

Pregnancy Intention, Contraceptive Use and Unintended Pregnancies Among Malawian Women Before and After Notification of Positive HIV Status

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Background

- Most efforts for the prevention of mother-to-child-transmission emphasize post-pregnancy prevention
- Limited resources have been allocated to improve access to contraceptive counseling and access to family planning services for HIV infected women
- It is the belief that improved services would reduce unintended pregnancies among HIV infected women thus reduce the number of HIV infected infants and improve the long-term health status of these women

Primary Goal

Use longitudinal observational data regarding pregnancy intention and contraceptive use among newly discovered HIV positive women to inform policy makers about improving access to reproductive health services in the context of HIV care

Design

- Prospective, observational cohort study of HIV+ women
- Documented pre-HIV testing, then periodically for 1 year after the women received their HIV positive status results, information regarding:
 - Intentions to become pregnant
 - Contraceptive practices
 - Pregnancy testing
 - Immune status (CD4)

Methods

- Women recruited and offered VCT from a variety of clinical settings at Kamuzu Central Hospital in Lilongwe, Malawi
- VCT not the standard of care in these clinical settings
- Once a woman was determined to be pregnant, she was excluded from further analysis

Visit Schedule & Activities

| Baseline Screening before HIV testing | One Week After results | One Month | Quarterly Month 3-12 |
|--|-----------------------------------|----------------------------|---------------------------------|
| Questionnaire | Questionnaire | Questionnaire | Questionnaire |
| HIV VCT | RH Counseling & Service | RH Counseling & Service | RH Counseling & Service |
| CD4 if positive | HIV Care CD4 results | HIV Care | HIV Care (CD4 at mo 6-12) |
| Pregnancy test | | Pregnancy testing | Pregnancy testing |

Results

VCT Uptake

- 1709 women recruited and offered VCT in 2004-2006
- 816 (47.7%) HIV tested
- 261 HIV positive (32.0%)
- 227 enrolled (87.0%)

Screening Results

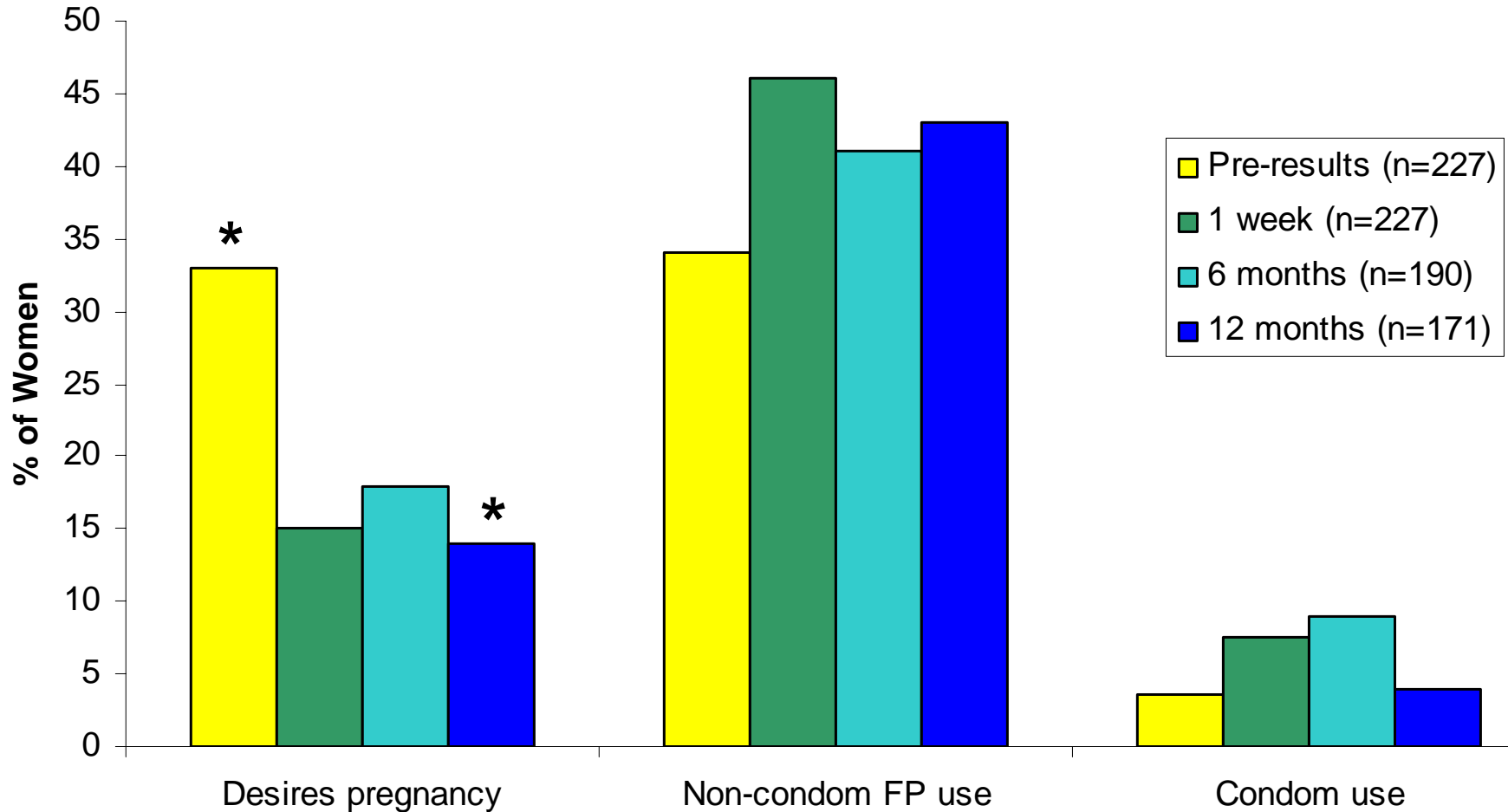
- N=227
- Mean age 26 (IQR 23, 30)
- Median CD4 count 295(IQR 145,499)
- Married 72%
- Electricity in house 27%
- Functional Illiteracy 43%

