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INSIDE

Counsel Teens on Dual Use of Condoms with LARC Methods

Pair consistent condom use with long-acting reversible methods

While more adolescents are choosing long-acting reversible contraceptive (LARC) methods, they may not be implementing dual use of condoms to protect themselves from sexually transmitted infections (STIs). New research indicates that self-reported condom use was low overall among postpartum teenagers and lower among LARC users than those who used non-LARC hormonal methods.[1]

Researchers used a cross-sectional analysis, examining 2012-2015 data extracted from the Pregnancy Risk Assessment Monitoring System (PRAMS), a multisite surveillance system focused on maternal behaviors and experiences before, during, and shortly after pregnancy. Using data from 37 sites, the investigators assessed the association of condom use by contraceptive methods with a multivariable survey-weighted logistic regression. Included in the analysis were teenage mothers aged 19 with a recent live birth who were using LARC or non-LARC hormonal methods.[1] Most of the postpartum teenage mothers were between ages 18 and 19 years, unmarried, first-time mothers who were experiencing an unintended pregnancy. Almost half were non-Hispanic white with current Medicaid coverage.

> TEENS WHO USED INTRAUTERINE DEVICES WERE LESS LIKELY TO REPORT CONDOM USE THAN THOSE USING AN IMPLANT; PATCH, RING, AND INJECTION USERS; AND PILL USERS.

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While condom use was reported by 28.8% of these sexually active teenagers overall, LARC users were half as likely to use condoms as non-LARC hormonal method users (17.8% versus 35.6%; adjusted prevalence ratio [aPR], 0.50; 95% confidence interval [CI], 0.41-0.60). Teens who used intrauterine devices (IUDs) (15.1%) were less likely to report condom use than those using an implant (21.5%; aPR, 0.70; 95% CI, 0.51-0.98); patch, ring, or injection users (24.9%; aPR, 0.61; 95% CI, 0.47-0.79); and pill users (47.2%; aPR, 0.32; 95% CI, 0.25-0.40).[1]

Counsel on Methods

Between 2006 and 2010, more than 80% of teens at risk of unintended pregnancy were using contraception, but just 59% used a highly effective method, including any hormonal method or IUD.[2] Adolescents who use contraception most often use short-acting methods, such as condoms, notes **Robert Hatcher**, MD, MPH, professor emeritus of gynecology and obstetrics at Emory University School of Medicine.

In a 2018 CDC analysis of the nearly 30% currently sexually active students nationwide, 53.8% reported that a condom was used during their last sexual intercourse. While the percentage of teens who used condoms fell from 61.5% in 2007, condoms remain the most-used contraceptive method by adolescents.[3] Such methods have higher discontinuation and pregnancy rates compared with long-acting options such as the IUD and the implant. Long-acting methods offer extremely effective use; for example, the copper-T IUD reported failure rate at one year of 0.8 per 100 women, and a 10-year failure rate of 1.9 per 100 women over 10 years.[4]

Both the American College of Obstetricians and Gynecologists and the American Academy of Pediatrics recommend that clinicians inform pregnant teens about birth spacing and postpartum contraceptive use, including the safety and effectiveness of LARC methods that are safe to use immediately postpartum.[5] Research indicates that teens who choose to initiate a LARC method shortly after pregnancy are at a lower risk of a short interpregnancy interval.[6]

When barriers to LARC use are removed, teens will choose long-acting methods. In the Colorado Family Planning Initiative,

EXECUTIVE SUMMARY

While more adolescents are choosing long-acting reversible contraceptive (LARC) methods, they may not be implementing dual use of condoms to protect themselves from sexually transmitted infections.

- New research indicates that self-reported condom use was low overall among postpartum teenagers and lower among LARC users than those who used non-LARC hormonal methods.
- While LARC methods are extremely effective at preventing pregnancy, they do not offer protection against sexually transmitted infections (STIs). This is of concern when it comes to adolescents, who represent nearly half of all diagnosed STIs annually.

investigators provided free access to LARC methods to clients in Title X-funded clinics in 37 of Colorado's 64 counties. Data indicate LARC use increased from 5% to 19% among low-income teenagers and young women. The increase in LARC use was accompanied by decreases in birth rates and abortion rates in both age brackets.[7]

While LARC methods are extremely effective at preventing pregnancy, they do not offer protection against sexually transmitted infections (STIs). This is of concern when it comes to adolescents, who represent nearly half of all diagnosed STIs annually.[8] In 2017, more than 1.7 million cases of chlamydia were diagnosed, with 45% of cases found among young females ages 15 to 24.[9] Previous cross-sectional data among teens indicate that using a LARC method is associated with lower condom use.[10]

