

Correlates of Long-Acting Reversible Contraceptive (LARC) Use Among Young Women in Southern Africa: A Secondary Analysis from HPTN 082

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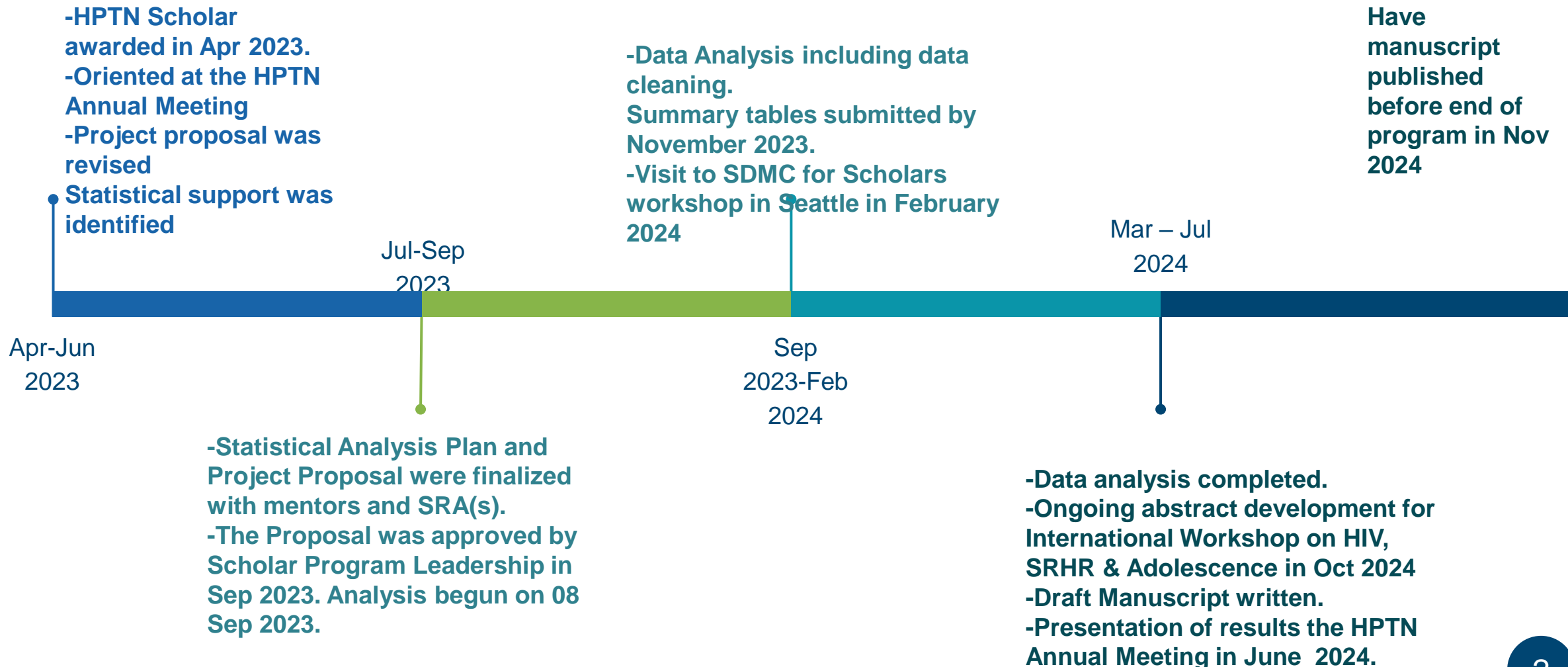
Co-Mentors: Prof. Connie Celum and Prof. Sinead Delany-Moretlwe



Presentation Highlights

1. Overall utilization of LARC in Sub-Saharan (SSA) is low, at 0.3%, and acceptance is less among women below 35 years. Understanding predictors of LARC use among adolescent girls and young women (AGYW) in SSA is critical.
2. In the HPTN 082 cohort, 60% of AGYW opted for a LARC method. Prior pregnancy and comfort talking to close friends about sexual relationships were significantly associated with choosing a LARC method. LARC use was associated with condomless sex.
3. Integration of HIV prevention within sexual reproductive health (SRH) services is key for AGYW in SSA. Continued efforts to develop LARC based Multipurpose Prevention Technologies (MPTs) is recommended especially in the context of inconsistent condom use.

