



An overview of knowledge-based methods

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Objectives & Outline

1. Overview of Knowledge-Based Methods
2. Overview of Fertility Awareness-Based Methods
3. Overview of Lactational Amenorrhea
4. Overview of Withdrawal



(What the heck are you talking about?)

Knowledge-based methods:

methods whose success relies on the user(s) having sufficient information about their fertility to subsequently modify their behaviors in order to prevent pregnancy

KBM's are not beloved...why?

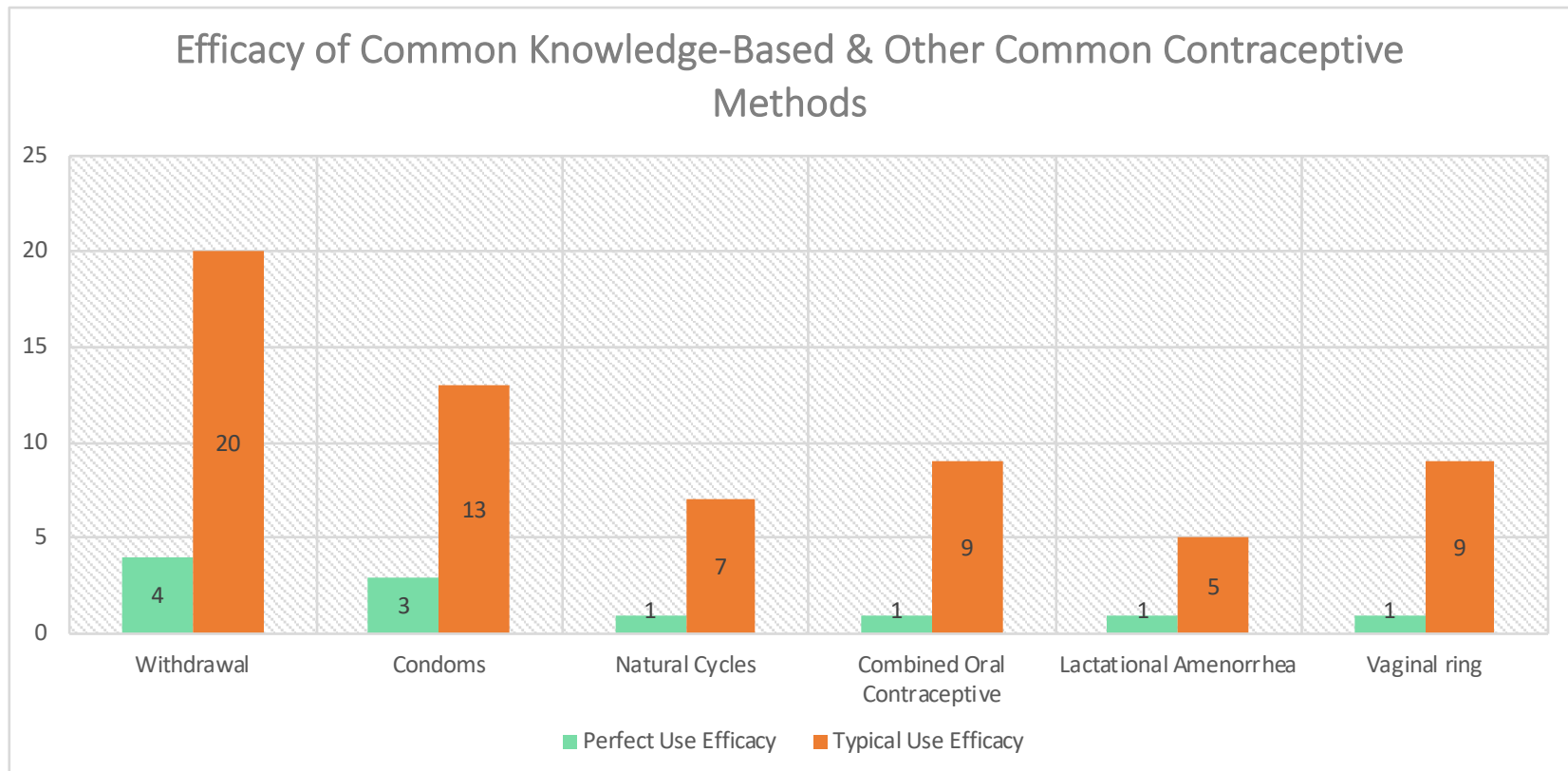
Pull-Out Method Effectiveness

