The Role of Menstruation in Contraceptive Choice Among HIV+ Women in Soweto, South Africa

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Soweto, a collection of townships adjacent to Johannesburg in Gauteng Province, has an antenatal HIV prevalence rate of 28.0% (29.7%?) (95% CI: 26.9 – 29.1%) and provincial CPR of X. Hormonal & barrier contraceptive methods are freely available through government sources, though consistent annual contraceptive use was 27.8% in 2007. Systemic injectable hormonal methods are popular but also have high discontinuation rates, largely due to bleeding pattern alterations. HIV’s effect on menstruation is controversial & impact on tolerance of menstrual changes unclear.

References:
The study objective was to describe perceptions towards menses & contraceptive-induced amenorrhea, & to describe their impact on contraceptive choice & discontinuation among HIV-infected women in Soweto, South Africa.

At PHRU between 2004-2008, 26% of 117 pregnant women receiving HAART terminated unwanted pregnancies, despite free on-site availability of multiple, effective contraceptive methods, indicating ongoing unmet need.¹ This study attempts to determine causal factors for unmet need via discontinuation for purposes of improving counseling & care.

References:
METHODS

- Data is derived from the Soweto site in a larger, 3 site qualitative study of contraceptive use and discontinuation among HIV+ women.
- Participants completed a standardized screening questionnaire about HAART, RH history, partnership status, & fertility desire.
- 3 focus groups (1/age stratum; 3 strata: <22, 23-30, & >30 years) were conducted to determine main themes, followed by 15 in-depth interviews (5/ stratum) to obtain further depth and explore themes.
- Transcripts were coded using a grounded theory approach & grouped into themes. Coded quotations were also analyzed for impact of various demographic factors (e.g. age, parity, & HAART status) on themes (such as meaning of menstruation). Analysis was performed with ATLAS-ti (ATLAS-ti Center, Berlin).
### Participant Characteristics & Contraceptive Utilization (N=48)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N, %</th>
<th>Mean</th>
<th>Range</th>
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<tbody>
<tr>
<td>Age (Years)</td>
<td></td>
<td>26.8</td>
<td>IQR 22-31</td>
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<tr>
<td>Years since HIV Diagnosis</td>
<td></td>
<td>4.3</td>
<td>0 - 12</td>
</tr>
<tr>
<td>Participants on ART</td>
<td>50, 21%</td>
<td></td>
<td></td>
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<tr>
<td>Prior pregnancies</td>
<td></td>
<td>1.9</td>
<td>0-4</td>
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<tr>
<td>Prior terminations</td>
<td></td>
<td>0.1</td>
<td>0-2</td>
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<tr>
<td>Contraception at time of interview</td>
<td></td>
<td></td>
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<tr>
<td>Injectable hormonal</td>
<td>25, 59.5%</td>
<td></td>
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<tr>
<td>Male condoms</td>
<td>11, 26.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female condoms</td>
<td>2, 4.8%</td>
<td></td>
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<tr>
<td>Oral contraceptives</td>
<td>1, 2.4%</td>
<td></td>
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<tr>
<td>Sterilization</td>
<td>1, 2.4%</td>
<td></td>
<td></td>
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<tr>
<td>No method</td>
<td>8, 19.0%</td>
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</tbody>
</table>
EMERGENT THEMES

- Generally, age & parity did not modify emergent themes. There was consistency of data between FGDs and IDIs; thus, these common themes are presented.

- Meaning of menstruation: Menstruation was seen as a way for “dirty blood” to leave the body. If menstruation did not occur (and the woman was not pregnant), it was believed illness would ensue.
  - “Menstruating indicates that I am alright. I am still alive and I am a woman. I don’t want to stop menstruating because this dirty blood needs to get out.” IDI 42, 20 years, 1 child.
IMPACT OF HIV ON PERCEPTIONS OF BLEEDING

- Most participants reported no menstrual changes since HIV diagnosis. A few mentioned menstruation stopping because of contraceptive method or spontaneous decrease in quantity. No difference was noted between ART and non-ART taking participants. Perspectives on menstrual bleeding changed with HIV diagnosis for some women, who became fearful of blood due to its symbolic reminder of infection.

  “Now, I don’t want to go on my periods, ever since being HIV positive. I am scared of (my) blood. When I see my blood, sometimes I vomit and other times I just feel sick. Other times I just start crying when I see blood. Before, when I was negative, I was fine, I never reacted like this to blood.” IDI 35, 20 years, 1 child.
Perceptions of contraceptive-induced oligo/amenorrhea were mixed:

- “Usually, when I am using Depo, I don’t menstruate, at all. But I know I’m not pregnant. I don’t feel good about this. I wish I could see my blood.” IDI 39, 35 years, 2 children.

- “I am just happy that I am not menstruating because I no longer have to worry about pads and period pains. Most of the time you are uncomfortable during your period, so I am really happy not to menstruate”. IDI 33, 25 years, 2 children.
Menstrual bleeding pattern changes play a role in contraceptive choice and discontinuation for HIV-infected women, similar to women in other settings, regardless of HIV status. However, most participants had a limited understanding of the menstrual cycle and its function, evidenced by multiple expressed misconceptions, creating misapprehension and misinformation about contraceptive amenorrhea.

HIV diagnosis emphasized connection between menstruation & health for participants.

About 33% of participants reported some menstrual change after HIV diagnosis. In this context, methods altering menstrual bleeding patterns further were deemed suspicious and undesirable by many women.

HIV also affected menstrual perceptions by heightening concern for transmission to partners, especially in sero-discordant pairs; this perception was unchanged by HAART. In combination with participants’ perception of male revulsion towards menses, contraceptive amenorrhea may be an advantage to be promoted for HIV-infected women in relationships.

LIMITATIONS

- Lack of comparative groups of HIV-uninfected women & small sample size which was limited only to clinic attendees may have introduced bias. Saturation was reached in IDIs for main themes.
- We attempted to reduce these possible biases by asking participants not only about their experiences and thoughts, but also about how they thought others in their community would respond to the questions.
- Non-random sampling was employed to represent women across the reproductive span, thereby limiting age effect.
- The cross-sectional nature may have limited recall of menstrual irregularities.
- We employed female staff to reduce inhibition and possible socially-desirable responses.
CONCLUSIONS

- In Soweto, equation of menstruation with health may be accentuated by HIV diagnosis, leading to avoidance or discontinuation of methods causing menstrual changes.
- Consistent provider counseling, emphasis of positive health effects of amenorrhea, particularly for HIV+ women, & variety of available methods are necessary for ensuring continuous contraceptive coverage for HIV+ women not desiring pregnancy.
ACKNOWLEDGEMENTS

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☐ We thank our participants for their time and trust with a variety of sensitive issues.