



University of Nairobi



**HIV and Pregnancy
Intention Study**

NYU COLLEGE OF
Nursing

Contraception among women in HIV concordant and discordant partnerships in Western Kenya

Trends and Predictors of Changes

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**INTEGRATION FOR IMPACT 2012
REPRODUCTIVE HEALTH AND HIV SERVICES IN SUB SAHARAN AFRICA
NAIROBI, KENYA**

Introduction



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- Contraception practices among women are known to change over time.
- It is important to understand the magnitude and factors associated with these changes in the context of the HIV epidemic.
- This is particularly important in the context of integrating reproductive health and HIV services.



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Study Aims

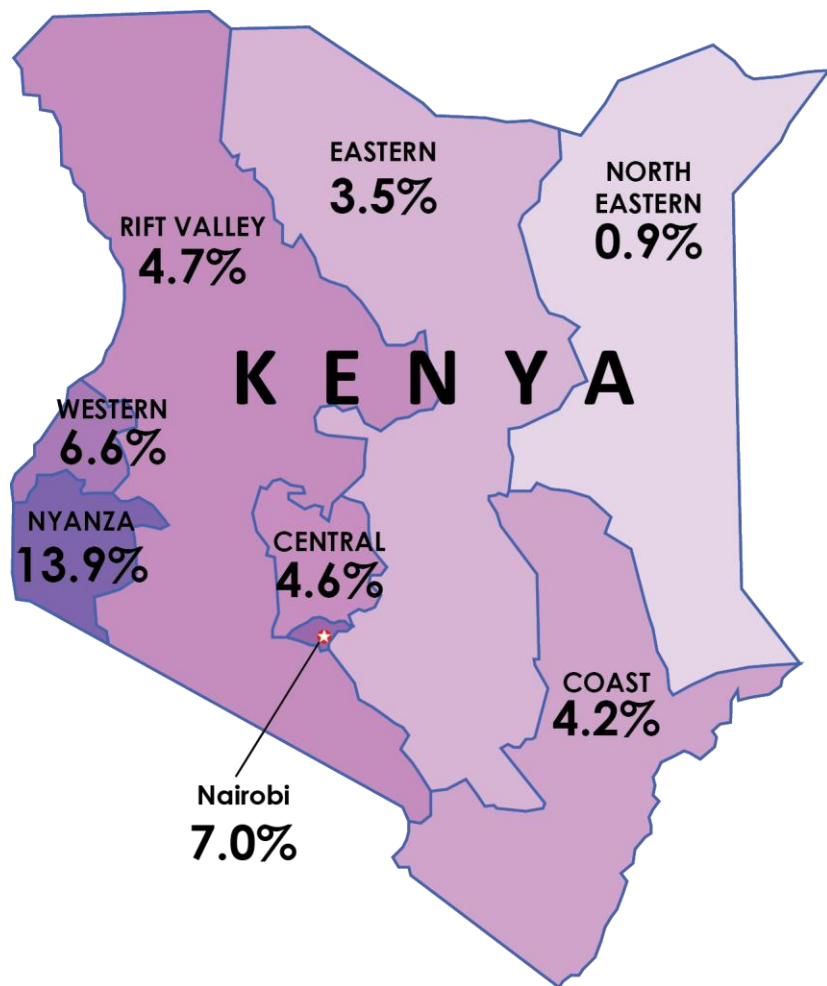
Among HIV concordant and discordant couples in Nyando district

1. Describe Contraceptive practices
2. Describe changes in use of hormonal and none hormonal methods of contraception
3. Determine predictors of changes in contraceptive practices

Study site



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- Nyanza Province
 - 14% prevalence in 15-49 year olds
 - 21% marriages polygamous
 - High pregnancy rates and low contraceptive use
 - 8.1% women currently pregnant
 - Total fertility rate 5.4
 - 33% using any modern method
 - 32% unmet need for family planning
 - 19% for spacing
 - 13% for limiting

