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INSIDE

RELIAS MEDIA

Help Women With Chronic Conditions Choose the Most Effective Form of Contraception

One in three has at least one issue that could affect pregnancy

The 34-year-old patient was diagnosed with diabetes in early adolescence. She is not using any form of contraception. What are the best options for her?

One in three women of reproductive age has been diagnosed with at least one chronic condition that could lead to adverse health and pregnancy outcomes — yet few are using the most effective forms of birth control to prevent unplanned pregnancies, according to research from the University of Utah.[1]

> WOMEN WITH PRE-EXISTING CONDITIONS MAY NOT BE RECEIVING ADEQUATE COUNSELING ABOUT THE SAFEST AND MOST EFFECTIVE BIRTH CONTROL OPTIONS FOR THEM.

Women who have a history of heart disease, breast cancer, epilepsy, high blood pressure, and diabetes are at risk for complications during pregnancy. However, women with such pre-existing conditions may not be receiving adequate counseling about the safest and most effective birth control options for them, researchers say.

While many health providers may consider reproductive-age women fairly healthy, chronic health conditions exist in this age population. An analysis of a nationwide healthcare claims database of reproductive-age women from

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2004-2011 indicates that despite the potential for serious maternal and fetal pregnancy-associated risks, contraceptive use was not optimal among women with medical conditions.[2]

"Unfortunately, many of these women aren't seeing an OB/GYN until they are pregnant," said lead author **Lori Gawron**, MD, MPH, assistant professor of in the University of Utah Department of Obstetrics and Gynecology, in a press statement.[3] "That suggests to me that there are a lot of missed opportunities in the healthcare system to make sure these women understand the risks of pregnancy, particularly if their disease isn't under control."

More Than 700,000 Women Assessed

Researchers used the Utah Population Database to identify 742,000 reproductive-age women who sought treatment at either University of Utah Health or Intermountain Healthcare between January 2010 and December 2014. They used administrative codes to identify highly effective contraception and flag chronic health conditions listed in the US Medical Eligibility Criteria for Contraceptive Use (US MEC) known to increase risk of adverse pregnancy outcomes. Multinomial logistic regression was used to relate demographic and disease status to contraceptive use.

The results show that of the 741,612 women assessed, 32.4% had at least one chronic health condition, and 7.3% had two or more chronic conditions. Researchers report that 7.6% of women with a chronic health condition used highly effective contraception, compared to 5.1% of women without a chronic condition. The proportion of women using long-acting reversible contraception did not increase with the number of chronic conditions (5.8% with one condition vs. 3.2% with more than one).[1]

Researchers point to the low percentage of women with comorbid conditions who indicated use of the most highly effective forms of birth control. Previous research suggests that women with chronic conditions experience a greater risk of unplanned pregnancy, along with an increased risk of adverse maternal and neonatal outcomes.[4]

The reasons for unintended pregnancy vary between patients,

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One in three women of reproductive age has been diagnosed with at least one chronic condition that could lead to adverse health and pregnancy outcomes — yet few are using the most effective forms of birth control to prevent unplanned pregnancies, according to research from the University of Utah.

- Women who have a history of heart disease, breast cancer, epilepsy, high blood pressure, and diabetes are at risk for complications during pregnancy.
- However, women with such pre-existing conditions may not be receiving adequate counseling about the safest and most effective birth control options for them, researchers say.

noted co-author **Jessica Sanders**, PhD, MSPH, family planning research director at University of Utah Health. Women with comorbid conditions may have competing priorities, making the balance between healthcare concerns, medication use, and contraception "overwhelming."

"However, this also presents healthcare providers with a tremendous opportunity to increase awareness of and access to forms of contraception that are acceptable to these women so they can optimize their health prior to pregnancy and achieve their reproductive goals without medical complications," Sanders said.[3]

Put US MEC to Use

The American College of Obstetricians and Gynecologists released a *Practice Bulletin* in 2019 to help providers guide patients with comorbid conditions in choosing the most effective contraception method.[5] The publication is aimed at helping clinicians to use the US MEC rating system.[6] It recommends combinations of medical conditions and contraceptive methods which are rated on a safety scale of 1 to 4. Category 1 indicates there are no restrictions for use of the method, while Category 4 indicates the method could present an unacceptable health risk for the patient.