Pulling out isn't a very reliable way to prevent pregnancy. It works about 78% of the time, which means that over a year of using this method, 22 out of 100 women -- about 1 in 5 -- would [get pregnant](#). By comparison, male condoms are 98% effective when used correctly every time.

For that reason, "if you don't care if you get pregnant or not, it's fine, it might delay it," Dr Newman says — but she wouldn't recommend it for women who certainly don't want to fall pregnant.

Dr Black agrees, adding: "They're not cost-effective, those methods, because the cost of unintended pregnancy is very high and very frequent with those methods."

Challenges of KBMs: EFFICACY



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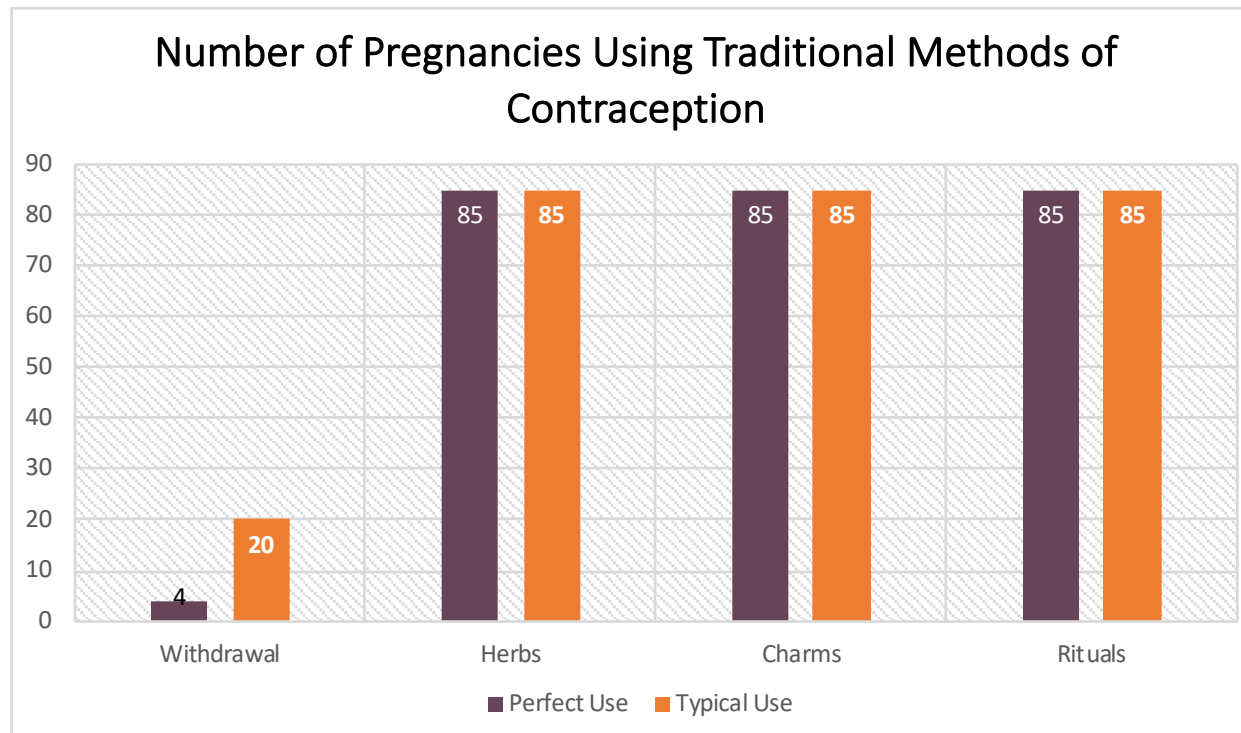
Challenges of KBMs: TERMINOLOGY