KDHS, 2009

HAPI Study Design



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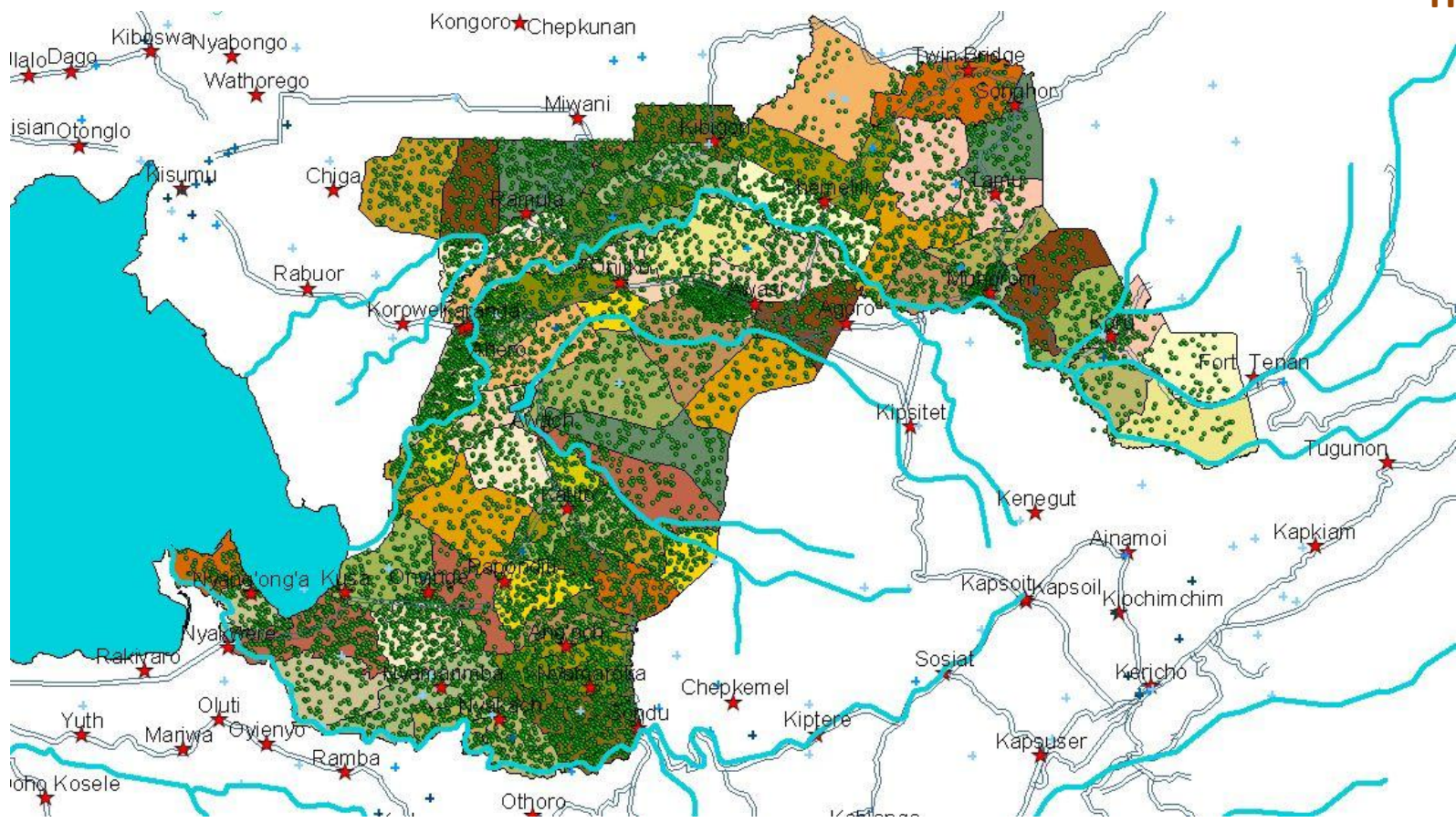
- Sampling Frame - Spatial points on a digital map of Nyando districts
- Points proportionate 2009 census population size
- Mobile data tools (PDAs) for locating points and for ACASI survey