In the case of the mid-30s patient with diabetes, use of combined hormonal contraceptives is contraindicated (US MEC Category 3 or 4, depending on the severity of the condition). Since the contraceptive injectable DMPA increases lipoprotein profiles favorable to atherosclerosis, the shot is given a US MEC Category 3 rating for women with diabetes of more than 20 years' duration, or evidence of microvascular disease. What choices may be offered such patients? The progestin-only pill, levonorgestrel intrauterine devices, and the subdermal implant are suitable alternatives.[5]

It is up to the woman and her family to determine if she wants to become pregnant, Gawron said. However, the woman should be counseled on what the risks are ahead of time, she stated.

"If she isn't willing to take those risks, then she should be using the safest and most effective birth control method that works for her," said Gawron. ■

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Grocery Chain Expands Access to Contraceptives With Pharmacist Provision

Access to contraception has been broadened in seven Western states as Kroger Health pharmacists now offer contraceptive patches and self-administered hormonal contraceptive products. Pharmacists at stores under the Kroger Health banner, including participating Fred Meyers, King Soopers, QFC, Ralphs, and Smith's locations in California, Colorado, Idaho, New Mexico, Oregon, Utah and Washington, as well as Kroger Health clinic facilities, will administer screenings prior to dispensing the contraceptive products.

"Prescribing hormonal contraceptives is another way our pharmacists are practicing at the top of their licenses," **Jim Kirby**, PharmD, senior director of pharmacy services at Kroger Health in Cincinnati, said in a statement. "We are excited to help more women access hormonal contraceptives through our pharmacies offering this service."[1]

Training Sessions Expand

Pharmacists licensed in states that have approved contraceptive provision can access appropriate training online. The Comprehensive Contraceptive Education and Certification course, developed by faculty at the Oregon State University College of Pharmacy with guidance from the Oregon Board of Pharmacy, the Oregon Health Authority, and others, offers online certification for pharmacists practicing in participating states.

Registration is available for pharmacists in California, Colorado, Hawaii, Idaho, Maryland, Montana, Oregon, Tennessee, Utah, and Washington. The online course covers information on hormonal contraceptives, including mechanism of action, doses, types, use, benefits, and risks.

The University of Tennessee partnered with the Oregon State University College of Pharmacy to offer its comprehensive contraceptive education and certification course for Tennessee pharmacists.

"While pharmacists are knowledgeable in being able to counsel women on the side effects and what to expect, before now they have never been in the role of starting or continuing a woman on any form of hormonal contraception," said **James Wheeler**, PharmD, BCPS, assistant professor of clinical pharmacy and translational science at the University of Tennessee Health Science Center in Knoxville. "It is good to have a foundational knowledge on hormonal contraception, but prescribing it requires a deeper understanding of how to practice seeing patients and in making clinical decisions."[2]

Study Details Pharmacist Provision

California Senate Bill 493 was passed in 2013, allowing pharmacists to provide a wider range of healthcare services, including direct provision of hormonal contraceptives. Oregon passed a similar law in 2015. Both states use a statewide protocol that went into effect in 2016.

Researchers of a 2019 study analyzed use of contraceptive services by women accessing pharmacies at Albertsons, a supermarket-based chain, in California and Oregon. They examined data of 2,117 patients, ages 13 to 55 years, who used the service between August 2016 and February 2017. Initial pharmacist screenings revealed health issues in about 7% of women that required a follow-up visit to primary care physicians. The most common health issue was high blood pressure, researchers reported.[3]

Seventy-four percent of women accessing the pharmacy had health insurance, 89% visited a primary care provider in the past year, and 91% previously used hormonal contraception. The contraceptive pill was the most commonly dispensed method, with almost 96% of women receiving pill prescriptions. Other methods included the contraceptive patch (1.6%), vaginal ring (2.6%), and the contraceptive injection (0.1%).[3]

Contraceptive services are just the start for the expanded scope of practice for pharmacists, noted **Lisa Kroon**, PharmD, chair of the Department of Clinical Pharmacy at the University of California, San Francisco School of Pharmacy. Albertsons is exploring the provision of even more services, said **Rebecca Strauss**, PharmD, manager of specialty care, quality assurance, and patient outcomes at Albertsons Companies.[4]

"Where states allow, we have begun prescribing [medications] for chronic conditions, such as statins for patients with diabetes, emergency medications such as epinephrine and naloxone, and medications for self-limiting conditions such as influenza, strep throat, urinary tract infections, and cold sores," Strauss said in a statement. "We also are working on implementing more smoking cessation services where pharmacists can prescribe tobacco

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- Pharmacists who hold licenses in states that have approved contraceptive provision can access appropriate training online. The Comprehensive Contraceptive Education and Certification course, developed by faculty at the Oregon State University College of Pharmacy with guidance from the Oregon Board of Pharmacy, the Oregon Health Authority, and others, offers online certification.

cessation medications and also HIV pre-exposure prophylaxis."

