



Age mixing relationships and baseline HIV PrEP uptake among women in Western Kenya

Auma Cynthia, Matemo Daniel, Wandera Cynthia, Kemunto Valerie, SchaafsmaTorin, Morton Jennifer F., Kinuthia John, Mugwanya Kenneth on behalf of the FP Plus team

Background

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- African women are disproportionately affected by HIV
- **Age mixing:** partnerships with ≥ 5 -year age gap
- Age mixing linked to increased HIV acquisition risk among women*
- We evaluated age mixing partnerships and its association with baseline PrEP initiation and women's HIV risk perception



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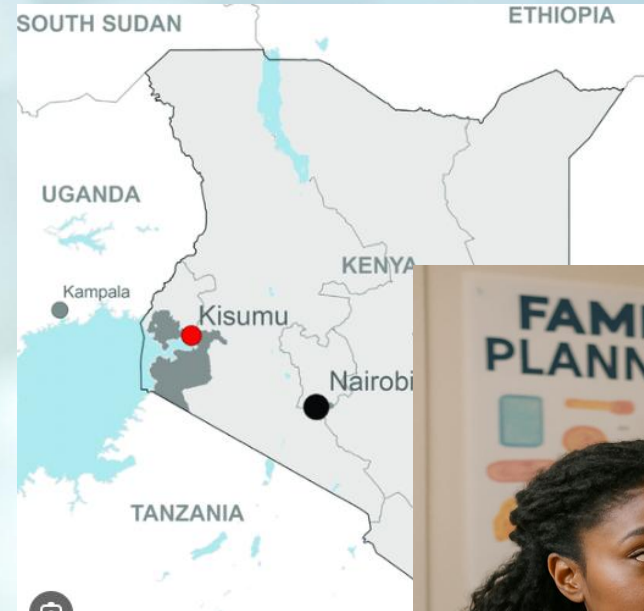
* Reed DM, Radin E, Kim E, et al *BMC Public Health* 2024; Bajunirwe et al, *AIDS* 2020; Schaefer et al *AIDS* 2017

Methods

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- **Design:** cross sectional analysis nested within a stepped wedge CRCT
- **Setting:** 4 health facilities in Kisumu offering FP
- **Eligibility :**
 - ✓ Age ≥ 15 years
 - ✓ Provided informed consent/ assent
 - ✓ HIV negative at enrollment
 - ✓ Accessing services at implementing clinics
- **Sample size:** 650, analysis confined to 500 participants aware of partner's age
- Participants offered PrEP if noted to have elevated risk based on national PrEP guidelines



AI generated image: ChatGPT- Sora

Methods

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- **Exposure:** Relationship type
 - **Age concordant:** 0-4 year age gap
 - **Age-disparate:** 5-9 years older
 - **Intergenerational:** partner ≥ 10 years older
- **Primary outcome:** HIV PrEP uptake
- **Secondary outcome:** HIV risk perception
- **Analysis:** Multivariable logistic regression models, adjusted *a priori* for age, education level, marital status, and partner's HIV status

} **Age mixing**

Results: Baseline characteristics

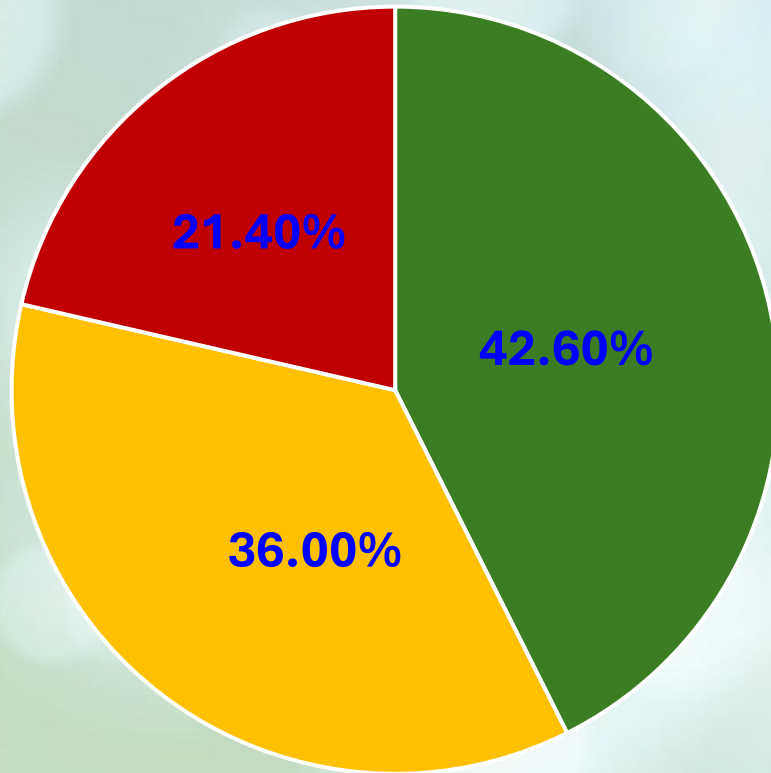
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Baseline characteristic	Overall, N = 500 (N (%) / median (IQR))	Age-concordant, N = 213 (N (%) / median (IQR))	Age-disparate, N = 180 (N (%) / median (IQR))	Intergenerational, N = 107 (N (%) / median (IQR))
Age (years)	26 (23, 30)	26 (23, 30)	25 (22, 29)	26 (24, 31)
< High school education	144 (28.8%)	51 (23.9%)	49 (27.2%)	44 (41.1%)
Married/ cohabiting	426 (85.2%)	172 (80.8%)	157 (87.2%)	97 (90.7%)
Suspected male partner infidelity	164 (32.8%)	69 (32.4%)	47 (26.1%)	48 (44.9%)
Transactional sex	26 (5.2%)	9 (4.2%)	9 (5.0%)	8 (7.5%)
Condomless sex	473 (94.6%)	202 (94.8%)	166 (92.2%)	105 (98.1%)
HIV status of primary partner				
HIV negative	95/316 (30.0%)	46/134 (34.3%)	32/120 (26.7%)	17/62 (27.4%)
Living with HIV	10/316 (3.2%)	4/134 (3.0%)	4/120 (3.3%)	2/62 (3.2%)
Unknown	211/316 (66.8%)	84/134 (62.7%)	84/120 (70%)	43/62 (69.4%)

