



# CONTRACEPTIVE TECHNOLOGY UPDATE®

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## Research Reveals Barriers to Contraceptive Care for Patients with Disabilities

*Providers might ignore contraception needs*

Several new studies highlight problems people with disabilities experience when trying to access contraceptive care. These include barriers related to educational material that is not designed with disabilities in mind as well as attitudes and biases among reproductive health providers and clinicians.<sup>1-3</sup>

“The biggest are attitudinal barriers,” says **Claire Z. Kalpakjian**, PhD, MS, associate professor in the department of physical medicine and rehabilitation at the University of Michigan Medical School. “The

barrier to having a conversation about contraception between a woman and her physician, nurse, or other healthcare provider is often colored by the healthcare provider’s belief that it is not relevant to them because people with disabilities don’t have sex. It’s not true. Sex is a normal thing.”

Sometimes, providers do not consider this barrier to contraceptive counseling. They might not even think to bring up the subject of sexual protection during a visit with a patient with disabilities.

“THE BARRIER TO HAVING A CONVERSATION ABOUT CONTRACEPTION IS OFTEN COLORED BY THE HEALTHCARE PROVIDER’S BELIEF THAT PEOPLE WITH DISABILITIES DON’T HAVE SEX.”

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“Other times, they’ll say, ‘Why are you worried about that? You don’t need that,’” Kalpakjian says. “Right there, that’s one of the biggest barriers: The conversation doesn’t happen.”

Instead, providers should ask every patient, including those with disabilities, “What is the right solution for you, and what do you know about contraception options?” Kalpakjian says.

The attitudinal barrier is related to societal biases or expectations. These filter through healthcare providers because they also live within a culture that sometimes dismisses the needs of people with disabilities.

Another barrier is limited information and evidence that can help guide thoughtful decision-making about appropriate contraceptives.

“There is a huge gap in the literature and our understanding about what their needs are and what their experiences are,” says **Monika Mitra**, PhD, Nancy Lurie Marks associate professor of disability policy with the Heller School for Social Policy & Management at Brandeis University in Waltham, MA. Mitra also is the director of the Lurie Institute for Disability Policy.

“We embarked on an innovative study to systematically examine

the prenatal health of women with disability,” Mitra says. “What we discovered is that women who are deaf or hard of hearing are at a disadvantage for many reasons.”

Women who are deaf or hard of hearing experience higher rates of pregnancy complications and adverse birth outcomes, and are more likely to be hospitalized before and in the postpartum period.

“What we also want to understand in contraceptive outcomes is what are the differences for women who are deaf and hard of hearing,” Mitra explains.

Depending on a person’s disability, some contraceptives could be difficult or less safe to use.

“I had a lot of women talk about using IUDs [intrauterine devices]. There’s not a lot of data on their safety and efficacy [for this population],” Kalpakjian says. “Healthcare providers tend to be cautious, and they won’t recommend it.”

Physicians are understandably uncomfortable with recommending a contraceptive option with no clinical guidelines and limited or no data on its safety for people with certain disabilities.

“There is no data on women with disabilities and IUDs, particularly if a woman with physical disabilities

## EXECUTIVE SUMMARY

People with disabilities experience barriers to contraceptive care, sometimes because of attitudes and biases among healthcare providers.

- One barrier is believing someone with a disability is not sexually active and does not need contraception.
- Contraception educational materials often are designed for a general population and ignore the needs of someone with sight impairment or other disabilities.
- Research data on the safety and efficacy of various contraceptive methods is lacking for people with disabilities. Because of this, some providers are too cautious in recommending or prescribing certain contraceptives.

uses a wheelchair and may lack sensation [in her pelvic area],” she says. “Healthcare providers worry that the woman cannot feel the IUD if something goes wrong, and she may not be able to check the string.”

Kalpakjian recalls the case of a woman with a spinal cord injury who used a wheelchair and wanted an IUD. “She had to go to five providers until someone finally agreed she had the right to take the risk she wanted to take,” she notes.

If a provider says a woman’s contraceptive choice is too risky in the absence of data, it shuts down contraceptive counseling and communication.