Timelines



Background

- Intrauterine contraceptive devices (IUCDs), injectables, and implants are classified as long-acting reversible contraceptives (LARCs).
- LARCs are safe, more effective, have higher user acceptability, fewer side effects, minimal partner involvement, lower discontinuation rates, need no user adherence and hence have decreased risk of incorrect or inconsistent use common to young contraceptive users (Kungu et al. 2020).
- As of 2019, adolescents aged 15–19 years in low- and middle-income countries (LMICs) had an estimated 21 million pregnancies each year (WHO). The use of LARCs plays a pivotal role in preventing unintended pregnancies amongst them.
- Despite this, LARC uptake by this population remains low and inconsistent

- Contraceptive use is one of the main components in the reproductive health of women who have the desire to space or limit childbirth.
- Contraception is also a strategy for prevention of mother to child transmission (PMTCT) since prevention of adolescent pregnancies averts their consequences especially the poor mother and infant outcomes.
- There is an unmet need for effective family planning estimated at 23% among AGYW in LMICs (UNFPA).
- Improvement of LARC use and provision of comprehensive and tailor-made SRH services is needed.
- Understanding factors associated with LARC uptake and continuation among AGWY may give insights into potential benefits and challenges associated with LARC use in adolescents.

- Title: Uptake and adherence to daily oral pre-exposure prophylaxis (PrEP) as a primary prevention strategy for young African women: A Vanguard Study
- 451 HIV–negative, 16–25-year-old non-pregnant women, who had vaginal or anal sex in the month prior to screening and reported interest in taking PrEP.
- Conducted in South Africa and Zimbabwe between October 2016- October 2018.
- Study visits occurred at months 1, 2, 3, 6, 9, and 12 wherein HIV and pregnancy testing were done.
- Contraceptive counseling occurred through week 39 and women had the option to initiate, decline, switch or discontinue a contraceptive method.

Project Research Questions/Aims



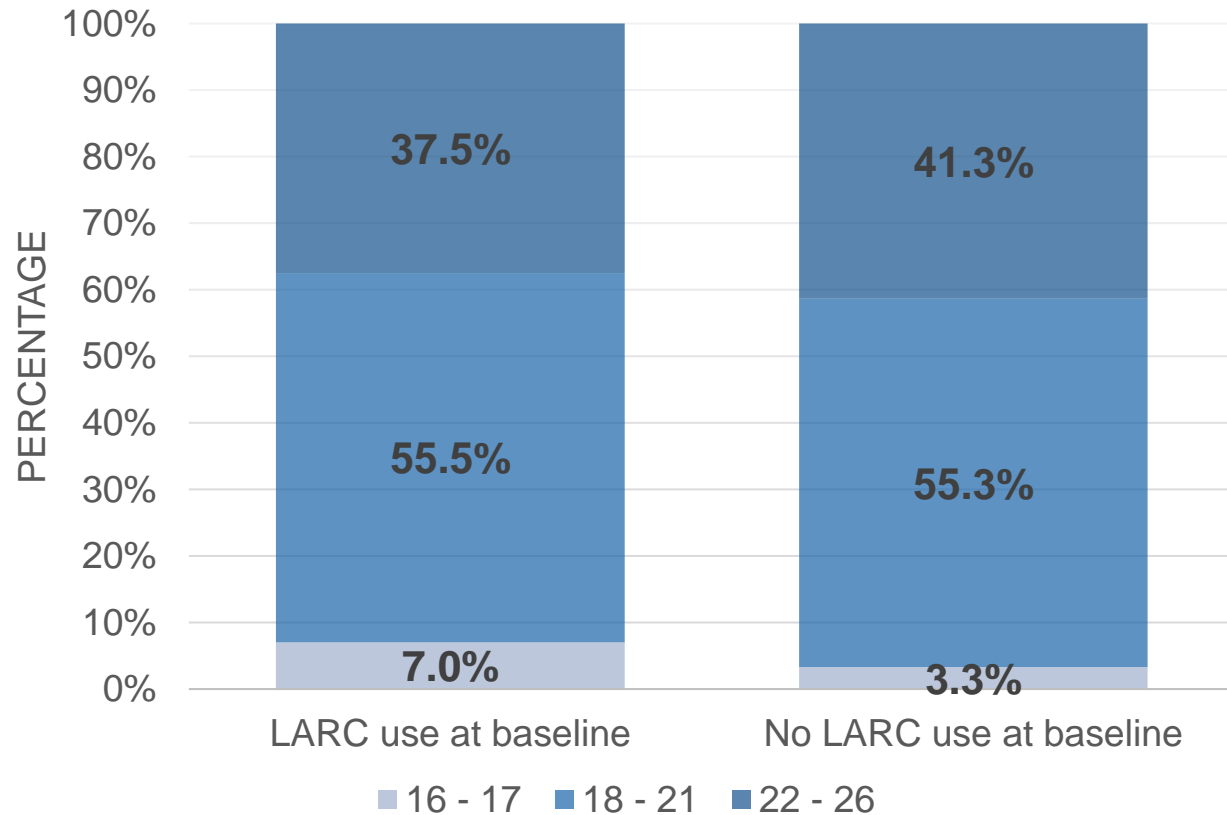
- To evaluate the correlates of LARC use (injectables, implants or IUDs) among young women in Southern Africa enrolled in the HPTN-082 study, at screening and over a 39 week follow up period.
- To describe the frequency and patterns contraceptive switch through the 39 week follow up period.
- To determine whether LARC use at enrollment is associated with condomless vaginal sex during the 52 week follow up period.

