Attitudes and behaviors surrounding reproductive and sexual health in women with Inflammatory Bowel Diseases

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Abstract

Inflammatory bowel disease (IBD) in women can affect behaviors and attitudes involving reproductive health. Poor reproductive planning is associated with adverse events such as abortion or pregnancy-induced flare[1]. In this study, we compared contraception methods, concerns about pregnancy, and sexual function in 60 patients aged 18-45 with IBD to 60 aged-matched controls at a female gastroenterology clinic. We hypothesized that women with IBD would have worse reproductive and sexual health in various domains. Interestingly, although data are still being collected, preliminary results suggest that women with IBD are more likely to use effective contraception methods than controls. However, women with IBD are more likely to have concerns about pregnancy and have lower sexual functioning. These findings indicate a need for targeted reproductive counseling or educational interventions.

Background

- IBD can affect women's sexual and reproductive health
- Despite a high need for reproductive planning, one study showed that women with IBD use contraception at a significantly lower rate than the general population[1,2]
- Unplanned pregnancy and STIs may result in adverse outcomes when immunosuppressed or in a disease-poor state[3]
- Reproductive counseling is often not discussed with gastroenterologists, but the majority of female IBD patients have IBD-related pregnancy concerns[3]
- Women with IBD are more likely to experience pain during sexual intercourse, low sexual desire, and difficulty in attaining orgasm[4]

HYPOTHESES:

1) Women with IBD are more likely to use **less effective methods of contraception** and have **more concerns about pregnancy** than women without IBD.

2) Women with IBD are more likely to experience **low sexual desire** & **pain with sexual activity** than women without IBD.

Methods

- So far, we have consented 27 IBD patients & 43 controls (patients without IBD) aged 18-45 at a gastroenterology clinic with a goal of consenting **60 patients in each group**
- Study participants were given a 15-minute survey split into 3 sections:
  - Demographics
  - Reproductive Health
  - Sexual Health
- Disease activity indexes were used for the IBD group only (Harvey Bradshaw Index for Crohn's disease and the Montreal Classification for ulcerative colitis[5,6])

Preliminary Results

Contraceptive Methods

TABLE 1. Differences in contraception methods between women with IBD and controls in a gastroenterology clinic at Women & Infants Hospital.

Contraception Method	Effectiveness*	Use in IBD Patients (%)	Use in Controls (%)
Birth control patch	91%	0	4.7
The pill	**91%**	**25.9**	**32.6**
Intrauterine device (IUD)	99.2%	14.8	16.3
Diaphragm	88%	0	0
Male condoms	**82%**	**25.9**	**20.9**
Female condoms	79%	0	0
Spermicides	72%	0	0
Male sterilization	**99.85%**	**14.8**	**2.3**
Female sterilization	**99.5%**	**11.1**	**4.7**
Depo-Provera	99%	3.7	7
Sponge	76%	0	0
Fertility awareness method	76%	0	2.3
Withdrawal	78%	7.4	14
No method	**N/A**	**18.5**	**25.6**

**As determined by U.S. Department of Health and Human Services of the Centers for Disease Control and Prevention (CDC).*

Sexual Health

- The Female Sexual Function Index (FSFI) was used to calculate differences between IBD and non-IBD patients in 6 domains (**desire, arousal, lubrication, orgasm, satisfaction, pain**)
- Each domain was scored from 0-6, with 36 being the best possible overall score
- **Controls scored higher than IBD patients in all domains of sexual functioning** (including desire and pain)

Concerns About Pregnancy

11 of 27 IBD patients (**40.7%**) expressed pregnancy-related concerns, compared to only 13 of 43 controls (**30.2%**). The following quotes were taken from IBD patients:

"I am scared how my body may be impacted by IBD during future pregnancies. In the past, pregnancy has caused my symptoms to flare."

"If I were to ever get pregnant, I am concerned how it would affect my disease and whether there would be complications."

"My main concern is making sure that myself and baby will be OK. I'm not sure I can continue Remicade while being pregnant."

TABLE 2. Differences in Female Sexual Function Index (FSFI) scores between IBD patients and controls.

FSFI Domain	Score in IBD Patients	Score in Controls
Desire	**3.022**	**3.314**
Arousal	3.233	3.526
Lubrication	3.778	3.986
Orgasm	3.496	3.552
Satisfaction	3.867	4.286
Pain	**3.496**	**4.038**
Overall Score	**20.893**	**22.712**

Conclusions

- Although no conclusions can be made until sample sizes are increased in both groups and ANOVA tests are performed, preliminary results suggest the following about women with IBD compared to controls at a gastroenterology clinic:

1. **They are more likely to use contraception, and use more effective methods overall**
2. **They are more likely to have concerns about pregnancy**
3. **They have an overall lower sexual function (i.e. more pain, less desire)**

Future Directions

- Better understand the physical and/or psychological reasons that IBD plays a role in both sexual and reproductive health
- Create an educational tool (i.e. pamphlet, handout, website) for women with IBD to learn more about how their disease affects reproduction, and reproduction affects their disease

References

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