Counsel on Dual Use

Since teens are at higher risk of STIs, providers should continue to follow standard guidelines for STI screening during the contraceptive counseling session, as well as advise adolescents to use male or female condoms consistently to decrease the risk of STIs, including HIV.[4] *(The CDC offers a free fact sheet on dual protection for adolescents, available at: https://bit.ly/2ospR3P.)*

In an editorial accompanying the new study, the authors suggested one approach is to tell teens who choose LARC methods, "Now that you have a very effective method of preventing pregnancy on board, let's talk about ways you can prevent STIs and stay healthy."[11]

Remember that pre-exposure prophylaxis (PrEP) is available for adolescents at risk for HIV, says **Anita Nelson**, MD, professor and chair of the obstetrics and gynecology department at Western University of Health Sciences in Pomona, CA. PrEP consists of the anti-HIV drugs emtricitabine and tenofovir disoproxil fumarate. The FDA has approved its use for adolescents and adults who weigh at least 77 pounds. The indications for PrEP, initial and follow-up prescribing, and laboratory testing recommendations are the same for teens and adults. ■

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New Progestin-Only Pill Receives FDA Approval

Women who are seeking an estrogen-free form of contraception now have a new option: Slynd, a drospirenone progestin-only pill (POP). The pill is scheduled for release in fall 2019.

Each package contains 24 tablets of 4 mg drospirenone and four inert tablets. Currently marketed ethinyl estradiol/drospirenone pills contain 3 mg of drospirenone, while norethindrone POPs contain 0.35 mg of norethindrone. Combination pills often contain 1 mg of norethindrone or norethindrone acetate, a dose that is three times higher than that found in the norethindrone progestin-only pills.

In clinical trials, Slynd showed no instances of thromboembolic events in clinical trials. Its use is contraindicated in females with renal impairment; adrenal insufficiency; presence or history of cervical cancer or progestin-sensitive cancers; liver tumors, benign or malignant, or hepatic impairment; and undiagnosed abnormal uterine bleeding.

Women with conditions that predispose to hyperkalemia should not use Slynd due to its antimineralocorticoid activity.

Information on the 13-cycle registration clinical trial for Slynd is contained in its package labeling, In an efficacy analysis based on 953 participants — all 35 years of age or younger — researchers determined a Pearl Index of 4.0, comparable to the failure rate observed in recent U.S. clinical trials of short-acting estrogen-progestin contraceptives.

> THE SAFETY PROFILE FOR THE NEW PILL WAS DEMONSTRATED FOR ALL PATIENTS, INCLUDING HIGHER-RISK POPULATIONS LIKE SMOKERS, OLDER WOMEN, AND SUBJECTS WITH A BODY MASS INDEX BELOW 30 KG/M^2.

Data analysis shows the percentage of participants with scheduled bleeding or spotting fell from 81% in Cycle 1 to 26% in Cycle 13, while the overall percentage of women with unscheduled bleeding or spotting decreased from 61% in Cycle 1 to 40% in Cycle 13.

These observations suggest that while scheduled withdrawal bleeding and spotting decreases with increasing duration of use, unscheduled bleeding/spotting remains relatively common in users of the new POP, says **Andrew Kaunitz**, MD, associate chair of the department of obstetrics and gynecology at the University of Florida College of Medicine—Jacksonville, and medical director of the UF Health Women's Specialists—Emerson.

The safety profile for the new pill was demonstrated for all patients, including higher-risk populations like smokers, older women, and subjects with a body mass index (BMI) below 30 kg/m^2, notes **Enrico Colli**, MD, chief scientific officer at Exeltis.

Who Is Eligible for POP?

Progestin-only contraceptives are appropriate for women for whom use of estrogen-progestin contraceptives is associated with elevated cardiovascular risks, including smokers age 35 and older, high blood pressure, those with migraines with aura, women with a history of thrombosis, and those with multiple cardiovascular risk factors, notes Kaunitz.

However, due to the low dose and corresponding concerns regarding possible low contraceptive efficacy, some clinicians are reluctant to use

EXECUTIVE SUMMARY

Women who are seeking an estrogen-free form of contraception now have a new option: Slynd, a drospirenone progestin-only pill. The pill is scheduled to be stocked on pharmacy shelves in fall 2019.

- Each package contains 24 tablets of 4 mg drospirenone and four inert tablets. Tablets must be taken every day at about the same time of the day so that the interval between two tablets is always 24 hours.
- Women who frequently miss their progestin-only pills should consider an alternative contraceptive method, such as an intrauterine device, implant, or injectable that is less user-dependent for effectiveness.

the norethindrone POP in fully fertile women, such as those who are not breastfeeding.

