An overview of knowledge-based methods

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MPH
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
KBMGs 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.

Withdrawal

The withdrawal method, also known as 'pull out' method involves pulling out just before ejaculation. Withdrawal is only efficient when used with another contraceptive method, eg. condoms.

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

Efficacy of Common Knowledge-Based & Other Common Contraceptive Methods

- Withdrawal: Perfect Use 4, Typical Use 20
- Condoms: Perfect Use 3, Typical Use 13
- Natural Cycles: Perfect Use 1, Typical Use 7
- Combined Oral Contraceptive: Perfect Use 1, Typical Use 9
- Lactational Amenorrhea: Perfect Use 1, Typical Use 5
- Vaginal ring: Perfect Use 1, Typical Use 9

Source:
Challenges of KBMs: TERMINOLOGY

Challenges of KBMs: CLASSIFICATION

Challenges of KBMs: BODY LITERACY

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

Amount of effort to offer KBMs

Number of people who ask about KBMs
Challenges of KBMs: LAST RESORT METHODS

Which one do you want?

RISK #1

RISK #2
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

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.

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

<table>
<thead>
<tr>
<th>METHOD TYPE</th>
<th>COMMON METHODS/ NAMES</th>
<th>SIGNS/SYMPTOMS COLLECTED</th>
<th>PERFECT USE EFFICACY</th>
<th>TYPICAL USE EFFICACY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basal body temperature (BBT) plus</td>
<td>-Natural Cycles</td>
<td>Period start dates BBT</td>
<td>99/100</td>
<td>93/100</td>
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<tr>
<td>Calendar methods</td>
<td>-Standard Days Method</td>
<td>Period start dates</td>
<td>95-99/100</td>
<td>88-95/100</td>
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<tr>
<td>Mucus-only methods</td>
<td>-Billings Ovulation Method*</td>
<td>Cervical mucus</td>
<td>96-97/100</td>
<td>78-88/100</td>
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<tr>
<td>Sympto-hormonal methods</td>
<td>-Marquette Method(s)*</td>
<td>Period start dates Cervical mucus Urinary luteinizing hormone tests</td>
<td>88-99/100</td>
<td>75-95/100</td>
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<td>Symptothermal methods</td>
<td>-Sensiplan</td>
<td>Period start dates Cervical mucus BBT</td>
<td>99/100</td>
<td>87-98/100</td>
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FABM Counseling tip #1: Discuss how/where they want to get information about their fertility

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

- Frequent breastfeeding
- Disrupts gonadotropin releasing hormone rhythm
- Affects the HPA axis
- Reduces luteinizing hormone
- Disrupts follicular development

PREGNANCY
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

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<tr>
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<th>Perfect Use</th>
<th>Typical Use</th>
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<tr>
<td>1.</td>
<td>99/100(^1)</td>
<td>98/100(^1)</td>
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<tr>
<td>2.</td>
<td>95/100(^2)</td>
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If parent is working outside the home and pumping instead of breastfeeding

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

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.

Efficacy of Withdrawal

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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!