The American College of Obstetricians and Gynecologists (ACOG) updated its guidance in 2019 regarding over-the-counter access to hormonal contraception, expanding its support for access to vaginal rings, the contraceptive patch, and contraceptive injections with no age restrictions.[5]

Women still should visit a gynecologist each year for a well-woman health assessment for such services as discussing reproductive health plans, a pelvic or breast exam, cervical cancer screening, or sexually transmitted infection testing, the organization said. However, obtaining contraception does not require an exam or office visit, the ACOG guidance stated.[5] ■

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Antibiotic-Resistant Gonorrhea Remains Urgent Health Threat

Reproductive health clinicians are all too familiar with *Neisseria gonorrhoeae*, the bacterium that causes gonorrhea. This infection can result in ectopic pregnancy, infertility, and can increase the risk of contracting and transmitting HIV.

Gonorrhea has quickly developed resistance to all but one class of antibiotics, and half of all infections are resistant to at least one antibiotic. In the 1980s, providers stopped recommending penicillin and tetracycline for treatment, and by 2007, ciprofloxacin was no longer effective. By 2012, cefixime was no longer indicated as a first-line regimen, leaving ceftriaxone as the last recommended treatment.[1] The current recommended regimen is a single dose of ceftriaxone 250 mg intramuscularly, and azithromycin 1 g orally as a single dose.[2]

The CDC recently released an update of its 2013 report, *Antibiotic Resistance Threats in the United States*, the first report to examine the threats posed by antibiotic resistance on human health. Antibiotic-resistant gonorrhea was listed as one of the three most urgent threats of its kind in the United States in 2013, and it retains its status as one of the five most urgent threats in the 2019 report. The other urgent threats include carbapenem-resistant *Acinetobacter*, *Candida auris*, *Clostridioides difficile*, and carbapenem-resistant Enterobacteriaceae.

There are 550,000 estimated drug-resistant cases of gonorrhea and 1.14 million total new infections each year, according to the report. Cost for care is estimated at $133.4 million in annual discounted lifetime direct medical costs.[1] Gonorrhea diagnoses increased 67% overall, rising from 333,004 to 555,608 cases, according to preliminary 2017 data. Diagnoses in men nearly doubled in 2018 — from 169,130 to 322,169 — with cases in women rising for the third year in a row, from 197,499 to 232,587.[3]

EXECUTIVE SUMMARY

The CDC recently released an update of its 2013 report, *Antibiotic Resistance Threats in the United States*. Antibiotic-resistant gonorrhea continues to be one of the most urgent threats, according to the 2019 update.

- Gonorrhea has quickly developed resistance to all but one class of antibiotics, and half of all infections are resistant to at least one antibiotic.
- There are 550,000 estimated drug-resistant cases of gonorrhea each year, with 1.14 million total new infections each year. Cost for care is estimated at $133.4 million in annual discounted lifetime direct medical costs.

The CDC report shows that antibiotic resistance is a larger threat in the United States than previously estimated, and the threat is not going away, said CDC Director **Robert Redfield**, MD, at a press conference.

"A death from antibiotic-resistant infections occurs about every 15 minutes, and a resistant infection occurs every 11 seconds," Redfield stated.

Pushing on All Public Health Fronts

The CDC developed Strengthening the United States Response to Resistant Gonorrhea (SURRG) in 2016 to help monitor and test for resistant gonorrhea and develop rapid response strategies if resistance is detected. The program is designed to enhance domestic gonorrhea surveillance and infrastructure, boost availability of culturing and local antibiotic susceptibility testing, and increase rapid field investigation to slow the spread of resistant infections. Nine jurisdictions are collecting and analyzing data to develop national recommendations for the public health response to resistant gonorrhea.

