# Fertility in IBD

**Fertility is generally normal when IBD is inactive**

**Fertility may be reduced with active inflammation**

Severe inflammation in the small intestine with active Crohn's can affect function of ovaries/fallopian tubes

Reduced levels of general health, including low BMI or poor nutrition, may impair release of eggs and likelihood of successful implantation

**Pelvic surgery, especially ileoanal pouch surgery, can decrease fertility**

Likely due to adhesions (scarring) around the ovaries/fallopian tubes

Keyhole surgery appears to reduce scarring and have less impact on fertility

**Success rates of IVF following pouch surgery are similar to women without a history of IBD and surgery**

*Beyer-Berjot et al, Annals of Surgery 2013*
*Ban et al, APT 2015*
*Pabby et al, AJG 2015*

# Pregnancy in IBD

Risk of passing on IBD with one affected parent is less than 10%
Diet and gut microbiome important

Pre-conception counselling is recommended for women with IBD
Aim for disease remission prior to and during pregnancy

Active disease can be associated with increased risk of miscarriage and pregnancy complications

**Generally, it is recommended to continue most maintenance IBD medications (including 5-ASA, thiopurines, biologic medications) throughout pregnancy and breastfeeding**
(EXCEPT methotrexate, JAK inhibitors and S1P modulators NOT recommended)
Biologic medications considered safe to continue in pregnancy and breastfeeding

IBD activity can be monitored during pregnancy using intestinal ultrasound and calprotectin

Caesarean section recommended if perianal Crohn's disease or history of pouch surgery

*Kim et al, JCC 2021*
*Flanagan E, et al, JCC 2020*
*Torres J, ECCO guidelines, JCC 2023*

# Contraception Considerations in IBD

**Women with IBD desiring contraception should consider long-acting reversible contraception (LARC)**
**eg. intrauterine device or contraceptive implant over estrogen containing contraceptives**

| Method | Disadvantages | Benefits |
|---|---|---|
| **Barrier methods** | Least effective - correct use important | No side effects<br>Protection against STI's |
| **Oral contraceptive pill:**<br>**COCP** | Increased VTE risk with COCP - suggest consider alternatives in IBD patients with higher risk for VTE<br>eg. past history VTE / active disease / on steroids or JAKi's<br>*(note also important to avoid unintended pregnancy)* | *COCP may improve cyclical IBD symptoms* |
| **POP** | Progesterone-only pill (POP) must be taken at same time each day (within 3 hours) | No increased VTE risk with POP |
| **LARC:**<br>**intrauterine device / contraceptive implant** | Longer-term options (IUD 5-10 years, implant 3 years); consider if not planning pregnancy within 1 year | **Most effective (failure rate <1%)**<br>**No oestrogen, no concerns re absorption or VTE risk**<br>*Levonorgestrel IUD may improve cyclical IBD symptoms* |

*Martin J, Kane SV, Feagins LA. Fertility and contraception in women with inflammatory bowel disease, Gastroenterology & Hepatology 2016*

# Sexual and reproductive health of Australian women who live with Inflammatory Bowel Disease (IBD)

**Dr Kate O'Reilly, Prof Eleanor Holroyd, Prof Kath Peters**
**Kate.Oreilly@westernsydney.edu.au**

WESTERN SYDNEY UNIVERSITY

## Background

An exploration of gender issues which are specific to women who live with IBD remain limited in the literature. A diagnosis of IBD often presents during childbearing years. This means that women may experience the debilitating physical and psychosocial impacts of the disease while navigating the impact on their sexual and reproductive health. By exploring the sexual and reproductive health issues for Australian women who live with IBD, we draw attention to the far-reaching impact on women's lives. We aim to highlight the broader impact IBD has on women's sexual wellbeing and to stimulate discussion to inform future directions for research, policy and practice.

## Methods

Australian women over 18 years with a confirmed diagnosis of IBD were invited to participate in an exploratory concurrent mixed methods study between March 2024 and November 2024 using an online survey and qualitive semi-structured interviews. The survey asked women about their health-related quality of life. It included questions specific to women's physical and emotional health, their self-esteem and their satisfaction with life and pregnancy related knowledge specific to IBD.