Rhythm Method

Source: "CDC Changes Effectiveness Rating on Fertility Awareness Methods." <https://naturalwomanhood.org/cdc-changes-effectiveness-rating-on-fertility-awareness-methods-2019/>

Challenges of KBMs: CLASSIFICATION



Source: No efficacy studies have identified herbs, charms or rituals as successful in preventing pregnancy. Withdrawal data come from: Sundaram A., et al. Contraceptive Failure in the United States: Estimates from the 2006-2010 National Survey for Family Growth. *Perspect Sex Reprod Health*. 2017; 49(1):7-16.

Challenges of KBMs: **BODY LITERACY**



Source: Newton VL, et al. Young women's fertility knowledge: partial knowledge and implications for contraceptive risk-taking. *BMJ Sex Reprod Health*. 2020; 46(2):147-151.

Challenges of KBMs: **ADVOCACY**



Hey Karen, Have you considered Merck's request to cover FABMs in your health plans?

Challenges of KBMs: OTHER PEOPLE

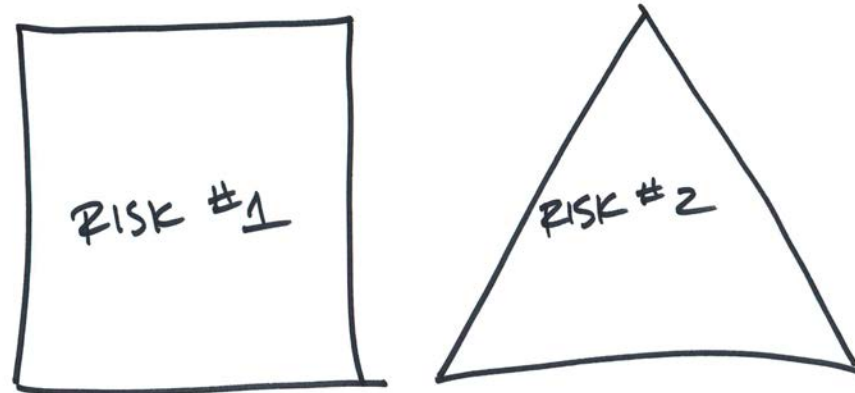


Challenges of KBMs: PERCEIVED LOW DEMAND



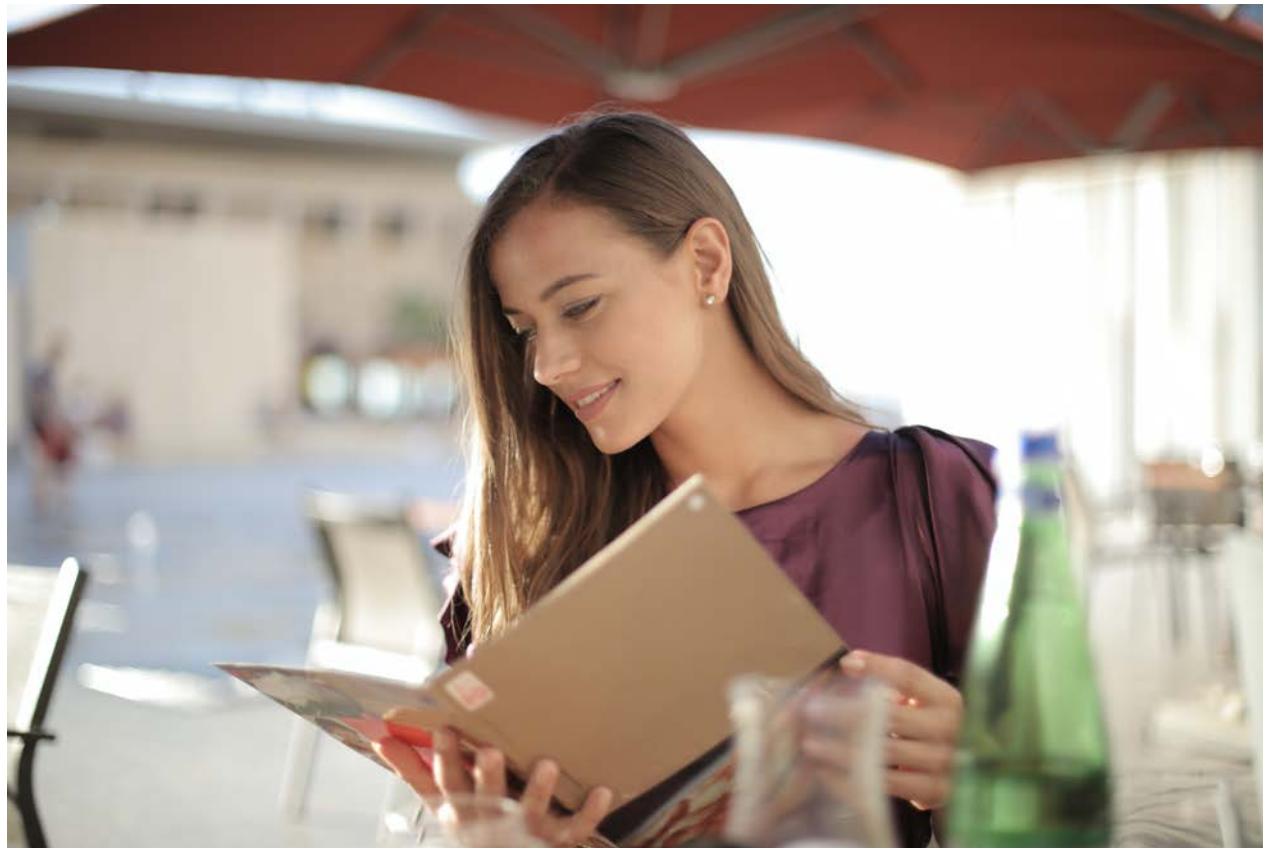
Challenges of KBMs: LAST RESORT METHODS

WHICH ONE DO YOU WANT ?





Benefits of caring about KBMs: FULL RANGE OF METHODS





Benefits of caring about KBMs: TRENDS

- An estimated 3% of women reported using an FABM method within the past month