Since the Slynd package label indicates that "negligible" levels of progestin are excreted in breast milk, the pill should be appropriate for postpartum/lactating women, as well as those with cardiovascular risk factors who should avoid combination hormonal methods, says Kaunitz. "The availability of a second, and presumably more effective, POP for our patients represents good news for U.S. women," he states.

Counsel women who use Slynd to take one tablet daily for 28 consecutive days; one white active tablet daily during the first 24 days and one green inert tablet daily during the four following days. Tablets must be taken every day at about the same time of the day so that the interval between two tablets always is 24 hours.

According to the U.S. Selected Practice Recommendations for Contraceptive Use, unlike combined pills, progestin-only pills inhibit ovulation in about half of cycles, although this rate can vary in individuals.[1]

Peak serum steroid levels are reached about two hours after administration, followed by rapid distribution and elimination, with serum steroid levels near baseline 24 hours after administration.[2] This rapid distribution and elimination underscores the importance of taking POPs at approximately the same time each day.

Research indicates that an estimated 48 hours of POP use is necessary to achieve contraceptive effects on cervical mucus.[2] Women who frequently miss their progestin-only pills should consider an alternative contraceptive method, such as an intrauterine device, implant, or injectable that is less user-dependent for effectiveness.

According to the package insert, the most common side effects for Slynd are acne, headache, breast pain and tenderness, weight gain, menstrual cramps, nausea, severe vaginal bleeding, and less sexual desire. Women who cannot tolerate irregular bleeding or amenorrhea may not find progestin-only pills a good fit, *Contraceptive Technology* authors recommend.[3]

Robert Hatcher, MD, MPH, professor emeritus of gynecology and obstetrics at Emory University School of Medicine, notes that the authors of a European study suggests that POPs containing desogestrel 75 mcg may inhibit ovulation reliably even when pills are taken 12 hours late.[4]

In a study of the 4 mg drospirenone formulation, findings suggest the pill inhibited ovulation in nearly all women, despite intentional 24-hour delays in pill intake and a four-day hormone break.[5]

"It appears that highly effective progestin-only pills which do not require strict adherence to taking pills 24 hours apart may be viable," says Hatcher. ■

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Pharmacist-Prescribed Contraception Effective in Oregon

Newly published research suggests that pharmacist-prescribed contraception in Oregon is not only successful at deterring unwanted pregnancy but is cost-effective as well.[1,2] Reproductive health advocates hope to replicate such efforts in other states, as the United States continues to experience high levels of unintended pregnancy — an estimated 2.8 million occurred in 2011 alone, the last year for which data are available.[3]

Eleven states (California, Colorado, Hawaii, Maryland, New Hampshire, New Mexico, Oregon, Tennessee, Utah, Washington, and West Virginia) and the District of Columbia have passed legislation to allow pharmacists to provide contraceptives without a prescription. This is made possible through standing orders, practice protocols, or an expanded scope of practice. California, Colorado, and New Mexico have established protocols. The Utah state health officer issued a standing order on March 27, 2019. Pharmacists can prescribe and administer types of contraceptives set out by the laws. Some states, including Oregon, also allow pharmacists to prescribe and administer injectable contraceptives.[4]

Study findings indicate that in the first two years after the Oregon law went into effect in 2016, pharmacist-prescribed contraception prevented more than 50 unintended pregnancies and saved an estimated $1.6 million in associated taxpayer costs.

Researchers examined Oregon Medicaid claims and discovered that of the 3,614 Medicaid patients receiving a new prescription for oral or transdermal contraceptives, 367 received their prescription from a pharmacist. Of those women receiving prescriptions, 252 had been enrolled in Medicaid for at least 180 days prior to receiving their first prescription. In further analysis, researchers found that 74% of the 252 women had no history of a birth control prescription in the preceding 30 days.[1,2]

This finding suggests that the pharmacist prescription program is indeed reaching new contraceptive users who may be at risk for unintended pregnancy, according to co-author **Maria Rodriguez**, MD, MPH, associate professor of obstetrics and gynecology at the Oregon Health & Science University (OHSU) School of Medicine.

"Furthermore, claims show that the safety profile seen with pharmacists is equal to what is seen among clinicians prescribing contraception," Rodriguez said in a press statement. "This suggests that pharmacists are an important strategy to safely reach women with unmet need for contraception."

Community pharmacies offer an alternative point of access for patients and are highly accessible, remarks study co-author **Daniel Hartung**, PharmD, MPH, associate professor in the Oregon State University (OSU)/OHSU College of Pharmacy.