“When decisions are made in a setting of uncertainty, and not clinical guidelines, power shifts to the healthcare provider, and conversations get shut down,” Kalpakjian says. “The conversation ends, rather than having a more open conversation of ‘Let’s explore this a bit; let me talk with my colleagues and let’s figure this out together.’”

Providers also are concerned about women with limited mobility using hormonal contraception that can raise the risk of blood clots. “If someone is not moving all day, they may have a higher risk of blood clots,” Kalpakjian says. “There are no randomized, controlled trials in this population of women to have data tell us what the risks are. Many decisions are made in the absence of data for women [with disabilities], and the default is that it’s too risky.”

Some contraceptive devices might not be risky, but are physically impossible for some people with disabilities to use. “Like the sponge — you can’t insert it if you don’t have hand dexterity,” she says. “I empathize with providers in making a judgment call without having either a lot of data or having a lot of experience with

women with disabilities. When they have less experience, that can lead to saying ‘No’ because they don’t have that much information to go on.”

These barriers and lack of research into contraceptive use among people with disabilities are problematic for this population.

“People with disabilities in the United States have higher rates of unintended pregnancies compared to people without disabilities,” Mitra says.<sup>2</sup>

Investigators studying contraception access among adolescents with and without disabilities found that girls with disabilities were less likely to report contraceptive use compared to their abled peers. This disparity was noted for both use of oral contraceptive pills and condoms. The investigators concluded that this disparity for adolescents with disabilities should be of concern on a national scale and suggested more research is necessary.<sup>4</sup>

Disparities also are evident among adults who are deaf or hard of hearing. “We also know that people who are deaf or hard of hearing have lower levels of health literacy and contraceptive knowledge,” Mitra says. “They report higher numbers of sexual partners. We also know that people with disabilities, including deaf and hard of hearing, are more likely to be sexually victimized.”<sup>2</sup>

People with disabilities are less likely to receive formal sex education. Those who are deaf or hard of hearing are more likely to receive discriminatory treatment and inadequate communication.<sup>2</sup>

“Even though they need and require an ASL [American Sign Language] interpreter, they may not be receiving that,” Mitra says. “Already having low levels of health literacy and then going into a healthcare setting and not receiving adequate communication help is a

problem.” Investigators should pursue more research to learn the reasons for these disparities, she notes.

Study data also showed clear disparities in contraceptive prescriptions. “What we found was that people who were deaf or hard of hearing were less likely to be provided prescription contraception, including pills, patch, ring, and diaphragm,” Mitra notes. “They were also more likely to be provided no contraception.”<sup>2</sup>

There was no difference in their use of long-acting reversible contraceptives when compared with people who are not deaf or hard of hearing, she adds.

Investigators used claims data instead of survey data, so they could not learn some details about contraceptive use, such as whether people who said they were using no contraception had partners who used condoms.

“That’s the caveat about this study,” Mitra adds.

“The other thing we need to note is that just because someone has a prescription doesn’t mean we know they are actually using the contraceptive that was prescribed,” Mitra says. “However, we found that people who are deaf or hard of hearing were less likely to receive prescription contraception, and they were more likely not to receive any contraception compared with their non-deaf or non-hard-of-hearing peers.” ■

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## Ways for Providers to Improve Contraceptive Access for People with Disabilities

*Communication is key*

Standard contraceptive counseling might not work for people with disabilities, particularly when those disabilities require different modes of communication.

One solution to improving access and reducing these disparities is to improve contraceptive counseling.

As investigators noted in one new study, it is not helpful to hand a paper pamphlet to a woman who is blind. The investigators found that the infrastructure of contraceptive care was based on an assumption of an able-bodied norm, overlooking the reproductive health needs of women with disabilities.<sup>1</sup>

“Provide adequate and credible contraceptive counseling, just as you would to other patients, and ensure women have access to communication help,” says **Monika Mitra**, PhD, Nancy Lurie Marks associate professor of disability policy with the Heller School for Social Policy & Management at Brandeis University in Waltham, MA. Mitra also is the director of the Lurie Institute for Disability Policy. “Do not assume that people who are deaf or hard of hearing have the same level of knowledge of health as other people. We need to ensure we are communicating effectively.”