Methods/Analysis Plan

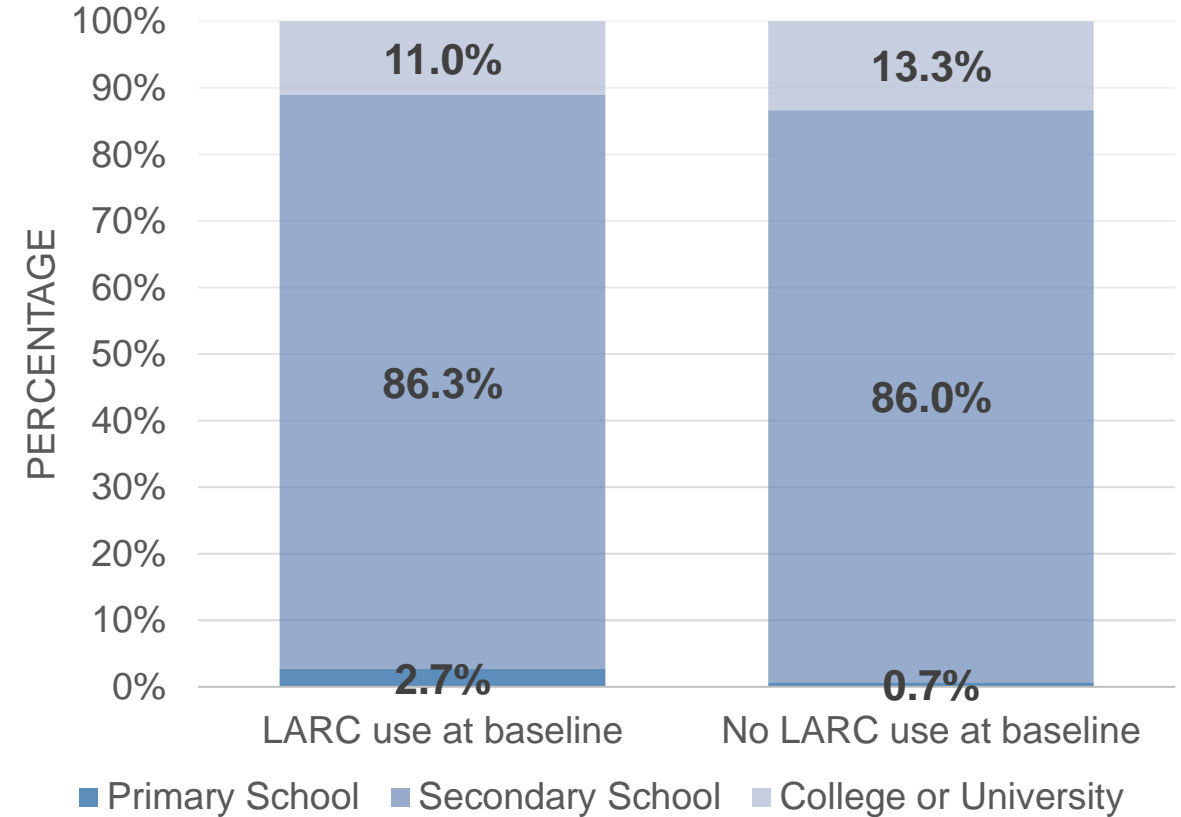
- This analysis includes all women who were enrolled in the study and initiated contraceptive use. Women who didn't use contraceptives at all during study follow up were excluded from the analysis.
- Aim 1: Descriptive statistics were used to summarize the data. The primary analysis applied a multivariate logistic regression to determine factors independently associated with long-acting reversible contraceptive use. A chi-square analysis was performed to test for differences in proportions of categorical variables.
- Aim 2: Descriptive statistics were used to define whether women were on the same, switched, discontinued, or never on contraceptives.
- Aim 3: A multinomial logistic regression analysis was applied for associations between the exposure and condomless vaginal sex through month 12 while adjusting for any potential confounders.