Lost to follow-up

- 37/227 (16.3%) did not have a 1 year follow-up visit
- Including 17/227 (7.5%) deaths (median CD4 128)
- There was no demographic or immunologic difference between those LTFU and those women retained

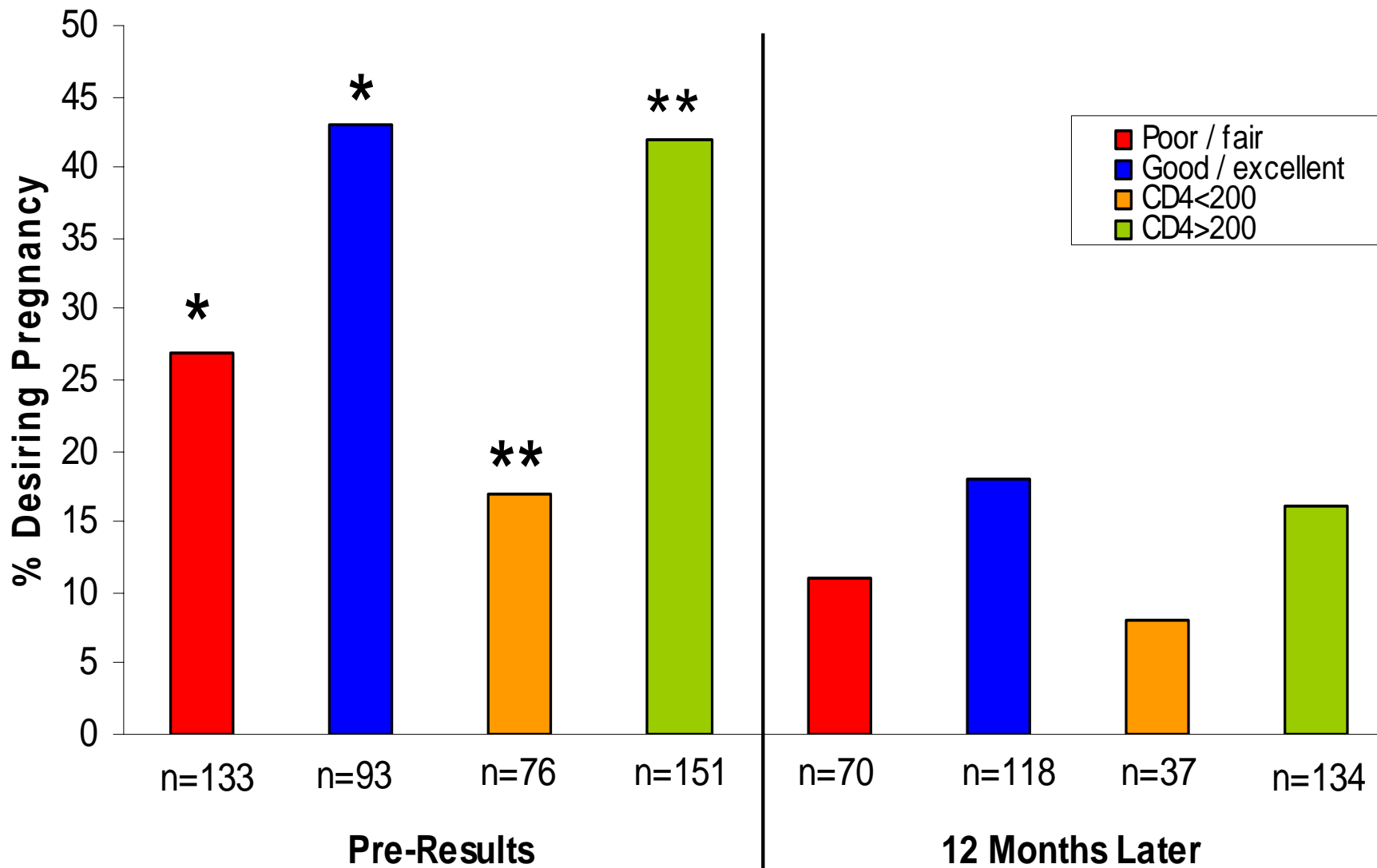
