

High proportion of unintended pregnancies and limited contraceptive use among HIV-positive women in rural Zambia

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Background

HIV-infected women and family planning

- Preventing unintended pregnancies is a priority intervention towards eliminating mother-to-child transmission of HIV (UNAIDS, 2012)
- Unmet need for family planning is high in sub-Saharan Africa (Sarnquist, et al., 2013)
 - 61-92% of women with HIV did not to want to have another child
 - Only 20-57% of the women used contraception

HIV/AIDS in Zambia

- HIV prevalence in 2012: 13 % (UNAIDS, 2013)
- PMTCT program in 2011: (MoH, 2012; UNAIDS, 2012)
 - 97% of pregnant women tested for HIV
 - 85% of HIV-positive pregnant women received ARV
 - 11% of HIV exposed infants acquired HIV infection
- Unmet need for family planning among married women in 2007: 27% (UNAIDS, 2012)
- Few studies have examined unmet need for family planning among HIV-positive women

Objectives

1. To assess prevalence of unintended pregnancy and contraceptive use among HIV-positive pregnant women
2. To identify factors associated with unintended pregnancy and non-contraceptive use
3. To examine reasons for not using contraceptives

Methods

- Study Design: Prospective cohort study
- Study Site: Chongwe district, Zambia
- Study Period: From July 2011 to March 2013



Methods

- Participants
 - 371 HIV-positive women enrolled in the PMTCT program in 11 health centers
- Data collection
 - Structured face-to-face interview
 - Background characteristics, pregnancy intention, contraceptive use, and reasons for not using contraceptives
- Statistical analysis
 - Descriptive analysis
 - Multiple logistic regression on factors associated with unintended pregnancy and non-contraceptive use, controlling for covariates with p-value < 0.2 in univariate analysis

Results: Basic characteristics

Characteristics (N=371)	N	(%)
Newly diagnosed as HIV positive at current pregnancy	189	(51.2)
Age<30	199	(53.6)
Education <8 years	247	(66.8)
Married	307	(83.2)
Has <4 children	228	(61.6)
Participant has any work	136	(36.9)
Partner has a permanent work	165	(44.8)
Partner's HIV status		
Positive	138	(37.2)
Negative	57	(15.4)
Unknown	176	(47.4)
Disclosed HIV status to partner	292	(88.5)
Experienced domestic violence	69	(18.6)

Pregnancy Intention and Contraceptive Use

- Unintended pregnancy: **50.4%** (187/371)
- Non-contraceptive use among those reported unintended pregnancy: **54.0%** (101/187)

Reasons for not having used contraception (multiple answer)	N	(%)
Did not want to use contraception	45	(45.9)
Did not ask health worker for contraception	42	(42.9)
Didn't know any contraception	31	(31.6)
Was afraid of health problems (side-effect of contraception)	26	(26.8)
Did not know where you can get contraception	24	(24.5)
Partner did not want to use contraception	23	(23.5)
Your religion did not allow to use contraception	6	(6.1)
Used a traditional contraception instead	6	(6.1)

Factors associated with unintended pregnancy

Characteristics	OR	95% CI	p-value	AOR	95% CI	p-value
Diagnosis of HIV infection						
Newly diagnosed						
Already known status	1.43	0.95 - 2.16	0.09	1.54	0.98 - 2.45	0.06
Age						
<30						
≥30	1.71	1.13 - 2.58	0.01	1.78	1.12 - 2.84	0.02
Education (years)						
<8						
≥8	0.96	0.62 - 1.48	0.85			
Marital status						
Married						
Unmarried	3.79	2.03 - 7.06	<0.01	3.72	1.48 - 9.33	0.01
Number of children						
<4						
≥4	1.01	0.66 - 1.54	0.96			
Participant's work status						
Permanent / Temporal work						
Non work	1.07	0.70 - 1.63	0.76			
Partner's work status						
Permanent work						
Non / Temporal work	2.03	1.34 - 3.08	<0.01	1.63	1.03 - 2.57	0.04
Partner's HIV status						
Positive	1.09	0.59 - 2.03	0.78			
Negative						
Unknown	1.40	0.77 - 2.55	0.27			
Disclosed HIV status to partner						
Yes	0.61	0.31 - 1.21	0.15	0.78	0.36 - 1.70	0.53
No						
Experienced domestic abuse						
Yes	0.95	0.56 - 1.60	0.84			
No						

Factors associated with non-contraceptive use

Characteristics	OR	95% CI	p-value	AOR	95% CI	p-value
Diagnosis of HIV infection						
Newly diagnosed						
Already known status	0.72	0.40 - 1.29	0.27			
Age						
<30						
≥30	0.62	0.35 - 1.11	0.11	0.70	0.39 - 1.28	0.25
Education (years)						
<8						
≥8	0.90	0.48 - 1.65	0.73			
Marital status						
Married						
Unmarried	2.16	1.08 - 4.35	0.03	2.01	0.99 - 4.09	0.05
Number of children						
<4						
≥4	1.11	0.61 - 2.00	0.74			
Participant's work status						
Permanent / Temporal work						
Non work	1.20	0.66 - 2.18	0.55			
Partner's work status						
Permanent work						
Non / Temporal work	0.72	0.39 - 1.33	0.29			
Partner's HIV status						
Positive	0.78	0.31 - 1.95	0.59			
Negative (reference)						
Unknown	0.89	0.37 - 2.13	0.79			
Disclosed HIV status to partner						
Yes	0.72	0.29 - 1.81	0.49			
No						
Experienced domestic abuse						
Yes	0.82	0.39 - 1.73	0.60			
No						

Summary

- High proportion of unintended pregnancy with low prevalence of contraceptive use among HIV-infected women
- Main reasons for non-contraceptive use
 - No/low intention to use contraceptives
 - Lack of information/knowledge
- Religious belief and traditional contraceptive practices were not the major barriers

Summary

- Factors associated with unintended pregnancy
 - Older age
 - Unmarried status
 - Partners without permanent job
 - Already known HIV status (marginal)
- Factors marginally associated with non-contraceptive use
 - Unmarried status

Conclusion and recommendations

- There is an urgent need to increase contraceptive coverage among HIV-positive women and their partners who are not considering for further pregnancies
- Further in-depth study is needed to explore reasons for low intention for using contraceptives
- Provision of family planning services at antiretroviral therapy clinic and PMTCT services could increase contraceptive coverage

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