Prevalence of age mixing relationships

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■ Age concordant

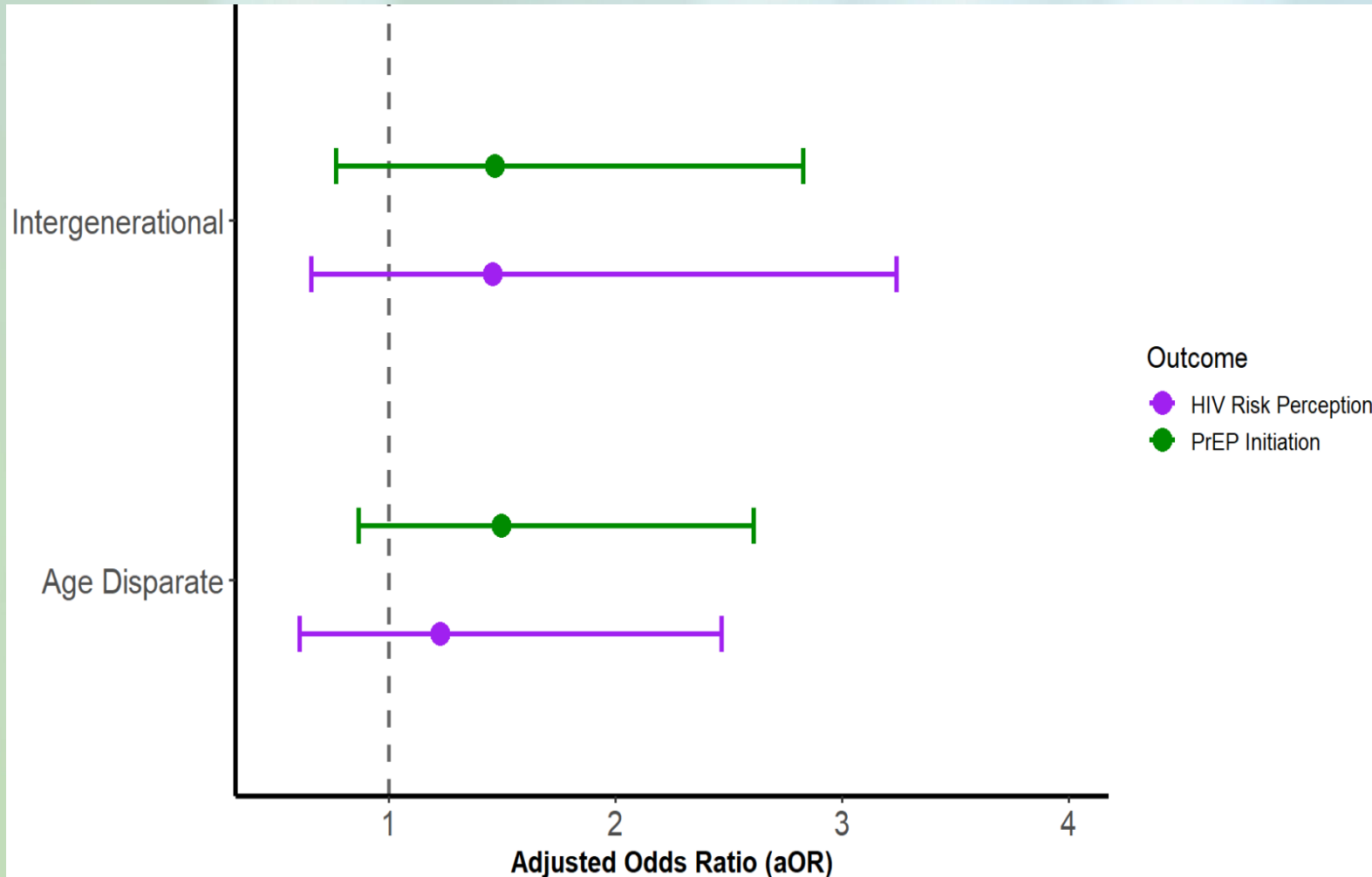
■ Age disparate

■ Intergenerational

- Age-concordant (0-4 years): 42.6%
- Age-disparate (5–9 years) :36.0%
- Intergenerational (≥ 10 years): 21.4%

Association of age mixing with baseline PrEP uptake and HIV risk perception

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PrEP Initiation:

- Age-disparate: aOR 1.50 (95% CI: 0.87, 2.61)
- Intergenerational: aOR 1.47 (95% CI: 0.77, 2.83)

HIV Risk Perception:

- Age-disparate: aOR 1.23 (95% CI: 0.61, 2.47)
- Intergenerational: aOR 1.46 (95% CI: 0.66, 3.24)

NB: All associations were positive but **not** statistically significant

Discussion

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- . Age mixing relationships are common in this setting
- . Women in age mixing relationships have higher odds of PrEP initiation and HIV risk perception
- . Women in age-mixing relationships may recognize higher HIV risk and be more likely to initiate PrEP services
- . There is need to develop tools to help women better assess their HIV risk, to enhance informed decision making & support PrEP uptake.

Acknowledgements

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