About 90% of Americans live within five miles of a pharmacy, notes Hartung. Most pharmacies are open for longer hours than a traditional clinic and do not require an appointment, he states.

Since 2018, Oregon pharmacists also have been able to prescribe the other forms of short-acting hormonal contraception: injection and the vaginal ring.

"As the program matures and contracts with additional insurers are implemented at pharmacies, the number of pharmacist prescriptions will likely increase," states co-author **Lorinda Anderson**, PharmD, clinical assistant professor in the OSU/OHSU College of Pharmacy.

According to a 2019 Association of State and Territorial Health Officials overview, most states allow

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Newly published research suggests that pharmacist-prescribed contraception in Oregon is not only successful at deterring unwanted pregnancy but is cost-effective as well.

- Findings from the study indicate that in the first two years after the Oregon law went into effect in 2016, pharmacist-prescribed contraception prevented more than 50 unintended pregnancies and saved an estimated $1.6 million in associated taxpayer costs.
- Reproductive health advocates hope to replicate such efforts in other states, as the United States continues to experience high levels of unintended pregnancy. An estimated 2.8 million such pregnancies occurred in 2011 alone, the last year for which data are available.

pharmacists to furnish contraceptives after receiving education or training on prescribing and dispensing such methods.[4] Pharmacists must assess patients before prescribing and dispensing birth control, usually by a self-screening risk assessment.

Most laws also require that patients be provided with an information sheet about birth control methods, a summary of the consultation, advice about follow-up with a primary care provider, and a referral to a reproductive care provider or clinic if the patient does not visit a provider regularly.

Tennessee, Utah, and Washington state limit pharmacist contraceptive prescriptions to patients 18 years or older, while Oregon allows pharmacists to prescribe to patients younger than 18 if there is evidence of a prior contraceptive prescription. This age limit is set to expire in 2020. Tennessee allows prescribing and dispensing birth control to emancipated patients younger than 18 years.

Some states also limit the amount of time a pharmacist can continue to prescribe and dispense birth control without evidence of a clinical visit by the patient. Colorado laws call for pharmacists to prescribe for three years without evidence of a clinical visit, while Utah legislation calls for two years, and West Virginia limits prescribing to one year.[4] ■

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Telemedicine May Offer Access Option for Abortion

Provision of medication abortion by direct-to-patient telemedicine and mail could increase abortion access, according to recent research.[1]

Reproductive health research organization Gynuity is conducting the TelAbortion study, designed to evaluate the use of telemedicine in providing medication abortion to women who have difficulty accessing abortion clinics. It is now available in Colorado, Georgia, Hawaii, Maine, New Mexico, New York, Oregon, and Washington. *(More information is available at: www.telabortion.org.)*

After consulting with an abortion provider by videoconference, qualifying participants receive the necessary abortion medicines by mail. Researchers studied data to determine how well the service model works and whether women are comfortable with this approach.

Each patient held a videoconference with a study clinician and underwent pretreatment lab tests and ultrasound at facilities of her choice. If the patient was eligible for medication abortion, the patient received a package via mail containing mifepristone, misoprostol, and usage instructions. After taking the medications, the participants obtained follow-up tests and a consultation with the clinician by phone or videoconference to evaluate the procedure.

Over 32 months, researchers conducted 433 study screenings and shipped 248 packages. Data show the median interval between screening and mailing was seven days, with no participant taking the mifepristone dosage beyond 71 days' gestation. Abortion outcomes were ascertained in 77% of cases; 93% had complete abortion without a procedure.

According to follow-up data, one participant was hospitalized for postoperative seizure and another for excessive bleeding; 27 women had other unscheduled clinical encounters, 12 of which resulted in no treatment. More than 60% of women completed satisfaction questionnaires at study exit; all were satisfied with the service.[1]

Phone Access May Provide Counseling

Telehealth capabilities may help facilitate the delivery of health-related information, education, and services when it comes to medication abortion. Results of a new study indicate that it may minimize the

burdens of cost, travel, and time associated with attending two in-person visits in Utah.[2]

Currently, Utah requires patients seeking abortion to wait at least 72 hours between attending mandatory information sessions and undergoing an abortion. Planned Parenthood Association of Utah began offering telemedicine in 2015 as a way for patients to attend such state-mandated information visits.

Researchers conducted in-depth interviews with women who attended informational visits via telemedicine. Overall, women reported that telemedicine was easy to use and believed the nurse who provided the education was attentive to their emotions over video. A minority of women said they would have preferred an in-person visit, but the burdens of attending in person led them to choose the telehealth option.