Longitudinal Results

Pregnancy Intentions and Family Planning Use Over Time



* $p < 0.0001$ (pre-results vs. 12 months later in all those completing follow-up (n=171))

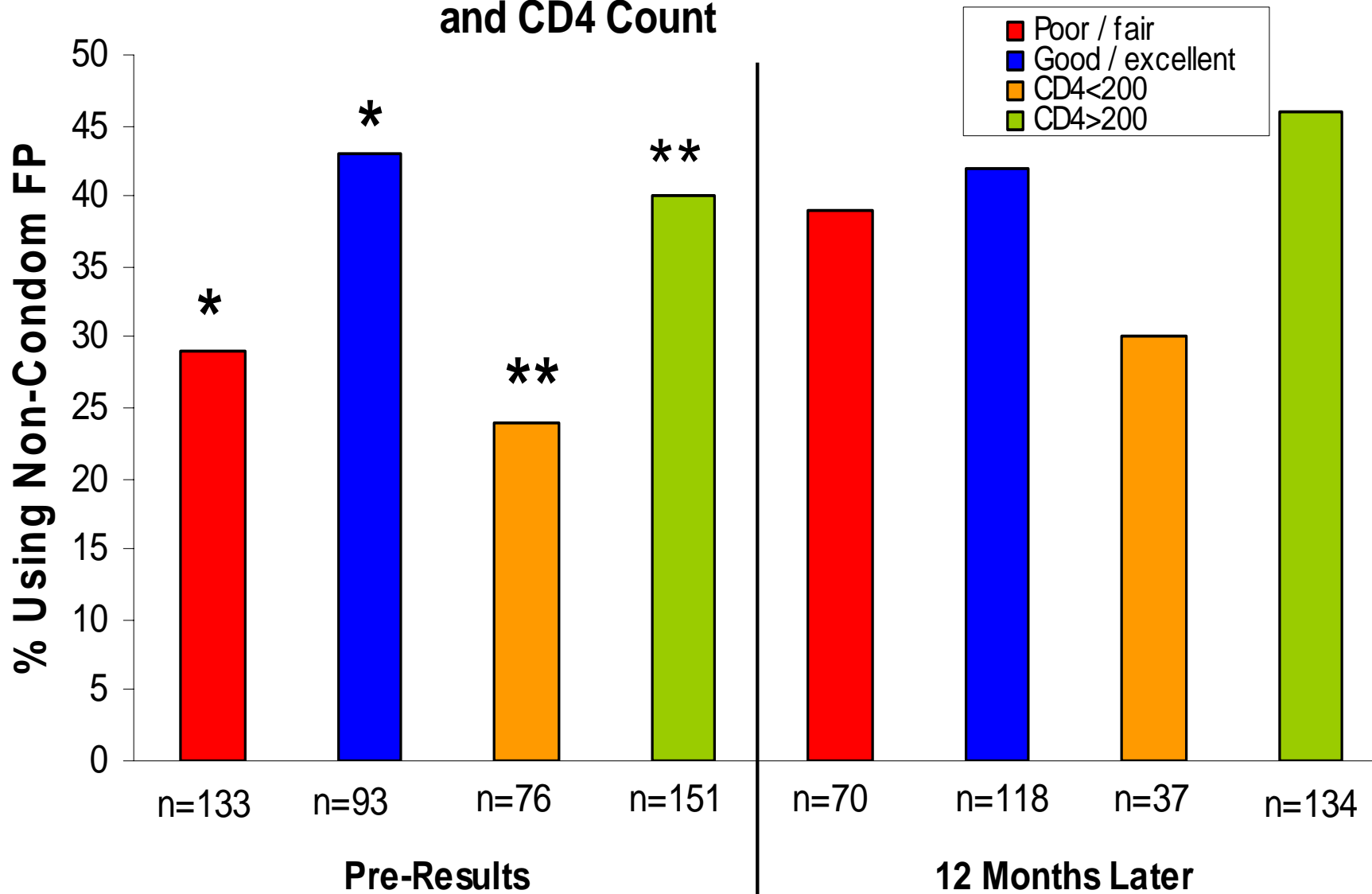
Pregnancy Intentions by Health Perceptions and CD4 Count