People with disabilities are doubly disadvantaged if their health literacy is low and the communication is inadequate. They also must be treated with respect.

“Accessible communication is to really ensure they have access to whatever form of communication they need,” she explains. “Ask people about their communication needs.”

During the COVID-19 pandemic, communication with people who are deaf and hard of hearing is particularly problematic because of the need for providers and patients to wear masks.

“People who are deaf or hard of hearing are at a disadvantage, especially if they lip-read,” Mitra says. “It has really impacted people who are deaf and hard of hearing.”

Some providers have used clear masks and face shields to allow patients to see their facial expressions and to read their lips as needed. “That is something that is an issue and can be ongoing, given that COVID is coming back,” Mitra adds.

Another tactic for reducing contraceptive care disparities is for reproductive health providers to examine their own attitudes about sexuality and people with disabilities.

“Think about people with disabilities as having a sexual life, like

### EXECUTIVE SUMMARY

Reproductive health providers use contraceptive counseling techniques largely based on an able-bodied norm, ignoring the needs of people with disabilities. New research suggests that better communication tactics are needed to reduce disparities and remove barriers for people who are deaf or hard of hearing as well as for people with other disabilities.

- People with disabilities often have low health literacy, which compounds communication issues.
- The COVID-19 pandemic has made contraceptive counseling particularly problematic for people who are deaf or hard of hearing because of providers wearing surgical masks, which makes lip-reading impossible.
- One of the better solutions to contraceptive counseling barriers is shared decision-making, with physicians openly acknowledging what they know and do not know about contraceptive use among people with disabilities.

anybody,” says **Claire Z. Kalpakjian**, PhD, MS, associate professor in the department of physical medicine and rehabilitation at the University of Michigan Medical School.

Shared decision-making is another good solution to communication barriers. This is a collaborative model for communicating healthcare information, values, and preferences. It is increasingly being promoted as the optimal framework for patients’ engagement with providers.<sup>2</sup>

“Learn what the patient’s values are and talk about these things, helping them make a good decision that is not the opinion of the provider, but something that fits well with their life and values,” Kalpakjian suggests.

Women with disabilities do not expect their reproductive health providers to be experts in their disability. They are realistic, Kalpakjian says. “But what is painful to many of them is the lack of openness to talk about possible solutions,” she explains. “They do not think their provider should have all the answers, but they’re critical

and frustrated when the healthcare provider won’t even listen to them and talk about it.”

Reproductive health providers often make the best assessments they can, based on what they know about contraceptives in the general population and what they understand of a particular person’s disability. Since there is too little robust evidence to inform physicians of the safest contraceptive for a particular person with disabilities, there is inherent discomfort in the decision-making process, Kalpakjian explains.

Even when physicians do not have all the best answers, women with disabilities want honesty and openness from their providers.

“They want providers to say, ‘I’m going to see what I can find out and talk with my colleagues, and we can work on this together,’” Kalpakjian says. “That’s the optimal. The absence of deliberation is the problem.”

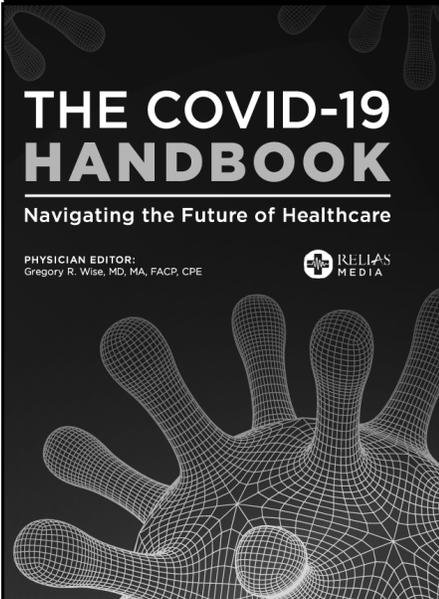
No patient wants a quick “no” to their questions or requests. They also want their providers to accept the fact they are having sex and discussing it is a normal part of that conversation.