- An estimated 12% of people reported using withdrawal at their most recent sex act....but when asked whether they'd ejaculated outside of the vagina at their most recent sex act...20% said YES
- 20% of teens reported using withdrawal during their most recent sex act

Source: 1. Polis C., et al. Multiple contraceptive method use and prevalence of fertility awareness based method use in the United States, 2013-2015. *Contraception*. 2018; 98: 188-192. 2. Fu TC., et al. Considerations in the measurement and reporting of withdrawal: findings from the 2018 National Survey of Sexual Health and Behavior. *J Sex Med*. 2019; 16(8): 1170-1177. 3. "Sex, Condoms and STDS: CDC warns about teen risk behaviors." <https://bigthink.com/sex-relationships/teen-sexual-risk-behavior?rebellitem=1#rebellitem1>



Benefits of caring about KBMs: BE A TRUSTED SOURCE OF INFORMATION



Benefits of caring about KBMs: REACH DIFFERENT POPULATIONS



- 64% of iCyclebeads users reported not using a method of contraception within the past 3 months prior to using the app
- 24% reported not ever having used a method of contraception before using the app

Source: Haile L, et al. Market-testing a smartphone application for family planning: assessing the potential of the CycleBeads app in seven countries through digital monitoring. Mhealth. 2018; 4: 27.