* $p = 0.04$ ** $p = 0.0005$

(Comparisons at 12 months NS)

Non-Condom Birth Control by Health Perceptions and CD4 Count



* p = 0.03 ** p = 0.02

(Comparisons at 12 months NS)

Pregnancy Incidence

| | Women at enrollment | # pregnancies During follow-up | Incidence Per 100P/Y | p-value |
|---------------------------|----------------------------|---------------------------------------|-----------------------------|----------------|
| Total | 227 | 29 | 15.5 | |
| Wants pregnancy | 35 | 9 | *32.0 | |
| Doesn't want pregnancy | 172 | 19 | *12.8 | *0.02 |
| Undecided about pregnancy | 19 | 2 | 12.3 | |
| CD4 >200 | 151 | 24 | **18.7 | |
| CD4 <200 | 76 | 5 | **8.6 | **0.12 |

Unintended Pregnancies

- 29 women became pregnant during the one year follow-up period
- 18/29 (62.1%) of these women reported that they did not intend to become pregnant

HIV Care

- 80/227 (35.2%) of women had CD4 <200 at some time during the 1 year follow-up
- 13/80 (16.3%) were LTFU or died before ART could be initiated
- 53/67 (79.1%) of the women who remained in follow-up successfully started ART

Results Summary and Discussion

Results:

In Family Planning and STD clinical settings, only 50% of women agreed to participate in HIV counseling and testing

Discussion:

Consistent accessibility to VCT services in these clinical settings will likely increase the uptake

Results Summary and Discussion

Results:

The desire to become pregnant was **33%** before HIV positive results were known, and **14%**, 12 months after. The pregnancy incidence (after HIV results were known) was **13%** among women not intending to become pregnant, and **32%** among women intending to become pregnant

Discussion:

Knowledge of a woman's HIV positive status, plus access to appropriate contraceptive counseling and HIV care follow-up, could result in fewer unintended pregnancies

Results Summary and Discussion

Results:

Contraceptive use was **34%** before HIV status was known and **43%** 1 year after learning their HIV positive status (a trend)

Discussion:

Providing contraceptive services within the context of HIV care is likely to improve voluntary contraceptive service uptake among HIV positive women

Results Summary and Discussion

Results:

Before knowing their HIV results, the desire to become pregnant was **17%** in the CD4 <200 group and **42%** in the >200 group, a significant difference. 12 months after receiving their HIV results, pregnancy desire was **8%** and **16%** respectively (no longer significantly different)

Discussion: As found in other studies, symptomatic women (CD4 <200) are less likely to want to become pregnant, however, even women who feel well (CD4 >200) significantly reduce their desire for pregnancy once their positive status is known.

Programmatic Recommendations for Malawi Pilot Project

- Provide HIV counseling and testing, partner notification services, couples counseling, CD4 testing and direct referral to HIV care in STD, FP and antenatal settings
- Integrate contraceptive counseling and FP services into HIV care services

Programmatic Recommendations for Malawi Pilot Project

For unintended pregnancies, provide a community-based education program and couples counseling that includes contraceptive counseling

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