There is an interpersonal aspect to reproductive health. The greatest benefit or the greatest barrier to optimal contraceptive care is providers’ beliefs and how they manage decision-making.

“My best advice is to be open to talk it through and be willing to learn more about her disability. Healthcare providers can be their allies in navigating challenging decisions, where nobody knows what, exactly, is the right decision,” Kalpakjian adds. “That’s what shared decision-making is — an alliance between the patient and provider for the best solution.” ■

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# A Model Offering Integrated Contraceptive Care with Primary Care Could Be Replicated

*Program could target rural populations*

A contraception integration model at federally qualified health centers (FQHCs) has helped to ensure comprehensive healthcare for reproductive-age individuals in some rural areas, new research shows.<sup>1</sup>

Investigators studied how FQHCs integrated services — not just offering contraceptives, but also integrating contraception care with primary care.

Some employees at FQHCs that work with rural populations told investigators they were systematically integrating contraceptive counseling, says **Sophie Wenzel**, DrPH, MPH, associate director of the Center for Public Health Practice and Research and assistant professor of practice in the department of population health sciences at Virginia Tech.

“Any time a woman comes in for primary care, they will ask her, ‘Do you want to get pregnant in the next few years? What contraceptives

are you using? If you’re not using contraceptives, what are you interested in?’” Wenzel says. “A lot of women in rural areas [of Virginia] may have been taught abstinence until marriage is the way to go, so the FQHCs took it upon themselves to offer this service.”

One FQHC received private funding from a local nonprofit to start the integrated contraception care and primary care program. “They since continued the program because it was successful, and women were coming and getting access to education,” Wenzel says.

Although the same population could access contraceptive care at a Title X program in their state, they would have to know they want contraceptives before visiting the reproductive health centers.

“That’s a big difference, because for women coming in to the FQHC for primary care services — and not necessarily with contraceptives on

their mind — they were asked about reproductive intentions,” Wenzel says.

At centers with the integrated services, all primary care providers were on the same page in terms of providing initial counseling and systematically assessing reproductive intention.

“They put extra time into their initial primary care visit to have a conversation and then provide services on site,” Wenzel adds. “A lot of the women in this rural area, which included an Amish population, had never been exposed to knowledge about contraceptives.”

The providers would talk about reproduction and how it works, and would provide some contraceptives directly on site. They also followed specific guidelines for same-day insertion of long-acting reversible contraceptives (LARCs).

“One of my recommendations is to increase access to same-day LARC to further reduce the barrier,” Wenzel says. “They do a lot of things really well, but there are things they could do even better.”

Providers use evidence-based materials when educating patients. They explain all of the different birth control methods available and help them find the right fit.

“The big difference between this program and a Title X program is, in the primary care visit, if someone doesn’t ask for contraceptives, the provider doesn’t necessarily have to ask,” Wenzel says. “But, the integrated care program at the FQHC has providers systematically assessing patients for that intention.”

## EXECUTIVE SUMMARY

Investigators recently studied the techniques federally qualified health centers (FQHCs) have used to integrate contraceptive care services with primary care in rural populations.

- Staff at centers with a contraception integration model asked women seeking primary care about their reproductive needs and concerns. They used evidence-based materials to educate them about the different types of birth control.
- Further research is needed to learn how clinics can offer same-day access to long-acting reversible contraceptives as well as how to overcome financial barriers.
- This integrated contraception and primary care model could be replicated nationwide in clinics that serve low-income populations as well as at primary care providers for any population.

Investigators found that many patients at the FQHC lacked knowledge about contraceptive services and birth control and were susceptible to misinformation and misconceptions.<sup>1</sup>

“One of the big things I’ve been looking at is the lack of comprehensive sex education in middle and high schools,” Wenzel adds. “One of the reasons women are not accessing birth control is they’re not getting comprehensive information when they need it in middle and high school, or they are taught abstinence is the only way to go.”

There was stigma about seeking contraceptive services. Some women said they received sex education, but not as much as they would have liked.