Other benefits of knowledge-based methods

- Improve body/health literacy
- No side effects
- Low/no cost
- Easy to stop



Fertility Awareness-Based Methods

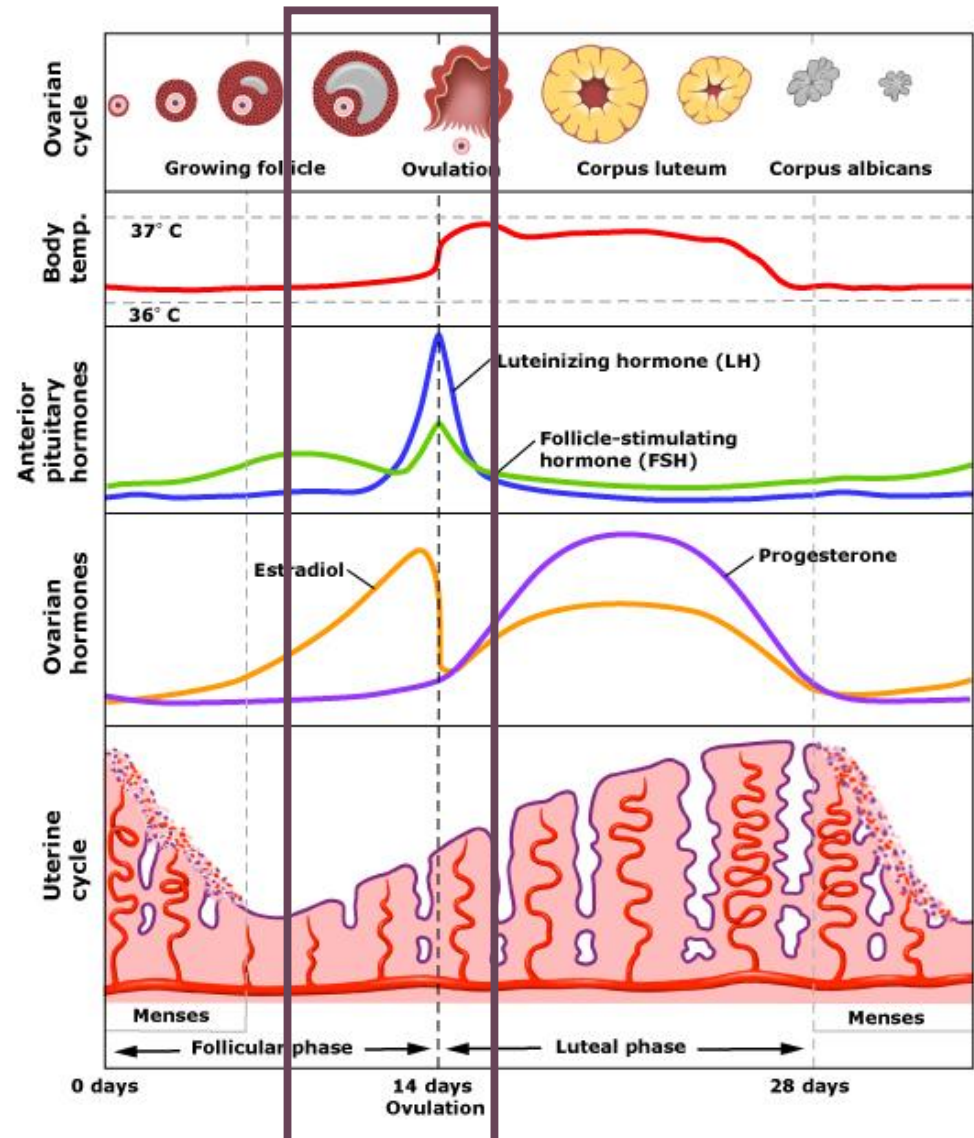


FABM: methods that use signs and symptoms to identify the fertile window

The Fertile Window:

-5 to +1 days from ovulation

Wilcox, et al. New Engl J Med. 1995;33(23):1517-1521.