## Results

64 survey records and 14 interviews were included in the analysis. The mean age of participants was 36 years(survey) and 34 years (interview). Most women were employed and were within the middle to upper income brackets however there was representation from lower incomes highlighting the fact that IBD does not discriminate. Over half of participants reported having CD (73.4% survey; 85.8% interview) with the remaining reporting that had UC (26.6 survey; 14.2 interview).

In this study women completed the SF – 12. The mental component scores showed that 81% of respondents achieved scores about the 50 benchmark which indicated favourable mental health. Conversely physical health scores were less favourable for women in this study with 67% of respondents scoring below the benchmark of 50. Correlation between both components were analysed and were largely independent of each other. More than half of the women (n=34; 53.1%) reported a change in their menstrual cycle due to IBD. Abdominal cramps, bloated stomachs and heavy periods were menstrual characteristics reported by many women in this study. These issues were also highlighted by women who participated in interviews. A total of 60 women completed the CCPKnow section of the survey, the mean score was 8.7 out of 16 which sits at the low end of the adequate IBD related pregnancy knowledge range. Very few women (n=5) had very good IBD related pregnancy knowledge. Reproductive health screening practices indicated that Most women in this study (n-47) had undergone cervical cancer screening within 5 years although more than half (n=38) reported not conducting monthly breast self examinations and half (n-32) had never had a breast examination by a healthcare professional. Women reported a variety of responses regarding their sexual satisfaction with 56% within the moderate to very satisfied rage. Interviews highlighted the challenges IBD had on women's sexual intimacy. Self –Esteem scores ranged from 12 – 19 with the mean score being 15.7 which is on the lowest end of the normal self-esteem band. A majority of women (76.2) reported self esteem within normal rage, however 19 was the highest score which is only the mid-point of the normal self-esteem range. There were no women who participated in this study with a high self-esteem score.

## Conclusions

Research which focuses specifically on the experience of women living with IBD is important to inform acute and chronic models of care which are relevant across women's lifespan. The far-reaching impact of IBD on women's lives is evident, highlighting the need to consider sexual wellbeing with a broader lens. Findings may help to inform undergraduate medical and nursing curricula and primary healthcare services.

*"I've experienced and heard anecdotally from women with IBD that their disease tends to be worse around their period"*

*"I think it can be extremely challenging to talk to consultants about sexual health and IBD particularly when living with a perianal fistula"*

*"Navigating your body changing and even learning how se or pregnancy can work it's really scary and daunting"*

***"I'VE BEEN SELF-CONSCIOUS ABOUT EVERY PART OF MY BODY"***

*"I wasn't confident enough to ear a bikini and have the ostomy on display"*

*"Particularly with regards to thigs like costs, having a child, the cost of living, having one income is not easy and my self-esteem now is so much worse than it was because I don't feel like I'm contributing like I want to contribute"*

*"It is a bright blue rubber band right next to my vagina. It is hideous. But the fact that it was also bright blue, and no one had given me any warning, that was just a whole other level of shock and it's right on my genitalia"*