Stocking LARC was a big barrier for FQHCs because of the cost, Wenzel notes. Further research is needed into barriers to offering same-day access to LARC and how to overcome them.

The integrated contraception and primary care model at FQHCs could be replicated at other clinics nationwide that also serve low-income populations. It also could work at any primary care provider office for any population.

“I would love to see a model like this provided systematically at all primary care providers,” Wenzel says. “They could assess reproductive intention among patients, and that could go a long way to reduce unintended pregnancies.” ■

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# Family Planning Providers Can Reduce Barriers for Women with Opioid Use Disorder

## *Judgment-free counseling needed*

The number of pregnant women with opioid use disorder (OUD) in the United States increased fourfold over the past decade. Family planning tactics could help reduce unintended pregnancies among women with OUD, reducing harm and risk, new research suggests.<sup>1</sup>

Women with OUD are about twice as likely to become pregnant unintentionally as the general population, despite most women with OUD reporting that they want to prevent pregnancy.<sup>1</sup>

“When we went into this study, we wanted to be here for women with opioid use disorder and [support] their ability to family-plan effectively,” says **Stephani L. Stancil**, PhD, APRN, lead study author and assistant professor in the department of pediatrics at Children’s Mercy Kansas City (MO).

Women with OUD who want to prevent pregnancy need information

about various contraception choices. They need understanding of their own views on long-acting reversible contraceptives (LARCs) as well as access if they desire this method.

Without adequate contraceptive counseling and access, women with OUD can become pregnant, which could be harmful. When the baby is born, it could be damaging if child services becomes involved and removes the child from the parents — even if that is the best answer, Stancil explains.

“All of that can be traumatic, so preventing pregnancy is reducing harm,” she says.

Access to contraceptives and counseling can reduce harm by preventing unintended pregnancies, which have a long-lasting effect, she adds. Unintended pregnancies can affect the woman and her family for years to come. Contraception is a way to reduce one of the negative

effects related to opioid use. The biggest barrier to contraception for the women with OUD was access, including education about contraceptives.

For women using opioids or in recovery from using opioids, navigating the healthcare system is complex. “Having access to receive comprehensive birth control education is the biggest barrier these women shared with us,” Stancil explains.

Trust also plays a role. Women with OUD often have encountered negative experiences with healthcare providers. They might have felt judged by clinicians. This lack of trust for the healthcare system can create a barrier. “There’s a way to build positive experiences and trust in providers,” she says.

Reproductive health providers can create an environment that is safe and protective for patients. They can

work to ensure positive experiences through open communication and making sure women feel heard and not judged. This requires clinicians to ask women what they want and not assume that avoiding pregnancy is best for them because of their opioid use.

“If you tell them, ‘You shouldn’t get pregnant because you’re using opioids, and so you should use birth control,’ that’s rarely going to work,” Stancil says. “It’s better if you explore with them and ask, ‘Hey, you’re using opioids, would you like to have a baby right now?’”

Then, if the patient says, ‘No,’ the provider can talk about birth control options and ask how they can help the patient reach contraceptive goals. “Take baby steps,” she advises.

Researchers asked women with OUD what they wanted in terms of contraceptive care and reproductive health. They heard that the women wanted to hear information from peers who had been through experiences similar to their own. This would make seeing a doctor less intimidating and make the women more comfortable in talking about sensitive topics.

It is helpful if healthcare facilities can connect these patients with someone who is in recovery and can share their own experiences and what they learned about birth control.

“They can talk about what women have heard and what’s not true,” Stancil adds. “They can talk about LARC, side effects, efficacy, and what makes things effective and less effective.”

**“THE PROVIDER OR HEALTHCARE WORKER WHO IS ENGAGING WITH THAT PATIENT NEEDS TO BE INTENTIONAL ABOUT THE POSITION THEY’RE COMING FROM AND WHAT THEY’RE TRYING TO SAY.”**

The challenge is finding peers. “We need to harness women who are invested in serving this role,” Stancil says.

Another way to improve reproductive counseling is to use shared decision-making. “We’re understanding from more research that shared decision-making is more important to improve health around the continuum,” she says.