METHOD TYPE	COMMON METHODS/NAMES	SIGNS/SYMPTOMS COLLECTED	PERFECT USE EFFICACY	TYPICAL USE EFFICACY
Basal body temperature (BBT) plus	-Natural Cycles	Period start dates BBT	99/100	93/100
Calendar methods	-Standard Days Method -Dynamic Optimal Timing	Period start dates	95-99/100	88-95/100
Mucus-only methods	-Billings Ovulation Method* -TwoDay Method	Cervical mucus	96-97/100	78- 88/100
Sympto-hormonal methods	-Marquette Method(s)* -Persona	Period start dates Cervical mucus Urinary luteinizing hormone tests	88-99/100	75-95/100
Symptothermal methods	-Sensiplan -Justisse -Symptopro* -Couple to Couple League*	Period start dates Cervical mucus BBT	99/100	87-98/100



FABM Counseling tip #1: Discuss how/where they want to get information about their fertility

User decision methods: user makes the decision about fertility	Decision-support methods: app/tool tells the user if they are fertile or not
Billings Ovulation TwoDay All symptothermal methods Marquette method(s)*	Natural Cycles Dynamic Optimal Timing Standard Days Persona

FABM Counseling tip #2: Discuss efficacy



Discuss individual method efficacy rather than lumping all FABMs together

Efficacy can be comparable to other contraceptive methods...BUT

These methods are less forgiving

FABM Counseling tip #3: Assess for contraindications

- Generally not a great fit for people with underlying reproductive issues
- Need to transition off hormonal birth control before relying on these methods



FABM Counseling tip #4: Ask about plans for sex during the fertile window



- For abstinence only: opportunity to discuss non-intercourse sex
- Offer barrier method counseling for people who plan to have sex during the fertile window

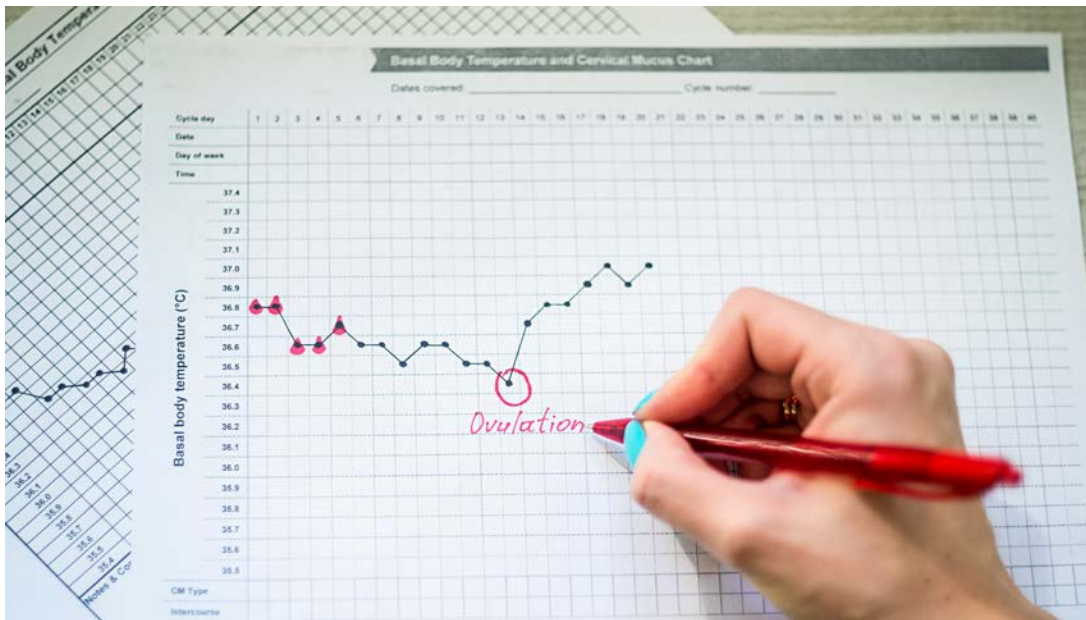


FABM Counseling tip #5: Talk about partner support

- Offer resources for male partner: condoms, information on withdrawal
- FABMs are contraindicated for people who don't have control over whether they have sex