The San Francisco AIDS Foundation is participating in SURRG. Its nurse practitioners collect samples from people with confirmed cases of gonorrhea to be analyzed by the San Francisco Department of Public Health. Samples are tested to see how susceptible the gonorrhea bacteria are to three of the antibiotics commonly used for gonorrhea treatment. About a week after samples are taken, foundation healthcare providers receive a report of lab analyses. If testing indicates a reduced susceptibility to one or more of the medications, additional follow-up is provided.

"While a number of new antibiotic agents are in development to treat gonorrhea, drug development has been slow, prompting the need for creative strategies to better use the drugs we already have," **Christopher Hall**, MD, San Francisco AIDS Foundation's vice president of medical affairs, said in a statement.[4]

Recent research has identified a drug combination that could be an effective back-up for patients not responding to current therapy for gonorrhea.

GONORRHEA HAS QUICKLY DEVELOPED RESISTANCE TO ALL BUT ONE CLASS OF ANTIBIOTICS, AND HALF OF ALL INFECTIONS ARE RESISTANT TO AT LEAST ONE ANTIBIOTIC.

Researchers from University Hospitals Birmingham in England report that the antibiotic gentamicin with azithromycin worked almost as well as ceftriaxone for genital gonorrhea.[5]

Funded by the United Kingdom's National Institute for Health Research, the study is the first randomized, controlled trial to compare the two treatments for the sexually transmitted infection. To conduct the study, 720 participants at 14 sexual health clinics in England were randomized to receive either injections of gentamicin or the current treatment of ceftriaxone intravenously. Both groups also were given a single dose of azithromycin orally. Results indicate that 98% of participants given ceftriaxone were successfully treated, compared to 91% given gentamicin.[5]

Researchers released results of a Phase III trial in which an oral solithromycin monotherapy was tested for noninferiority against intramuscular ceftriaxone plus oral azithromycin in patients with uncomplicated gonorrhea.[6] However, scientists report that solithromycin as a single 1,000 mg dose is not a suitable alternative to ceftriaxone plus azithromycin as first-line treatment for gonorrhea.[5] ■

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Mailing HPV Testing Kits May Boost Cervical Cancer Screenings

In the United States, more than 50% of cervical cancers are diagnosed in underscreened women.[1] In 2016 (the latest year for which incidence data are available), almost 13,000 new cases of cervical cancer were reported in the United States, and 4,188 women died of the disease.[2]

Mailed self-sampling kits that test for human papillomavirus (HPV) may increase the number of women screened for cervical cancer. Results from a new study of 20,000 women, conducted by researchers from the University of Washington and Kaiser Permanente Washington Health Research Institute, indicate that home testing may be a viable option for increasing screening rates.[3]

Researchers followed female members of Kaiser Permanente Washington who were 30-64 years of age and overdue for cervical cancer screening. Researchers randomly assigned the women to receive either usual care, which consisted of annual patient reminders and outreach from primary care clinics, or usual care plus a mailed HPV test kit, with instructions for collecting a sample at home. Women in the second group could either choose to complete the self-collection kit and return samples in the mail, or go to a clinic for screening. Primary outcomes were cervical intraepithelial neoplasia grade 2 or worse (CIN2+) detection within six months of screening and treatment within six months of detection. Screening uptake within six months of randomization was a secondary outcome set by researchers.

According to **Diana Buist**, PhD, senior investigator and director of research and strategic partnerships at Kaiser Permanente Washington Health Research Institute, women who received a kit were 50% more likely to be screened compared to those who received usual care. Women in the mailing group were screened faster, Buist said in a statement.[4]

Many women may be overdue for cervical cancer screening because they dislike the procedure, or simply do not have the time for in-clinic screening, said Buist. "HPV testing in the privacy and comfort of home promises to put care in the hands of women, remove barriers to care, and increase access and affordability," she stated.

Studies have shown that an HPV test on a self-collected sample performs as well as a physician-collected sample,[5] noted lead author **Rachel Winer**, PhD, MPH, professor of epidemiology at the University of Washington School of Public Health and an affiliate investigator at Kaiser Permanente Washington Health Research Institute.

"Randomized trials in other countries have shown that offering home-based HPV testing increases screening participation, but this was the first U.S. trial to study the impact of mailed kits in a real-world health system setting," Winer said.[6]

Other countries, such as Australia and the Netherlands, include the option of home HPV screening for underscreened women, noted Winer. Winer and Buist are spearheading a follow-on trial that also will include women who are up to date with cervical cancer screening. With further research in hand, the scientists hope that home HPV screening can become a useful option for all eligible patients, similar to Kaiser Permanente Washington's practice of mailing stool test kits for colorectal cancer screening.