For all patients seeking reproductive healthcare, but especially for women with OUD, clinicians should provide trauma-informed care. “There’s a broader framework for how to engage with patients and their families,” Stancil says. “Assume everyone who comes in your door, clinic, hospital has undergone some sort of trauma.”

Any patient could be struggling because of something that occurred in their lives. “There’s likely something in their background that impacts their response,” she explains. “How do you meet them where they are?”

One answer is open, nonjudgmental communication. “Viewing patients as having trauma reduces the unconscious bias that most folks have,” Stancil says. “Maybe you grew up in a family or setting where substance use was considered someone’s choice, but what does the evidence suggest?”

The goal is to view patients as having potentially experienced trauma and determine how to help them become healthy.

“The provider or healthcare worker who is engaging with that patient needs to be intentional about the position they’re coming from and what they’re trying to say,” Stancil explains. “If you have the desire to meet the patient where they’re at, are you intentional in body language, verbal language? What approach are you taking overall?”

Keep in mind that everyone makes mistakes. Healthcare practitioners can learn from their patients and even apologize to patients when they realize their approach displayed bias.

“You can say, ‘I apologize. I’m trying to be intentional about getting this right,’” Stancil says.

Providers also can use motivational interviewing. “It’s a technique used

## EXECUTIVE SUMMARY

Women with opioid use disorder (OUD) are more likely to become pregnant unintentionally. They often encounter contraception barriers, including inadequate counseling.

- Women with OUD sometimes have had negative experiences in the healthcare system, leading to a lack of trust.
- Reproductive health providers can create a safe and protective environment by keeping communication open and nonjudgmental.
- Another solution is to ask peers, who have been through similar experiences, to help with reproductive education.

commonly to promote contraceptive service uptake and family planning, making goals mutually,” Stancil says. “One of the benefits of the framework is there often are scripts, even brief phrases, that a clinician can find and adopt.”

For instance, a reproductive health provider could say, “Help me understand when you would like to start a family,” she says.

“The other thing is open-ended questions. Rather than asking a question with ‘yes’ or ‘no’ answers, ask questions that cannot be answered [simply],” she explains.

A better approach is to ask for help to understand what the patient wants. “We know time is of the essence, and not everyone has time to do this every time, but try to integrate one or two of these tools,” Stancil says. ■

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# Oral Contraceptives Can Affect Verbal Working Memory, Cognition

*Study finds no effect on gender self-concept*

Millions of women use oral contraceptives (OCs) in the United States, but not enough is known about how these affect their behavior, feelings, and gender self-concept. However, there is some evidence of effects on cognition, research suggests.<sup>1,2</sup>

“From a basic science perspective, we wanted to use oral contraceptives as a natural experiment,” says study co-author **Adriene M. Beltz**, PhD, assistant professor of psychology, research assistant professor of data science, and 2020-2022 Jacobs Foundation research fellow at the University of Michigan. “Women are

putting hormones into their body every day at doses we know, so we can use that information to determine if it impacts other aspects of their behavior and feelings. Informing women to whether cognition, actions, or behaviors are related to oral contraceptive use can allow them to be empowered in their decision as they choose to use oral contraceptives or not.”

Beltz and her co-investigator examined whether oral contraceptives affected gender self-concept, which their study described as a broad range of psychosocial constructs linked to individual and cultural perceptions of

gender. These include being other-oriented and self-assertive.<sup>1</sup>

“We looked at gender self-labels, how you appear, how you act, and how you view yourself,” Beltz says. “[We thought] women may choose to use oral contraceptives differently, depending on how they see their gendered personality and how they label themselves in terms of masculinity and femininity.”

This was not about people who did not identify with their sex assigned at birth. “We only have women in the study who identified as cisgender women,” she says. “What we find is that there are no differences between women who do and don’t use oral contraceptives and these aspects of gendered personality qualities.”<sup>1</sup>

Beltz and her co-investigator found no difference between OC users and non-users in general personality traits, such as openness, conscientiousness, nervousness, and others, Beltz says.<sup>1,3</sup> There also were no differences in personality factors of neuroticism, extroversion, and agreeableness.<sup>3</sup>

“Women who do or don’t use oral contraceptives did not differ in

## EXECUTIVE SUMMARY

New research shows that oral contraceptive use does not affect people’s behavior, feelings, and gender self-concept, although it does appear to affect cognition.