Ten Thousand Sampled Points



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Key

- Towns
- Health Centers
- Rivers
- Roads
- Lakes
- Sampled Points

Field Point Identification



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- Go to locator point on sample list
 - If point not accessible go to point nearest designated locator point
- Map the starting point
- Locate household nearest to start point
 - Standardized algorithm for locating household





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Eligibility Characteristics

- Cohabiting in selected household
- Planning to live in area for 2 years
- Female partner is 15 to 49 years
- Not using permanent contraception
- Have not previously tested HIV positive
- Accept home based couple HCT
- Follow up
 - All discordant couples
 - An equal number of randomly selected concordant Negative couples
 - All Concordant Positive Couples

Analysis restricted to enrolled couples that had a 6 month follow up visit by March 2012



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Data collection

- Home based HCT results
- Self administered ACASI using PDA
 - Couple characteristics
 - Pregnancy intention
 - Contraception hormonal (pills, injection and implants), intra uterine device (IUD), female sterilization (BTL) or none
- Results of pregnancy testing of all women



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RESULTS



Characteristics of Couples



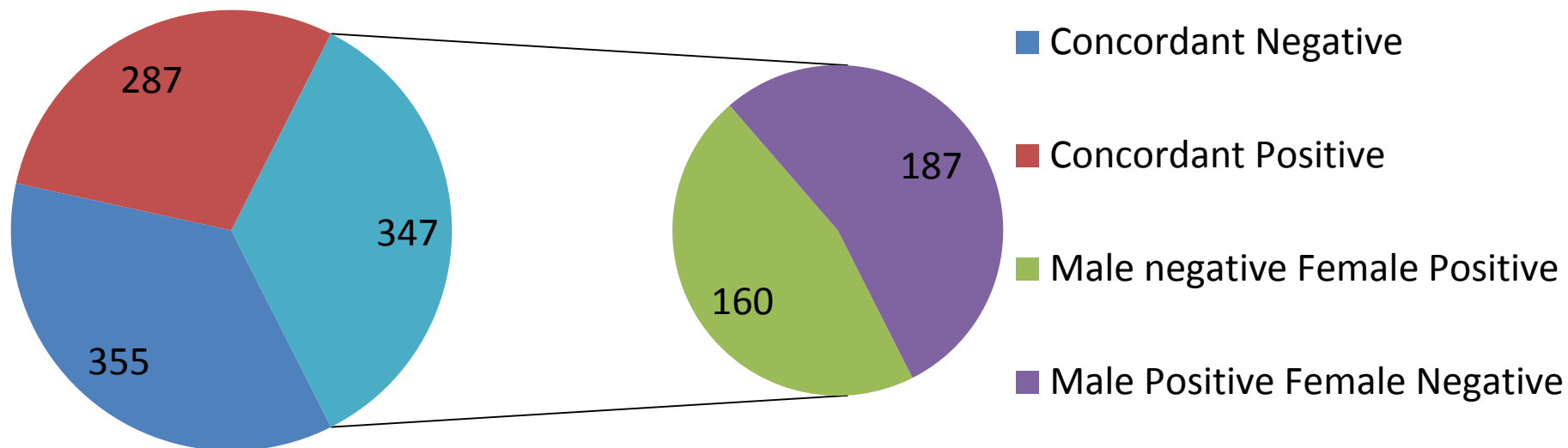
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Characteristics		Mean (IQR) or Number (%) N=989
Age:	Male Partner	39 (29 – 47)
	Female partner	29 (23 – 34)
Female Partner Education level		
	Primary level or less	840 (86%)
	Secondary level or above	138 (14%)
Marital status:	Monogamous	943 (97%)
	Polygamous	32 (3%)
Number of living children		
	2 or less	382 (39%)
	More than 2	607 (61%)
Intends pregnancy in next 6 months		
	Yes	289 (29%)
	No	593 (60%)
	Not sure	85 (9%)
Pregnancy	Pregnant	121 (12%)
	Not Pregnant	868 (88%)