Baseline Characteristics by LARC Use

AGE GROUPS



EDUCATION



Demographic and Behavioural Characteristics

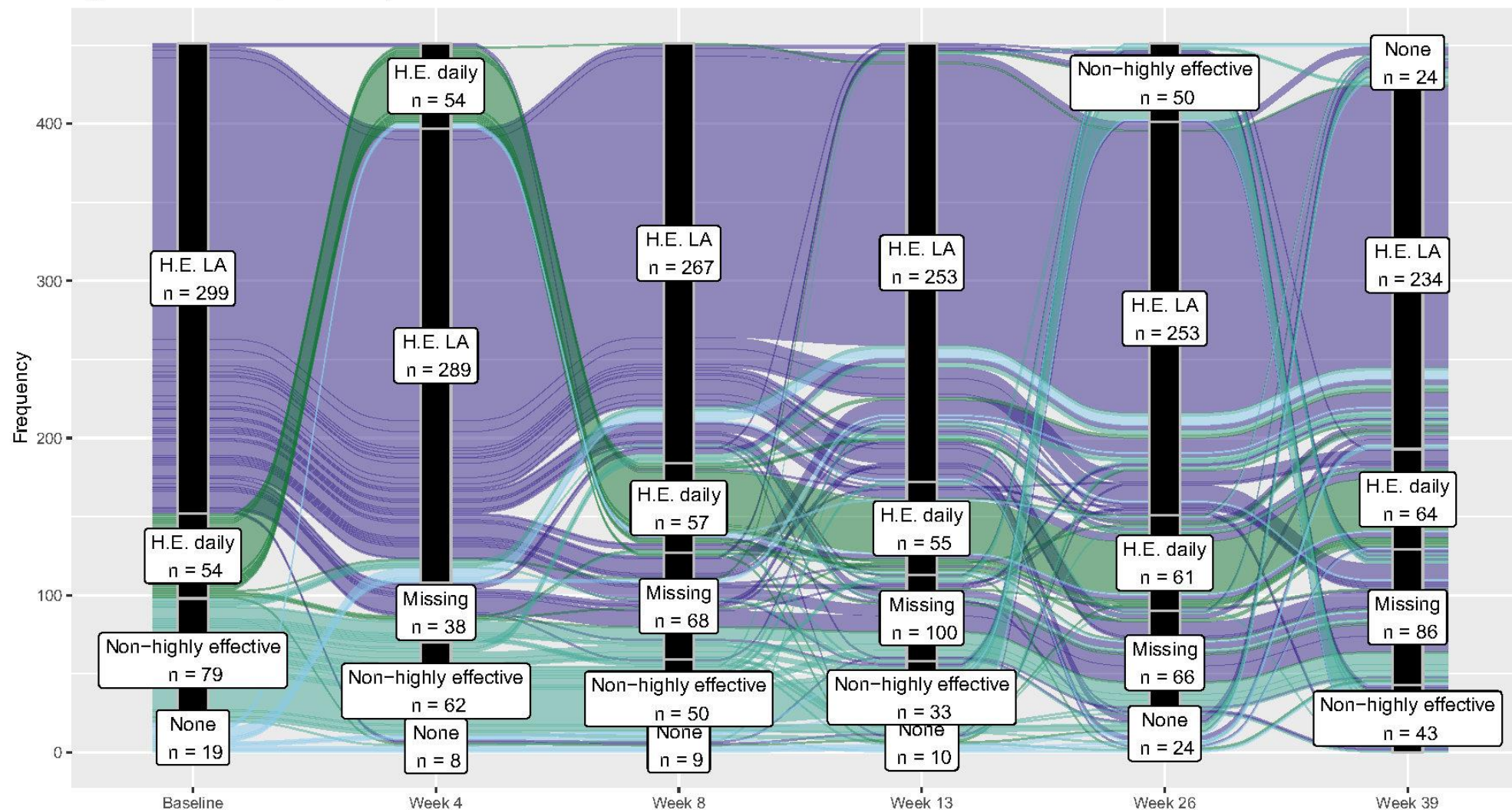
	LARC use at baseline	No LARC use at baseline	Overall	P-value
How many total sex partners have you had in the past 3 months?				0.517
0 Partners	3/262 (1.1%)	1/130 (0.8%)	4/392 (1.0%)	
1 partner	165/262 (63.0%)	90/130 (69.2%)	255/392 (65.1%)	
2+ partners	94/262 (35.9%)	39/130 (30.0%)	133/392 (33.9%)	
Primary partner age relative to participant				0.335
Within 5 years	128/239 (53.6%)	70/117 (59.8%)	198/356 (55.6%)	
Younger by at least five years	5/239 (2.1%)	4/117 (3.4%)	9/356 (2.5%)	
Older by at least five years	106/239 (44.4%)	43/117 (36.8%)	149/356 (41.9%)	
Have you ever been pregnant?				< .001
Yes	182/298 (61.1%)	56/149 (37.6%)	238/447 (53.2%)	
No	116/298 (38.9%)	93/149 (62.4%)	209/447 (46.8%)	
Prefer not to answer	0/298 (0.0%)	0/149 (0.0%)	0/447 (0.0%)	