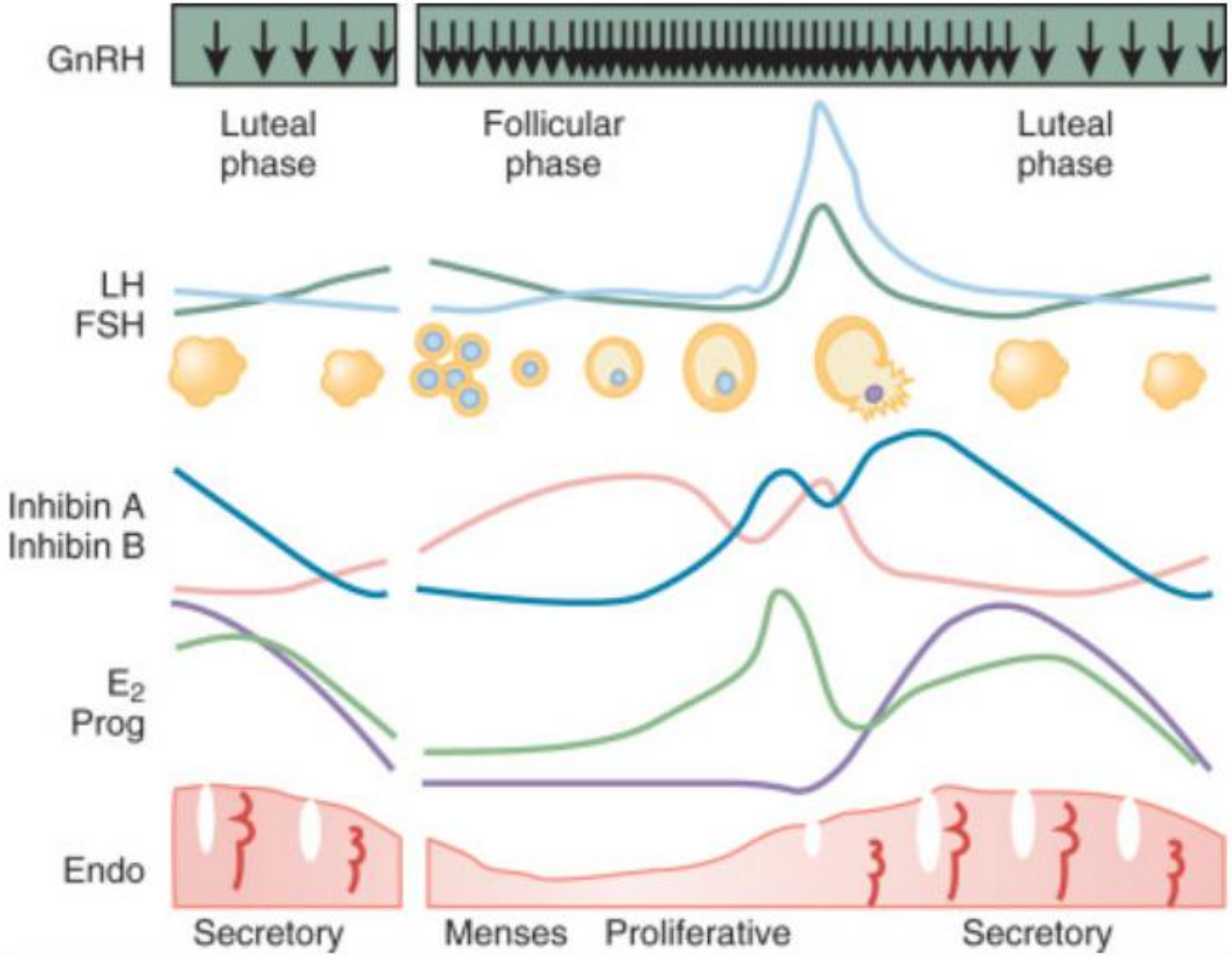


FIGURE 7.7

BOOK CHAPTER

## Neuroendocrine Control of the Menstrual Cycle

Janet E. Hall

Yen & Jaffe's Reproductive Endocrinology, Chapter 7, 149-166.e5

# Hormones available in Australia

Therapeutic Guidelines

**Combined hormonal contraceptive preparations available in Australia**

| Oestrogen dose (micrograms) | Progestin dose (micrograms) | Brand name examples [NB1] |
|---|---|---|
| **monophasic preparation (oral)** | | |
| **low dose** | | |
| oestradiol (hemihydrate) 1500 | nomogestrol acetate 2500 | Zoely [NB2] |
| ethinyloestradiol 20 | drospirenone 3000 | Yaz [NB2] |
| ethinyloestradiol 20 | levonorgestrel 100 | Femme-Tab ED 20/100, Loette [NB2], Microgynon 20 [NB2], Microlevlen [NB2] |
| **standard dose** | | |
| ethinyloestradiol 30 | desogestrel 150 | Marvelon [NB2] |
| ethinyloestradiol 30 | dienogest 2000 | Valette [NB2] |
| ethinyloestradiol 30 | drospirenone 3000 | Yasmin [NB2] |
| ethinyloestradiol 30 | gestodene 75 | Minulet [NB2] |
| ethinyloestradiol 30 | levonorgestrel 150 | Femme-Tab ED 30/150, Levlen, Microgynon 30, Monofeme, Nordette |
| ethinyloestradiol 35 | cyproterone 2000 | Brenda-35 [NB2], Diane-35 [NB2], Estelle-35 [NB2], Juliet-35 [NB2] |
| ethinyloestradiol 35 | norethisterone 500 | Brevinor, Norimin |
| ethinyloestradiol 35 | norethisterone 1000 | Brevinor-1, Norimin-1 |
| **high dose** | | |
| ethinyloestradiol 50 | levonorgestrel 125 | Microgynon 50 |
| **multiphasic preparation (oral)** | | |
| ethinyloestradiol 30 to 40 | levonorgestrel 50 to 125 | Logynon, Trifeme, Triphasil, Triquilar |
| ethinyloestradiol 35 | norethisterone 500 to 1000 | Improvil |
| oestradiol valerate 1000 to 3000 | dienogest 2000 to 3000 | Qlaira [NB2] |
| **monophasic preparation (vaginal)** | | |
| ethinyloestradiol 2700 (15 per 24 hours over 3 weeks) | etonogestrel 11 700 (120 per 24 hours over 3 weeks) | NuvaRing [NB2] |

NB1: List may not be complete.

NB2: Not available on the Pharmaceutical Benefits Scheme (PBS) at the time of writing. See the PBS website for current information <www.pbs.gov.au>.

Ethinylestradiol unclassified
LN possibly problem

Therapeutic Guidelines

**Progestin-only contraceptive preparations available in Australia**

| Route | Progestin | Brand name examples [NB1] |