- Women who used oral contraceptives showed no differences in openness, conscientiousness, neuroticism, extroversion, and agreeableness.
- Gender self-labels, such as how people appear, act, and view themselves, also were not affected by oral contraceptive use.
- But people using oral contraceptives, depending on particular formulations, demonstrated better verbal working memory and spatial ability.

any of those personality features or factors,” she explains. “It didn’t matter whether the women were using oral contraceptives for therapy purposes or contraceptive purposes.”

Evidence suggests OCs affect some aspects of cognition, particularly related to verbal working memory.<sup>2</sup>

“I think the emerging story out of work from our lab is that there aren’t personality and gender self-concept differences between users, but there are some differences in cognition,” Beltz adds. “These are small effects, and some people might notice and some might not, but on average they seem to be there.”

Finding cognition differences with OC use is not shocking because scientists already knew that as ovarian hormones change throughout life, such as at menopause when the hormones decline, there are cognitive consequences.

“Women report feeling cognitively fuzzy, and one of the big things to drop is verbal working memory,” she says. “There certainly seems to be something about hormones affecting verbal working memory.”

It also is possible that some OCs affect spatial skills, depending on formulations. “The effects are small but have been consistent across several studies,” Beltz notes.

For instance, women who use OC might perform slightly better when recalling a grocery list than women who do not use oral contraceptives. Also, research shows that women using a monophasic oral contraceptive formulation, consisting of ethinyl estradiol and a second-generation progestin, show better spatial ability than naturally cycling women.<sup>2</sup>

“One of the takeaway messages is that we need to be aware of the pills and the different formulations,” Beltz says.

Reproductive health providers could ask women what is important to them and recommend a particular oral contraceptive based on their preferences.

“All oral contraceptives seem to have similar impacts as far as we can tell,” Beltz says. “But if there are some that heighten verbal working memory or maybe spatial skills, let’s know what those pills are and think about

that when women want to decide which pill to use.”

More research is needed on this topic to help clinicians and women make these decisions. “Studies help us understand how hormones affect everyone, potentially, and also how to help women make the right choices and advocate for the right contraceptives,” Beltz says. “I think this is really important for us to understand.” ■

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# Women Athletes Need Evidence-Based Reproductive Health Treatment, Information

*Menstrual cycle should be a vital sign*

**M**enstrual cycles can vary and be inconsistent among female athletes. Physicians and other providers could miss important health problems if they downplay athletes’ cycle changes or differences.

A new study shows that a tool, called the Health and Reproductive Survey (HeRS), can assess menstrual function in physically active females.<sup>1</sup>

“It’s clear to me that the menstrual cycle should be used as a vital sign in females,” says lead author **Donna Duffy**, PhD, associate professor in the department of kinesiology, associate director at the Center for Women’s Health and Wellness, and co-director for the Female BRAIN Project at the University of North Carolina at Greensboro.

The menstrual cycle can provide information about a patient’s endocrine system, bone health, development, and temperature regulation. “I came to the conclusion that we need to treat the menstrual cycle as a vital sign, and I’m not the first person to suggest that,” Duffy explains. “It’s critically important that we look at [menstruation] in overall female health.”

This is true for athletes playing on an organized team or for a 45-year-old woman training for a marathon. “There’s a lot to consider on how the menstrual cycle influences and regulates the health of females,” Duffy says. Menstrual cycles can cease in athletes and patients who are very active physically, she notes.

Duffy and colleagues focused on exercising females — not just college-level and professional athletes. “We know female athletes are on teams and compete with each other and train with each other,” Duffy says.

But it is more challenging to understand the menstrual cycle effect on a woman older than age 40 who has begun marathon training. “The increase in her physical activity will have implications for her health,” Duffy says. “It’s well-accepted and established in the literature that physical activity is good for us; we have to move our bodies. But what are the byproducts of human movement that are not related to female athletes participating on a team? How are women’s bodies impacted and affected by movement beyond what we would consider the female athlete?”