FABM Counseling tip #6: Discuss support during the learning phase



- Normalize that there *is* a learning phase
- Offer EC
- Discuss cycle changes that can occur as a result of EC use

FABM Counseling tip #6: Encourage appropriate use of fertility apps

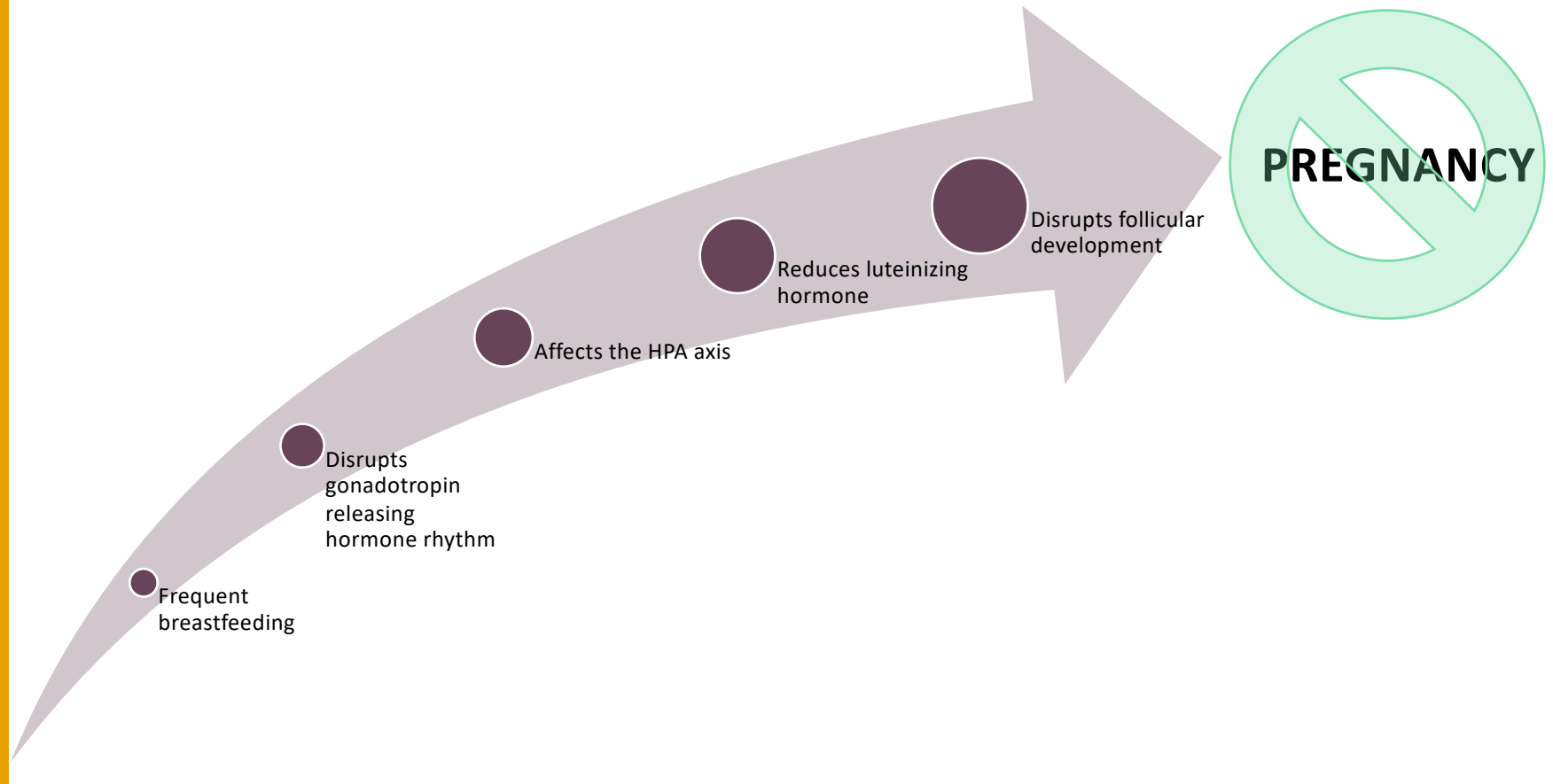
Discourage reliance on unstudied apps for information about ovulation or fertile window (or anything else related to predictions!)