Meta-Analysis Shows Support

Results from a recent meta-analysis indicate that women who had the option of collecting their own sample for HPV testing were twice as likely to seek cervical cancer screening as those who relied on standard screening practices.[7] The study was conducted by researchers in the Department of International Health at the Johns Hopkins Bloomberg School of Public Health, the World

EXECUTIVE SUMMARY

Self-sampling HPV testing kits may help more women get screened for cervical cancer. Results from a new study of 20,000 women indicate that home testing may be a viable option for increasing screening rates.

- Women who received a kit mailed to their home were 50% more likely to be screened compared to those who received usual care.
- Women in the mail group were screened more quickly.
- Other countries, such as Australia and the Netherlands, include the option of home HPV screening for underscreened women.

Health Organization (WHO), and the International Agency for Research on Cancer. WHO used information from the meta-analysis to develop new recommendations for key self-care interventions for sexual and reproductive health and rights in light of vulnerable populations and settings with health systems that have limited capacity and resources.

"Self-care is an integral component of the health system," **Caitlin Kennedy**, PhD, MPH, an author of the study and an associate professor of international health at the Bloomberg School of Public Health, said in a statement. "With the right approach, evidence-based self-care interventions for sexual and reproductive health can empower individuals and help achieve universal health coverage by making critical interventions more widely available around the world."[8]

According to the latest U.S. Preventive Services Task Force cervical cancer screening recommendations, all women ages 21-29 years should be tested every three years with cervical cytology. For women ages 30-65 years, recommendations call for screening with the Pap test alone every three years, screening with the high-risk HPV test alone every five years, or screening with both tests together every five years.[9]

Recent CDC data indicate that an estimated 92% of cancers caused by HPV could be prevented by vaccine.[10] The federal agency will continue to push for increasing HPV vaccination coverage to 80%, which is set as the Healthy People 2020 target. ■

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Crisis Pregnancy Center Care Is Focus of Adolescent Health Societies' Statement

The Society for Adolescent Health and Medicine (SAHM) and the North American Society for Pediatric and Adolescent Gynecology (NASPAG) have issued a joint position paper detailing how crisis pregnancy centers, or CPCs, pose serious health risks for adolescents.[1] According to the position paper, such centers fail to consistently follow medical and ethical practice standards, which could lead to negative health outcomes.

Also known as pregnancy resource centers or pregnancy care clinics, such facilities are nonprofit organizations with a primary aim of preventing women from obtaining an abortion. Many also oppose contraception. More than 2,500 crisis pregnancy centers are currently operating in the United States.

"Crisis pregnancy centers attempt to prevent use of reproductive healthcare services, particularly abortion and contraception, often without revealing their true intentions," said **Andrea Swartzendruber**, PhD, MPH, the lead author of the position paper and an assistant professor of epidemiology and biostatistics at the University of Georgia College of Public Health.

"The lack of transparency, use of inaccurate health information, and failure to provide evidence-based services could harm young people and their health."[2]

Swartzendruber leads the Crisis Pregnancy Center Map Project, which aims to provide location information about all crisis pregnancy centers operating in the United States. Most centers are affiliated with national religious organizations that oppose abortion and create policies against promoting and providing contraception. Some centers only offer pregnancy tests and pregnancy-related information or counseling, while others provide limited medical services, such as obstetric ultrasounds to confirm a pregnancy.

"It can be difficult to distinguish between CPCs and healthcare clinics that provide safe, comprehensive care, especially online," said **Maria Trent**, MD, MPH, pediatrician and adolescent medicine specialist at Johns Hopkins University Schools of Medicine, Nursing, and Public Health, and president of SAHM. "Health professionals should help young people recognize CPCs and the limitations of CPC services, and facilitate access to quality, unbiased sources of information, care, and resources."

A 2016 survey of sexual health information presented on crisis pregnancy centers websites revealed that the websites provided inaccurate and misleading information about condoms, sexually transmitted infections (STI), and methods to prevent STI transmission. Such information could be harmful to teens, who might be unable to discern the quality of sexual health information presented, researchers concluded.[3]

"Government-funded health programs have a responsibility to protect and promote health and provide accurate information," said **Eduardo Lara-Torre**, MD, vice chair of obstetrics and gynecology at Virginia Tech Carilion School of Medicine, and NASPAG president. "Because CPCs prioritize their own beliefs over the needs and rights of clients and prevailing medical guidelines, their practices and services clearly do not align with a public health approach."