|---|---|---|
| oral | levonorgestrel 30 micrograms | Microlut |
| | norethisterone 350 micrograms | Locilan 28 Day, Micronor, Noriday 28 |
| subdermal implant | etonogestrel 68 mg over 3 years | Implanon NXT |
| deep intramuscular injection | medroxyprogesterone acetate 150 mg/mL | Depo-Provera, Depo-Ralovera |
| intrauterine | levonorgestrel 52 mg over 5 years | Mirena |

NB1: List may not be complete.

Jaydess v Mirena

# Efficacy of contraception methods

Showing typical use for methods available in Australia

MOST EFFECTIVE

## 99%+

Less than 1 pregnancy per 100 women in one year

**Contraceptive implant**
99.95% effective
Lasts up to 3 years

**Hormonal Intrauterine Device (hormonal IUD)**
99.8% effective, lasts to 5 years

**Copper intrauterine device (Cu-IUD)** 99.2% effective
Lasts to 10 years

**Sterilisation:**

**Male sterilisation (vasectomy)**
99.85% effective / Permanent

**Tubal occlusion by metal microinsert**
99.8% effective / Permanent

**Female tubal ligation**
99.5% effective / Permanent

## 91%+

6–9 pregnancies per 100 women in one year

**Contraception injection:**
Depot medroxyprogesterone acetate (DMPA) 94% effective
Injection every 12 weeks

**Contraceptive vaginal ring**
91% effective
New ring used every 4 weeks


**Combined oral contraceptive pill (the COC Pill)** 91% effective
Taken daily with 24hr window

**Progestogen-only contraceptive pill (POP)**
91% effective
Taken daily 3hr window

Family Planning Alliance Australia is the nation's peak body in reproductive and sexual health. It promotes advances in public health through policy insight and advocacy and represents leading health and education agencies across Australia.

## 76%+

18 + pregnancies per 100 women in one year

**Diaphragm**
88% effective

**Male condom**
82% effective

**Female condom**
79% effective

**Withdrawal method**
78% effective


**Fertility awareness based methods** 76% effective
Abstain from intercourse or use another method on fertile days.

* Long-Acting Reversible Contraception
(After procedure, little /nothing to do or remember)

FAMILY PLANNING ALLIANCE AUSTRALIA

Reproductive and Sexual Health
Policy and Advocacy
www.fpallianceaus.org.au