Results: Predictors of LARC Use

	OR(95% CI)	p-value	AOR(95% CI)	p-value
Comfortable talking to close friends about my sexual relationship?				
No	1	-	-	-
Prefer not to answer	2.29(0.45, 11.7)	0.318	1.27(0.19, 8.39)	0.805
Yes	1.49(0.99, 2.25)	0.055	1.78(1, 3.17)	0.049
Have you ever been pregnant				
No				
Yes	2.55(1.78, 3.66)	<.0001	2.38(1.55, 3.65)	<.0001

Results: Contraceptive Switch

Figure 3 – Contraceptive use by Visit



Note: Participants may be on multiple contraceptives. Participants are counted at most once per category per visit.
 Source: SCHARP (Michael Burton) – /trials/hptn/p082/analysis/manuscripts/2023_phionah/code/f_contraceptive_switch.R (24MAY2024 16:42)

Results: LARC Use by Condomless Vaginal Sex

AOR(95% CI)

p-value

Condomless vaginal sex through Week 52

None

Always

0.27(0.19, 0.39)

<.0001

- In this cohort of young African women, LARC use is associated with talking to friends about sexual relationships, condomless vaginal sex and having a previous pregnancy.
- Peer support plays an important role in decision making for AGYW as seen in prior studies.
- Prior pregnancy could be explained by the fact the young women usually have an unplanned pregnancy and this engages them in the health service, leading to them choosing contraception to avoid another pregnancy.
- The fact that those who were on LARC were less likely to use condoms during vaginal sex, alternative forms of HIV prevention like PrEP need to be accessible to them, which calls for the need to integrate HIV and SRH services.

Implications/Future Considerations

- Integration of HIV and sexual & reproductive health services into existing primary health care services remains a key service delivery model to implement comprehensive, complementary HIV and SRH services for AGYW.
- MPTs may be a game changer for the prevention of HIV and pregnancies for AGYW.

Contributors



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