HeRS was designed to learn retrospective information, based on a person’s stage of life. It includes a time frame before the patient turned 18 years of age, then ages 19-24 years, and then ages 25-40 years. “We ask them to give us information about how their menstrual cycle was impacted, based on their level of activity in that time of their life cycle,” she says. “Some women reported their menstrual cycle stopped. Because their energy availability wasn’t enough to sustain menstrual demands, endocrinological demands of their body, their menstruation stopped.”

Other people reported that they played harder when in the middle

of bleeding. Women of different age groups reported how their menstruation kicked up their energy level a notch, enabling them to perform better and to feel better while exercising, she adds.

Duffy played field hockey and experienced an irregular menstrual cycle throughout her life. “I have polycystic ovary syndrome, so I never had a regular period in my life. I wasn’t diagnosed until my mid-40s,” she notes. “I was so relieved in high school and college that I wasn’t having the same menstruation issues of colleagues.”

After her diagnosis, she realized that her lack of a period for months — even up to 18 months — at a time was a health problem that needed to be addressed. As she ages, she could be at increased risk for various diseases affected by estrogen.

Experiences similar to Duffy’s can affect athletic and active women and need more attention from reproductive health providers.

“My hope — and the hope of the authors on this paper — is that if you have someone in your clinic

or practice who is having issues with the menstrual cycle, you will look at their physical activity levels to see if there’s any connection there,” Duffy says. “We hope HeRS eventually gets into the hands of clinicians, athletic trainers, and women’s health practice — the people who see women every day for their reproductive health.”

This area of women’s health often is overlooked. “I think one of the opportunities with HeRS is this type of survey tool allows for longitudinal menstrual tracking of symptoms, side effects, and different characterizations,” Duffy explains. “This type of understanding shows how physical activity and exercise can influence overall women’s health — not just reproductive health. We hope it will have an impact on community practitioners.” ■

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1. Duffy D, Yourkavitch J, Bruinvels G, et al. The development and initial validation of the Health and Reproductive Survey (HeRS). *Womens Health (Lond)* 2021;17:17455065211004814.

## CME/CE OBJECTIVES

After reading *Contraceptive Technology Update*, the participant will be able to:

1. identify clinical, legal, or scientific issues related to development and provisions of contraceptive technology or other reproductive services;
2. describe how those issues affect services and patient care;
3. integrate practical solutions to problems and information into daily practices, according to advice from nationally recognized family planning experts;
4. provide practical information that is evidence-based to help clinicians deliver contraceptives sensitively and effectively.

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## CME/CE QUESTIONS

- 1. According to Claire Z. Kalpakjian, PhD, MS, reproductive health providers can be uncomfortable recommending some contraceptive methods to women with certain disabilities because:**
  - a. they are generally uncomfortable counseling women with disabilities.
  - b. they believe this population is less likely to adhere to some methods.
  - c. they are reluctant to recommend a method for which there are no clinical guidelines and limited or no data on safety among certain populations with disabilities.
  - d. they do not want to go against guidelines set by gynecological associations.
- 2. According to researcher Donna Duffy, PhD, a new vital sign should be:**
  - a. fertility.
  - b. the menstrual cycle.
  - c. ovulation.
  - d. activity level.
- 3. Women with opioid use disorder in the United States are more likely than women who do not use opioids to:**
  - a. use intrauterine devices and other long-acting reversible contraceptives.
  - b. want to become pregnant.
  - c. become pregnant unintentionally despite reporting they want to prevent pregnancy.
  - d. use contraceptive methods that also prevent sexually transmitted infections.
- 4. Investigators found that many patients at federally qualified health centers (FQHCs) faced what type of barrier to optimal reproductive healthcare?**
  - a. They lacked knowledge about contraceptive services and birth control and were susceptible to misinformation and misconceptions.
  - b. They could not afford the more popular contraceptive methods.
  - c. They wanted to avoid some of the more effective birth control methods because of cultural biases.
  - d. They did not trust their FQHC providers.