Centers Gain Momentum

According to analysis provided by the Guttmacher Institute, more states are passing legislation bolstering crisis pregnancy centers' positions as healthcare providers. For example, Arkansas Gov. Asa Hutchinson signed a measure in April 2019 that permits, but does not require, the state Department of Health to establish a crisis pregnancy support program. If implemented, the program would promote childbirth and parenting as an alternative to abortion, as well as operate a hotline for social, medical, and charitable services referrals. The law took effect in July.

In June 2019, the Michigan House of Representatives passed a budget bill that would allocate nearly $8.5 million for family planning services, but would prevent funding from going to any entity that provides abortions, or counsels or refers for an abortion.

According to information from the Charlotte Lozier Institute, a research group that opposes abortion, most CPCs provide non-healthcare services such as counseling and baby supplies.[4] While an estimated 70% of centers provide ultrasounds, about 25% offer STI testing, and 5% provide prenatal care.

Some CPCs are taking a new approach. Eight independent, Texas-based pregnancy centers merged in 2019 to form a chain called The Source. The nonprofit organization will offer a full array of medical services, including STI testing, first-trimester prenatal care, and contraception choices, at centers in Houston, Dallas, San Antonio, and Austin. The centers will offer such methods as pills, contraceptive injections, and intrauterine devices.[4] This practice differs sharply from other pregnancy centers, which refuse to discuss or offer contraception due to the belief that it encourages sex outside marriage.

EXECUTIVE SUMMARY

The Society for Adolescent Health and Medicine and the North American Society for Pediatric and Adolescent Gynecology have issued a joint position paper detailing how crisis pregnancy centers pose serious health risks for adolescents.

- According to the position paper, such centers fail to consistently follow medical and ethical practice standards, which could lead to negative health outcomes.
- Also known as pregnancy resource centers or pregnancy care clinics, such facilities are nonprofit organizations with a primary aim of preventing women from obtaining an abortion. Many also oppose contraception. More than 2,500 crisis pregnancy centers currently are operating in the United States.

With Planned Parenthood declining to apply for Title X funding due to current administration rules that ban participating clinics from referring patients for nonemergency abortions and requiring financial separation from facilities that provide abortions, The Source clinic administrators say they will file for such funding in 2020. Another group of nonprofit crisis pregnancy organizations, the Obria Group, is now expanding beyond the West Coast, operating 30 clinics in five states. The group is adding medical services to allow it to bill insurers and qualify for government funds.

Robert Hatcher, MD, MPH, professor emeritus of gynecology and obstetrics at Emory University School of Medicine, has expressed concerns about CPCs and "problem pregnancy centers."

"First and foremost is my concern is that those phrases suggest that there is counseling, and counseling is not really the objective; the objective is to talk people out of considering an abortion if they are pregnant," says Hatcher. "Secondly, there is minimal counseling beyond the goal of reducing the likelihood of a woman seeking an abortion, and moreover, there is minimal counseling about how to proceed to have a healthy pregnancy if a woman does want to continue her pregnancy."

While the eight Texas-based centers are a desirable step in the right direction, as they offer pills, injections, intrauterine devices, and presumably other contraceptives, their failure to offer abortion when that is the immediate need of many women seeking counseling about a possible pregnancy is "extremely undesirable," says Hatcher, as it may delay such women from receiving information about where to obtain an abortion as early as possible. ■

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More Women Look to Self-Managed Medication Abortion

Results of a recent study indicated that online abortion medication demand is highest in states with restrictive abortion policies. Findings showed that from Oct.15, 2017, to Aug. 15, 2018, 6,022 people living in the United States requested abortion medications from an online service. While requests came from across the nation, states with restrictive abortion policies saw higher volumes of requests.[1]

Drugs similar to those used in the U.S. medication abortion regimen are available online, as well as information on how to safely and effectively self-manage abortions. March 2018 saw the launch of Aid Access, a service that provides medication abortion pills via mail order to people living in the United States. Around 2,500 prescriptions reportedly were filled in that year.[2]

Researchers analyzed consultation forms from U.S. residents requesting abortion medications from Women on Web, an online abortion telemedicine service. The nonprofit organization provides abortion medications to people in countries without access to safe abortions. While Women on Web does not send abortion medications to the United States, it does field requests from American residents. Researchers used the organization's consultation forms, which include demographic characteristics, medical history, and motivations for seeking abortion medications online, for analysis.

