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Abstract

Both HIV and unintended pregnancies have been associated with adverse maternal, perinatal, and infant outcomes. Malawi is a country with both high HIV prevalence and rates of unintended pregnancy, where 13% of women aged 15-49 years have HIV, and 41% of pregnancies are unintended. We conducted a cross-sectional study of baseline characteristics of Malawian women in a prospective cohort study assessing postpartum contraceptive uptake and continuation. 424 HIV-uninfected and 210 HIV-infected postpartum Malawian women were surveyed between May and October 2013. HIV-infected women were more likely to report an unintended pregnancy. Nearly all women did not want a child in the next two years but HIV-infected women were more likely to desire no further children when adjusted for age and number of living children. HIV-infected women were also significantly less likely to recognize the IUD and implant as safe in breastfeeding. There is a high desire for fertility limitation among postpartum women, but misperceptions about IUD and implant during breastfeeding may impede postpartum uptake of these methods. Educational efforts may improve knowledge and uptake of the most effective forms of reversible contraception.



Introduction

Prevention of unintended pregnancies is one of the four cornerstones of a comprehensive approach to the prevention of mother-to-child-transmission (PMTCT) of HIV.

HIV-infected women wanting to limit or space their pregnancies should have access to the most effective methods of family planning.

13% of Malawian women aged 15-49 years have HIV, and 41% of pregnancies are unintended.

The primary objective of our study was to compare the pregnancy intentions and family planning (FP) knowledge, attitudes, and practices of HIV-infected and HIV-uninfected postpartum Malawian women.

We also examined the effect of HIV status on fertility desire and intrauterine device (IUD) and implant knowledge.



Copper T380A IUD
Effective 10-12 years



Subdermal implant
Effective 3-5 years

Methods

We conducted a cross-sectional study of the baseline characteristics of postpartum women enrolled in a prospective cohort study of postpartum contraceptive uptake and continuation in Lilongwe, Malawi.

Pearson's chi-square tests were used to compare reproductive health history and family planning knowledge, attitudes, and practices between HIV-positive and HIV-negative women.

Modified Poisson regression was performed to assess the effect of HIV status on future fertility desire and knowledge about the IUD and implant.

Results

Table 1. Baseline reproductive characteristics

Reproductive history (N=634)	210 HIV+ n (%)	424 HIV- n (%)	P-value
Unintended pregnancy	103 (49)	156 (37)	0.003
Unintended, using contraception	63 (61)	85 (54)	0.005
Injectables	36 (57)	56 (66)	0.3
Condoms	40 (63)	29 (34)	<0.001
Breastfeeding	24 (38)	19 (22)	0.04
IUD/implant	6 (10)	2 (2)	0.06
Desire no more children	124 (59)	108 (25)	<0.001
Plan implant postpartum	135 (64)	292 (69)	0.2
Plan IUD postpartum	43 (21)	82 (19)	0.7
Plan condoms postpartum	112 (53)	153 (36)	<0.001

Almost all (97%) of women did not want another pregnancy in 2 years.

HIV-infected women were more likely to desire no further children when adjusted for age and # of living children (PR: 1.59; 95% CI: 1.33, 1.89)

Table 2. IUD and implant counseling and knowledge

IUD/implant knowledge (N=634)	210 HIV+ n (%)	424 HIV- n (%)	P-value
Antenatal counseling on implant	91	80	<0.001
Heard of implant	99	97	0.06
Implant safe in breastfeeding	69	82	<0.001
Antenatal counseling on IUD	87	71	<0.001
Heard of IUD	98	89	<0.001
IUD safe in breastfeeding	49	69	<0.001

Almost all (99%) women had at least 1 misconception about the IUD compared to 77% regarding the implant

HIV-infected women were significantly less likely to know that the IUD (adjusted PR 0.72; 95% CI: 0.61,0.84) and implant (adjusted PR 0.83; 95% CI: 0.75, 0.92) are safe in breastfeeding.

The most common FP methods planned between both groups were breastfeeding (73%), the implant (67%), and condoms (42%).



Top: Bwaila Maternity Hospital
Bottom: Two postpartum women

Discussion and Conclusions

- Postpartum women strongly desire family spacing; many HIV-infected postpartum women desire no further children.
- Misperceptions about IUD and implant during breastfeeding may impede postpartum uptake of these methods.
- Educational efforts may improve knowledge and uptake of the most effective forms of reversible contraception.

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