Public Health*. 2010;10:197.
25. Homsy J, Kalamya JN, Obonyo J, et al. Routine intrapartum HIV counseling and testing for prevention of mother-to child transmission of HIV in a rural Ugandan hospital. *J AIDS*. 2006;42(2):149-154.
26. Muula A, Misiri H, Tadesse E. *Challenges Facing the Scaling Up Prevention of Mother to Child Transmission of HIV in Blantyre, Malawi*. Blantyre, Malawi: University of Malawi; 2004.
27. Byamugisha R, Tumwine J, Semiyaga N, Tylleskar T. Determinants of male involvement in the prevention of mother-to-child transmission of HIV programme in Eastern Uganda: a cross-sectional survey. *Reprod Health*. 2010;7:12.
28. Mushi D, Mpebeni R, Jahn A. Effectiveness of community based safe motherhood promoters in improving the utilization of obstetrical care. The case of Mtwara Rural District in Tanzania. *BMC Pregnancy Childbirth*. 2010;10:14.
29. Magoma M, Requejo J, Campbell O, Cousens S, Filippi V. High ANC coverage and low skilled attendance in a rural Tanzania district: a case for implementing a birth plan intervention. *BMC Pregnancy Childbirth*. 2010;10:13.
30. Oluwatosin OA, Aluko JO, Onibokun A. Factors influencing initiation of antenatal care in Ibadan, Nigeria. *Afr J Midwifery Womens Health*. 2011;5(4):163-168.
31. Taguebu J, Monebenimp F, Zingg W, et al. Risk factors for prematurity among neonates from HIV positive mothers in Cameroon. *World J AIDS*. 2011;1:1-7. www.SciRP.org/journal/wja. Accessed December 10, 2011.
32. Donkor ES, Obed SA. Waiting time and women's satisfaction at an antenatal clinic in Ghana. *Afr J Midwifery Womens Health*. 2012;6(1):7-14.
33. Lincetto O, Moathebesoane-Ahoh S, Gornez P, Munjanja S. Antenatal care. Chapter 2. In: *Opportunities for Africa's Newborns*. Geneva, Switzerland: Partnership for Maternal, Newborn & Child Health (PM-NCH); 2006:51-60.
34. Maman S, Moodley D, Groves AK. Defining male support during and after pregnancy from the perspective of HIV-positive and HIV-negative women in Durban, South Africa. *J Midwifery Womens Health*. 2011;56(4):325-331.
35. Family Care International. Care-seeking during pregnancy, delivery, and the postpartum period: a study in Homabay and Migori Districts, Kenya. 2003. www.countdown2015mnch.org/reports-publications/2010-report. Accessed July 28, 2011.
36. Kyomuhendo GB. Low use of rural maternity services in Uganda: impact of women's status, traditional beliefs and limited resources. *Reprod Health Matters*. 2003;11(21):16-26.
37. Cham M, Sundby J, Vangen S. Availability and quality of emergency obstetric care in Gambia's main referral hospital: women-users' testimonies. *Reprod Health*. 2009;6(5). www.reproductive-health-journal.com/content/6/1/5. Accessed October 20, 2010.
38. Akpabio II, Edet OB, Robinson-Bassey GC. Preferences for traditional or modern practitioners: a comparative study. *Afr J Midwifery Womens Health*. 2012;6(1):13-20.
39. Ndikom CM. Pattern of uptake of maternal health services in a rural community in Nigeria. *Afr J Midwifery Womens Health*. 2010;4(3):139-145.

40. Leina C. Cameroon loses ground on maternal health goal. *WeNews*. June 5, 2011. Accessed July 5, 2011.
41. Chirwa E, Noor K, Malata A, Mambulasa J. A community participatory process for peer group HIV prevention. *Afr J Midwifery Womens Health*. 2011;5(3):111-116.
42. Welty T, Bulterys M, Welty E, et al. Integrating prevention of mother-to-child HIV transmission into routine antenatal care—the key to program expansion in Cameroon. *J AIDS*. 2005;40(4):486-493.
43. Oboro V, Oveniran AO, Akinola SE, Isawumi AL. Attitudes of Nigerian women toward the presence of their husband or partner as support person during labor. *Int J Gynecol Obstet*. 2010;112(1):56-58.
44. Mullick S, Kunene B, Wanjiru M. Involving men in maternity care: health service delivery issues. In: *Frontiers in Reproductive Health: Special Focus on Gender, Culture and Rights*. New York, NY: Population Council; 2005:124–135.
45. Iliyasu Z, Abubaker IS, Galadanci HS, Aliyu MH. Birth preparedness, complication readiness and father's participation in maternity care in a northern Nigerian community. *Afr J Reprod Health*. 2010;14(1):21-32.
46. Akarro RRJ, Deoisia M, Sichona FH. An evaluation of male involvement on the programme for PMTCT of HIV/AIDS: a case study of Ilala Municipality in Dar es Salaam, Tanzania. *Arts Soc Sci J*. 2011. http://astonjournals.com/manuscripts/vol2011/assj-20_vol2011.pdf. Accessed July 15, 2011.
47. Ditakemena J, Matendo R, Koole O, et al. Male partner voluntary counseling and testing associated with the antenatal services in Kinshasa, Democratic Republic of Congo: a randomized controlled trial. *Int J STD AIDS*. 2011;22:165-170.
48. Bwambale FM, Sali SN, Byaruhanga S, Kalyango JN, Karamagi C. Voluntary HIV counseling and testing among men in rural western Uganda: implications for HIV prevention. *BMC Public Health*. 2008;8(263):1-12.