Beyond Pregnancy Prevention: The Impact of the Intravaginal Ring (IVR) on Women's Sexual Experiences

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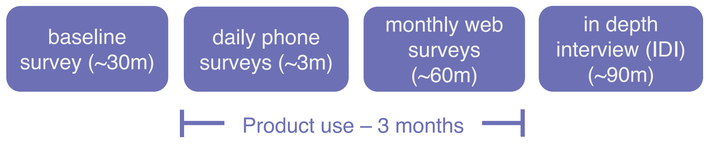
Background

- Studies have shown that sexual pleasure is an important factor in both a woman's choice in contraception and her decision in discontinuing contraception.[1]
- Most existing research on contraception and sexual pleasure focus on the impacts of hormones on women's sexual experiences. Though the term "hormonal methods" may be used, many studies are solely focusing on the oral contraceptive pill.
- The few studies that do individually consider other hormonal methods show that adhesive from the Patch can leave welts on the skin and that the NuvaRing can be painful during sex.[2] These novel findings show that, though each method contains similar levels of levogesterone or estradiol, there still exists huge variation within each method, and they further support the need to specify and individualize the term "hormonal methods."
- In 2008, Higgins wrote on the pleasure deficit that exists in sexual and reproductive health research, demanding more thorough research on sexual pleasure that moves beyond the biological considerations of sexual side effects. In 2017, the current literature review on this subject shows that the consequent discussion is still lacking.[3]

Methods

- Eligibility: 18-45y females, sexually active, reported HIV status as negative or unknown, not pregnant or planning to be pregnant during study period.
- In protocol v1, participants (ppts) used each method for 3 months: OCP, IVR and spermicide+condom. In protocol v2, ppts used method(s) across 6 months and could either continue on their 1st method or switch after 3 months. Order of method use was randomized.
- All participants completed the following for each method:



Results

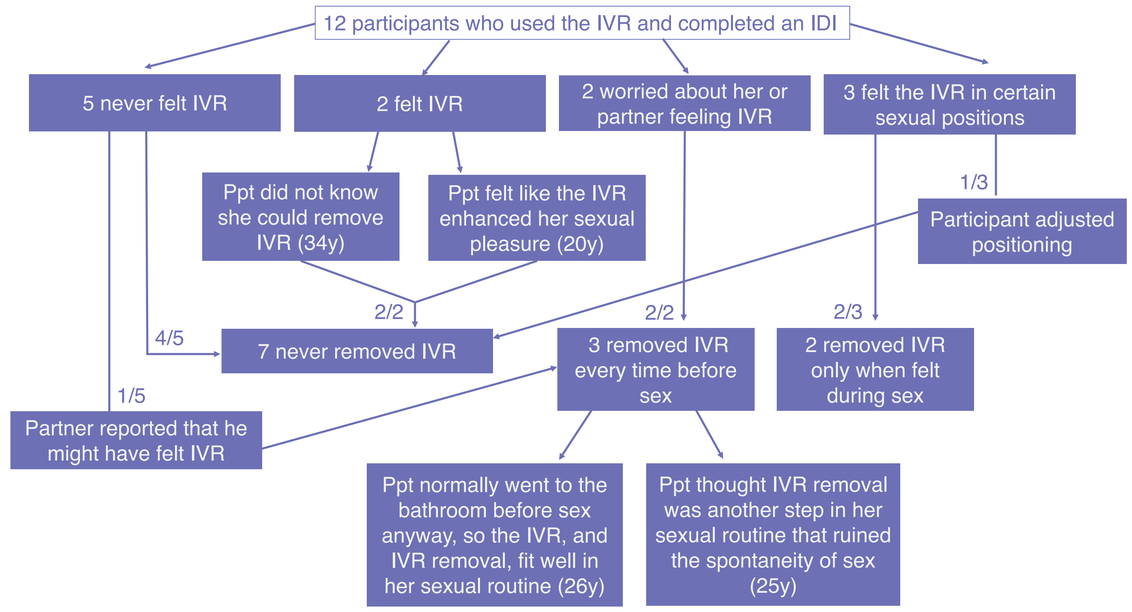


Figure 1: Participants' (n=12) awareness of IVR during sexual intercourse and its impact on IVR removal

Illustrative Quotes

Feeling the IVR during sex

- "Almost like if you had a cup and you were holding the cup to your skin. Like pushing down on it. So…it's not sliding but it's pushing down" (23y-A).
- "The ring kinda made [sex] feel a little better. Like, the sensation. Every time he stroked his penis in and out, it felt better. I don't know why, but it did" (20y).
- "It didn't feel like pain. It just felt like not normal. I could feel that it was there. Like the ring, moving" (34y).
- "…the guy that I was sleeping with, he could feel it, too. He was like brushing past it basically" (23y-A).

Thinking about IVR during sexual intercourse

- "I think I was concentrating on the ring. That's what I was really worried about, so that's how I spent my time, worrying about the ring" (29y).
- "It was just the thought in my head, where I was just like I'm afraid that it might come out or something. None of that happened" (23y-B).

Perceptions on partner's awareness of IVR

- "…it's a little awkward to know that something's inside of you, and that your boyfriend could possibly feel it…You don't want him to be like well, I can feel that, cuz then…the mood just got killed (23y-B).
- "But then I was worried. I'm like, 'Well since I told him, is he now gonna like try to see if he can feel it? Is he gonna maneuver in a way where he can see if he can feel it?'" (29y)

Psychological sexual experience

- It's [my sex life] probably gotten better cuz I don't have to worry about 'did I or did I not take the pill' (31y).
- "I think the ring gave me more pleasure cuz I knew personally that it's not there to harm me. It's there to help out the situation…more fun and more confident (23y).

Conclusions

- Ppts' sexual experiences were impacted by the IVR through physical, administrative, and social factors.
- Ppts had quite varied and individual experiences with the IVR. Notably, ppts reacted widely to their cognitive and emotional experiences, ultimately conveying the depth and variety in IVR use.
- The physicality of the IVR affected ppts' expectations of the IVR and manifested through psychological (worrying) or tangible (ring removal) consequences.
- Though many partners did not feel the IVR, ppts were still worried about the possibility of their partners' IVR awareness.

Significance in research and the clinic

- Future research must look beyond hormones when considering the impact of the IVR on the lives of their users.
- The wide range of experiences seen with the IVR can lead to different levels of adherence. In order to provide the most thorough contraceptive counseling, providers must be prepared and willing to counsel patients on potential barriers and facilitators to effective IVR use.

References

1. Sanders, S.A., et al., *A prospective study of the effects of oral contraceptives on sexuality and well-being and their relationship to discontinuation.* Contraception, 2001. **64**(1): p. 51-58.
2. Fennell, J., *"And Isn't that the point?": pleasure and contraceptive decisions.* Contraception, 2014. **89**(4): p. 264-270.
3. Higgins, J.A. and J.S. Hirsch, *The Pleasure Deficit: Revisiting the "Sexuality Connection" in Reproductive Health.* Perspectives on Sexual and Reproductive Health, 2007. **39**(4): p. 240-247.

Acknowledgements

Project WISH was supported by NIH K24HD062645. Special thanks to Warren Alpert Medical School for the Summer Assistantship scholarship and the Project WISH team: Iris Tong, Melanie Hill, Kelley A Smith, Genevieve Ilg, Candelaria Barroso, Tyler Kaiser, and Robert E Berry