HIV Status and Other Factors Associated with Infection Complicating Abortion In Botswana

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BACKGROUND

- In sub-Saharan Africa, **abortion** is a significant contributor to **maternal morbidity & mortality**.
- **75%→ unsafe** conditions.
- **Infection complicate 1 in 10 abortions**.
- People with HIV (PWH) are **just as likely to seek abortion** but may be at **risk of worse outcomes**.

Does HIV increase the risk of an abortion-related infection?

METHODS

- **Setting:** Gynecology ward, Princess Marina Hospital, Gaborone.
- Retrospective chart review of **adolescents & women** admitted following abortion at < 28 weeks.
- Included **spontaneous & self-induced abortions.**
- HIV status self-reported.
- Diagnosis = physician's medical assessment.
- Bivariable & multivariable models determined factors associated with abortion-related infection.

RESULTS

- **9% had abortion-related infection**

- Age range: **16-45 years**
- Overall ave length of stay (LOS): 2 days.
- Ave LOS for abortion-related infection: 3 days.
- **3% of admissions** required ICU stay.

PWH were **≥ 3 times more** likely to have an abortion-related **infection**.

Table 1. Demographics by HIV status

Variable	Overall N=847	HIV Negative n=505	HIV Positive n=212	HIV unknown n=130	P-value
Age in years (mean, SD)	28 (5)	27 (5)	30 (5)	27 (4)	**<.001**
Single (marital status)	669 (79%)	413 (82%)	149 (70%)	107 (82%)	**0.008**
Completed secondary school	822 (97%)	493 (98%)	205 (97%)	124 (95%)	0.520
Presence of NCD*	81 (10%)	51 (10%)	24 (11%)	6 (5%)	0.104
Prior STI diagnosis	844 (46%)	232 (46 %)	116 (55%)	44 (34%)	**0.001**
Late pregnancy loss (≥12 weeks)	128 (15%)	72 (14 %)	30 (14%)	26 (20%)	0.283
Mechanical injury on pelvic exam	49 (6%)	21 (4%)	21 (10%)	7 (5%)	**0.012**

***NCD**: Non-communicable disease including Diabetes, Hypertension, seizure disorder

Table 2: Unadjusted and Adjusted Associations between Participant Characteristics and Abortion-related Infection.

Variable	Overall N=847	No infection n=773	Infection n=74	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
Age in years (mean, SD)	28 (5)	28 (5)	27 (6)	**0.95 (0.91-0.99)**	**0.92 (0.87-0.98)**
Single (marital status)	669 (79%)	606 (91%)	63 (9%)	1.72 (0.87-3.44)	-
Completed secondary school	822 (97%)	750 (91%)	72 (9%)	1.92 (0.25-14.52)	-
HIV Negative	505 (60%)	476 (94%)	29 (6%)	**REF**	-
Positive	212 (25%)	176 (83%)	36 (17%)	**3.36 (1.99-5.64)**	**3.91 (2.00-7.65)**
Unknown	130 (15%)	121 (93%)	9 (7%)	1.22 (0.56-2.64)	0.99 (0.37-2.68)
Presence of NCD	81 (10%)	69 (85%)	12 (15%)	**1.97 (1.01-3.84)**	**4.39 (1.91-10.10)**
Prior STI diagnosis	392 (46%)	351 (90%)	41 (10%)	1.48 (0.92-2.40)	-
Late pregnancy loss (≥12 weeks)	128 (15%)	116 (91%)	12 (9%)	1.26 (0.47-3.36)	-
Mechanical injury on pelvic exam	49 (6%)	13 (27%)	36 (73%)	**56.43 (27.61-115.35)**	**60.58 (27.98-131.17)**

CONCLUSIONS

- **PWH** > 3x more likely to **have abortion-related infection.**
- **Mechanical Injury** most significant risk factor → **≥2 x more** common in **PWH.**

- **Etiology of association with HIV unclear:**

? **Behavioral** e.g. delayed presentation, dangerous methods.
? Undiagnosed **STI** ↑ **risk** for ascending infection.
? **Immunocompromise**

Need to explain this association to ensure reproductive health equity for PWH.

FUTURE DIRECTIONS:

- Expanding Sexual & Reproductive Healthcare→ less unwanted pregnancy→ less abortion complications.
- PrEP in Post- Abortion Care → less incident HIV in Key Population → less HIV-related maternal morbidity & mortality.

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Acknowledgements: This work was supported by the Penn Center for AIDS Research (CFAR), an NIH-funded program (P30 AI 045008) to Ronald Collman, & the Harris Award from the Division of Infectious Disease at the University of Pennsylvania to B.L. We wish to thank the staff at Princess Marina Hospital Gynecology Unit and the Medical Records Department who facilitated the completion of this work.