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HIV status of Couples



Reported Contraception at Enrolment



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Hormonal Contraception	242	(28%)
Intra Uterine Device	46	(5%)
None	580	(67%)

HIV status	Hormonal	IUD	Any
Concordant negative couple	99 (32%)	21 (7%)	120 (39%)
Concordant Positive Couple	67 (27%)	7 (3%)	74 (30%)
Discordant Couple (Male Positive)	43 (26%)	9 (5%)	52 (31%)
Discordant Couple (Female Positive)	33 (24%)	9 (6%)	42 (30%)
P value	0.240	0.185	0.088
HIV positive women	101 (26%)	16 (4%)	117 (30%)
HIV negative women	141 (30%)	30 (6%)	171 (36%)
P value	0.165	0.133	0.042

Reported Contraception at 6 months



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Hormonal Contraception	156	(18%)
Intra Uterine Device	87	(10%)
Female Sterilization	141	(17%)
None	468	(55%)

HIV status	Hormonal	IUD	BTL	Any
Concordant negative couple	61 (20%)	41 (14%)	57 (19%)	159 (53%)
Concordant Positive Couple	42 (17%)	25 (10%)	32 (13%)	99 (40%)
Discordant Couple (Male Positive)	29 (18%)	12 (7%)	31 (19%)	72 (44%)
Discordant Couple (Female Positive)	24 (17%)	9 (6%)	21 (15%)	54 (38%)
P value	0.894	0.058	0.233	0.008
HIV positive women	67 (17%)	34 (9%)	57 (14%)	158 (40%)
HIV negative women	89 (19%)	53 (12%)	84 (18%)	226 (49%)
P value	0.344	0.122	0.122	0.006