Lactational Amenorrhea

Mechanism of Action



Rule #1 for LAM: Baby must be fully/nearly fully breastfed



- <75% of feeding should be on the breast
- On demand feeding (at least every 4H in the day and every 6H in the night)
- Pumping/self-expressing likely less effective

Rule #2 for LAM: Amenorrhea

Any blood or spotting >2 months postpartum should be interpreted as menstruation and a new contraceptive method should be started



Rule #3 for LAM: 6-month window



LAM should only be used in the first 6 months postpartum



Efficacy of LAM

Perfect Use	Typical Use
99/100 ¹	98/100 ¹
	95/100 ² If parent is working outside the home and pumping instead of breastfeeding

Source: 1. World Health Organization Department of Reproductive Health and Research (WHO/RHR) and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs (CCP), Knowledge for Health Project. Family Planning: A Global Handbook for Providers (2011 update). Baltimore and Geneva: CCP and WHO; 2011.

2. Pallone SR, Bergus GR. Fertility Awareness-Based Methods: Another Option for Family Planning. The Journal of the American Board of Family Medicine. 2009 Mar 1;22(2):147-57.



Counseling tips for LAM

- Ensure client knows the rules for LAM before birth
- Help manage expectations to reduce shame/stigma on the new parent/LAM user in the event of challenges
- Offer emergency contraception
- Discuss a transition plan for method use after LAM



Withdrawal



Withdrawal is the only method
where typical use efficacy
hasn't increased over the past
20 years

Rules for Withdrawal:



#1: Urinate before each sex act (including the first!)

#2: Ejaculate completely away from the vulva and vagina

Withdrawal is a *Skill*

- People who practice withdrawal get better at withdrawal over time
- Practice can include masturbation OR withdrawing with a condom on



Source: Ozkan S, et al. Premature ejaculation in couples using contraceptive withdrawal and associations with characteristics of its use: a cross-sectional study. *Andrologia*. 2020;00:e13765.

What about sperm in pre-ejaculate fluid?



- Two studies have looked at this formally
- Between 12-16% of people have live sperm in their pre-ejaculate fluid
- Probably a thing for *some* but not most people

Source: Killick SR, et al. Sperm content of pre-ejaculatory fluid. Hum Fert (Camb). 2011; 14(1): 48-52.

Kovavisarach E, et al. Presence of sperm in pre-ejaculatory fluid of healthy males. J Med Assoc Thai. 2016; 99: suppl 2: S38-41.



Efficacy of Withdrawal

Perfect Use Efficacy	Typical Use Efficacy
96/100	80/100



Counseling tips for Withdrawal

1. Be KIND
2. Discuss male partner withdrawal education and abilities
3. Provide education (with visual resources)
4. Offer emergency contraception
5. Offer dual/back-up/alternative methods





Take-Home Points

- KBMs are legit and people are using them
- FABMs are a method group, each with different rules and requirements. Try to discuss individual methods in counseling
- LAM can be effective, but support systems need to be in place (for breastfeeding AND for transitioning) *before* birth where possible
- Withdrawal is a skill people can get better at!



THANK YOU!