According to the researchers, 76% of requests for medication came from people living in states with restrictive abortion policy climates. Mississippi, where 24.9 per 100,000 women of reproductive age requested medication, was the state with the highest number of requests, followed

by Louisiana, Alabama, Tennessee, and Texas. One-quarter of requests came from women living in states with more supportive abortion policies. New Hampshire had the lowest rate of requests.

Difficulty accessing clinical care and personal preferences were the leading reasons for seeking abortion medications online, researchers report.

"In both states that have passed many abortion restrictions and states that have passed fewer, people are motivated by a combination of barriers to clinic access and a preference for at-home care," said lead author **Abigail Aiken**, MD, MPH, PhD, assistant professor of public affairs at the LBJ School of Public Affairs at the University of Texas at Austin.

Barriers for women differed according to state policy environment, researchers noted. Legal barriers to clinic access, such as waiting periods, and the cost of in-clinic abortion care, were experienced more commonly in states with restrictive abortion policies.[1]

"These results suggest that state policies restricting access to abortion have made it harder for some people to access care in the clinic setting, and so they look online for alternatives," Aiken said.[3]

Efforts Underway to Expand Access

A network of providers, researchers, and advocates is working toward access to the full range of safe and effective options for abortion services for U.S. women, including self-managed methods. The FDA-approved regimen for medication abortion is sanctioned for use up to 70 days since the patient's last menstrual period. It consists of two medications: mifepristone, which works by blocking progesterone, and misoprostol, which is taken 24 to 48 hours later to induce contractions and end the pregnancy.[4]

To check the online availability of medication abortion drugs, researchers identified 18 websites and ordered 22 products: 20 mifepristone-misoprostol combination products, and two that contained only misoprostol. A total of 18 combination products and two misoprostol products were received from 16 different sites. No site required a prescription or any relevant medical information. Researchers reported the time between order and receipt of products ranged from three to 21 business days, with prices ranging from $110 to $360 for the combination products. Products without mifepristone cost less. Based on chemical analysis, researchers determined that the 18 tablets labeled 200 mg mifepristone contained between 184.3 mg and 204.1 mg mifepristone, while the 20 tablets labeled 200 mcg misoprostol contained between 34.1 mcg and 201.4 mcg of the active ingredient.[5] Women can access a report card on online medication abortion sites by visiting: www.plancpills.org.

How should healthcare providers prepare to deal with patients who are considering or have accessed self-care sites? The Bixby Center for Global Reproductive Health at the University of California, San Francisco offers the following tips that providers may consider in addressing patients' needs in the safest way possible:

• Assess patients for health risks, determining gestational age and viability;

• Provide information on what methods are safest to try on their own and which are riskier;

• Counsel on warning signs, what to expect, and what to say if they present at a healthcare facility with complications;

• Understand the legal implications and educate other providers. Providers have no duty to report self-managed abortions — and, in fact, may violate patient privacy laws by doing so. The majority of women prosecuted for pregnancy loss have been reported by someone within the healthcare system;

• Provide compassionate care to patients who present with complications from self-managed abortions.[6]

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CONTRACEPTIVE TECHNOLOGY UPDATE®

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CME/CE QUESTIONS

1. **Use of the contraceptive injection DMPA in women with diabetes of more than 20 years' duration is given what category rating according to the US Medical Eligibility Criteria for Contraceptive Use?**

   a. Category 1
   b. Category 2
   c. Category 3
   d. Category 4

2. **Which is the current recommended antibiotic for treatment of gonorrhea?**

   a. Penicillin
   b. Tetracycline
   c. Cefixime
   d. Ceftriaxone

3. **According to the latest US Preventive Services Task Force cervical cancer screening recommendations, which age group should be tested every three years with cervical cytology?**

   a. Women ages 16-21 years
   b. Women ages 21-29 years
   c. Women ages 21-35 years
   d. Women ages 30-40 years

4. **The FDA-approved regimen for medication abortion is sanctioned for use up to how many days since the patient's last menstrual period?**

   a. 30 days
   b. 45 days
   c. 70 days
   d. 75 days

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.