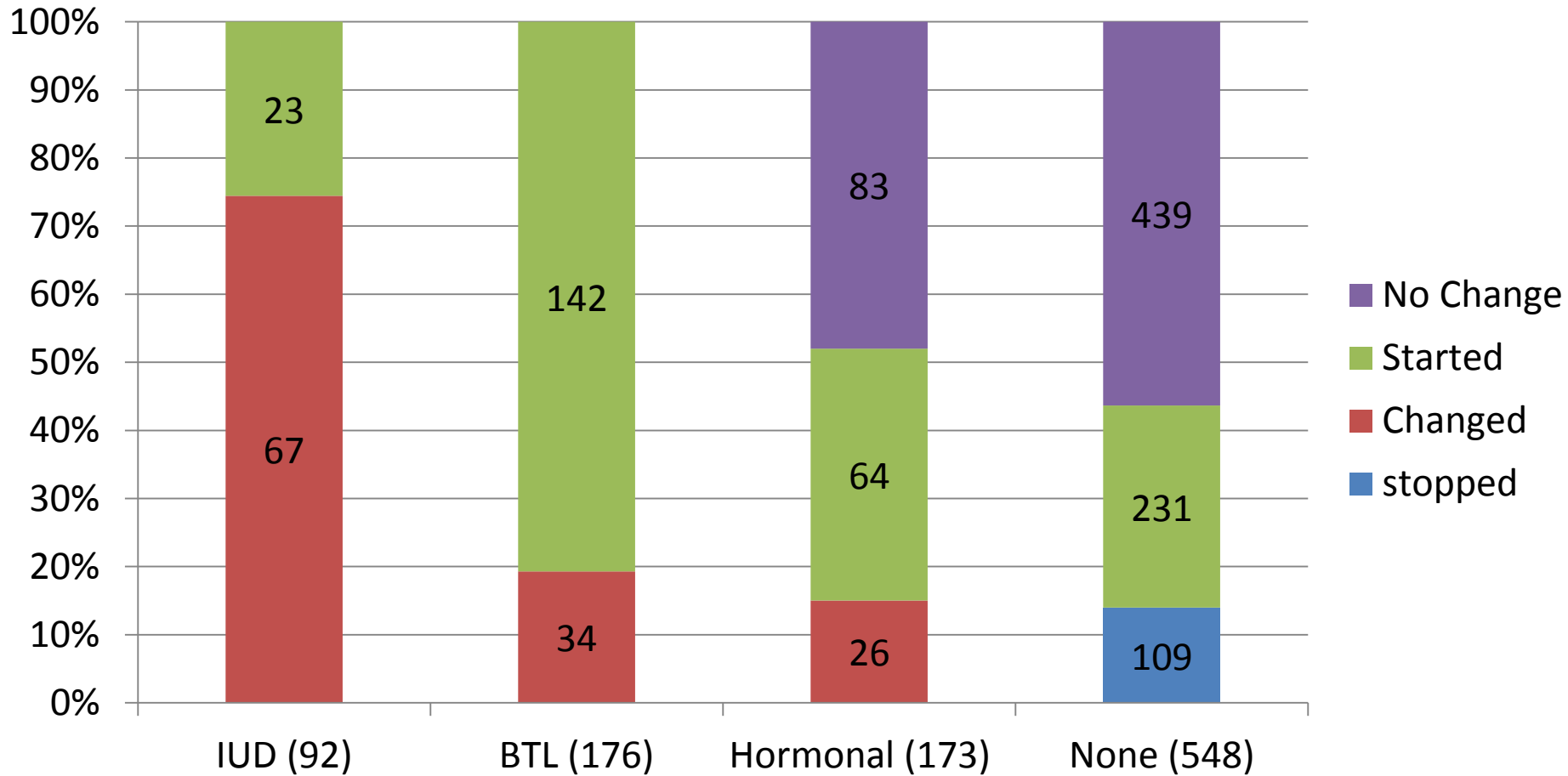


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Unmet Family Planning Need

		Contraception	
		Using	Not using
Pregnancy intention	Intending Pregnancy	108 (11%)	169 (17%)
	Not Intending Pregnancy	360 (37%)	243 (25%)
	Not Sure	42 (4%)	45 (5%)

Changes in contraception practice



Predictors of stopping contraception



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		Stopped	OR (95% CI)	P value
Age group	<35 years	13%	1.9 (1.1 – 3.3)	0.02
	>=35 years	7%	ref	
No of living children	<=2 children	10%	0.8 (0.5 – 1.3)	0.4
	>2 children	12%	ref	
HIV Status	Negative	11%	1.0 (0.6 – 1.7)	0.9
	Positive	12%	ref	
Contraception at enrolment	Hormonal	31%	0.5 (0.3 – 1.0)	0.03
	IUD	48%	ref	

Predictors of change contraception method



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		Changed	OR (95% CI)	P value
Age group	<35 years	14%	1.9 (1.1 – 3.1)	.01
	>=35 years	8%	ref	
No of living children	<=2 children	10%	0.7 (0.4 – 1.0)	.07
	>2 children	15%	ref	
HIV status	Negative	15%	1.6 (1.1 – 2.4)	.02
	Positive	10%	ref	
Contraception at enrolment	Hormonal	38%	0.6 (0.3 – 1.2)	0.2
	IUD	48%	ref	



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Predictors of initiating method of contraception

		Initiated	OR (95% CI)	P value
Age group	<35 years	22%	0.9 (0.6 – 1.3)	0.6
	>=35 years	24%	ref	
No of living children	<=2 children	26%	1.3 (0.9 – 1.8)	0.09
	>2 children	21%	ref	
HIV status	Negative	24%	1.1 (0.8 – 1.6)	0.4
	Positive	21%	ref	

Limitations and strengths

- Strengths

- Random sample of couples
- Community based study
- Use of ACASI promotes disclosure of sensitive information

- Limitations

- Contraceptive practices are self reported
- The hormonal contraceptive methods were not broken down by type

Conclusions



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- Computer assisted data collection is feasible at community level
- There is need to explore challenges that HIV positive women and those in discordant relationships may be having in taking up effective contraception
- In the short term women who test HIV positive are not more likely to stop, change or initiate contraception

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