While telemedicine does not remove the logistical and financial barriers women experience with Utah's 72-hour waiting period and two-visit requirement, it may ease some burdens of the requirements, researchers concluded. States that require in-person information sessions may wish to seek similar programs, researchers stated.[2]

According to the Guttmacher Institute, 17 states currently require the prescribing clinician to be physically present when abortion medication is dispensed.[3] By removing these restrictions, states could implement medication abortion services using the site-to-site model used by Planned Parenthood.

OVERALL, WOMEN REPORTED THAT TELEMEDICINE WAS EASY TO USE AND BELIEVED THE NURSE WHO PROVIDED THE EDUCATION WAS ATTENTIVE TO THEIR EMOTIONS OVER VIDEO.

Planned Parenthood of the Heartland pioneered telehealth access to abortion in 2008, when it began using telehealth at Iowa health centers not regularly staffed by a clinician providing abortion care; now, Planned Parenthood offers such services in at least 10 states.[3]

Many women are seeking ways to access medication abortion on their own due to their inability to access clinic-based abortion services or personal preference to the convenience and control that comes with self-use. Plan C, plancpills.org, provides public education about how women can safely and effectively manage their own abortions using pills. The website is a project of the National Women's Health Network.

The website offers information on ways to access the mifepristone/misoprostol form of medication abortion, as well as the misoprostol-only option. A recent review of published medical evidence on use of the misoprostol-only agent for medication abortion suggests that misoprostol alone is an effective, safe, and reasonable option for women seeking abortion in the first trimester.[4] ■

EXECUTIVE SUMMARY

Providing medication abortion via telemedicine and mail could increase abortion access, according to recent research.

- Gynuity, a New York City-based reproductive health research organization, is conducting the TelAbortion study, designed to evaluate the use of telemedicine in providing medical abortion to women who have difficulty accessing abortion clinics. It is now available in Colorado, Georgia, Hawaii, Maine New Mexico, New York, Oregon, and Washington.
- According to the Guttmacher Institute, 17 states currently require the prescribing clinician to be physically present when medication abortion is dispensed. By removing these restrictions, states could implement medication abortion services using a site-to-site model pioneered by Planned Parenthood.

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The Push Is On to Reduce Pregnancy-Related Deaths

Pregnancy-related death can occur during pregnancy, delivery, and even up to one year after. National health experts are outlining ways to reduce maternal deaths in light of new research indicating that about three out of every five such deaths are preventable.[1]

The findings stem from a CDC analysis of 2011-2015 national data on pregnancy mortality and 2013-2017 detailed data from 13 state maternal mortality review committees (MMRCs). According to the analysis, of the 700 pregnancy-related deaths that occur each year in the United States, about 31% happen during pregnancy, 36% occur during delivery or the week after, and 33% are recorded one week to one year after delivery.

The study's findings suggest that leading causes of death differed throughout pregnancy and after delivery. Overall, heart disease and stroke caused one in three deaths. At delivery, obstetric emergencies such as severe bleeding and amniotic fluid embolism were found as the cause of most deaths.

Severe bleeding, high blood pressure, and infection were the most common causes in the week after delivery, while cardiomyopathy was the leading cause of deaths one week to one year after delivery.[1]

There are racial disparities, according to the analysis: black and American Indian/Alaska Native women were about three times as likely to die from a pregnancy-related cause as white women. However, most deaths were preventable, regardless of race or ethnicity, the report authors concluded.

"Our new analysis underscores the need for access to quality services, risk awareness, and early diagnosis, but it also highlights opportunities for preventing future pregnancy-related deaths," notes **Wanda Barfield**, MD, MPH, FAAP, director of the Division of Reproductive Health in CDC's National Center for Chronic Disease Prevention and Health Promotion. "By identifying and promptly responding to warning signs not just during pregnancy, but even up to a year after delivery, we can save lives."

EXECUTIVE SUMMARY

A pregnancy-related death can happen during pregnancy, at delivery, and even up to one year after. National health experts are now sounding out what is necessary to reduce maternal deaths in light of new research indicating that about three out of every five such deaths are preventable.

- According to the analysis, of the 700 pregnancy-related deaths that occur each year in the United States, about 31% happen during pregnancy, 36% occur during delivery or the week after, and 33% are recorded one week to one year after delivery.
- Analysis findings suggest that leading causes of death differed throughout pregnancy and after delivery. Overall, heart disease and stroke caused more than one in three deaths.

Changes on State and National Levels

Beginning in fall 2019, through CDC's new "Preventing Maternal Deaths: Supporting Maternal Mortality Review Committees" funding opportunity, the agency will provide financial backing for up to as many as 25 committees across the country to collect data that can aid in eliminating preventable maternal deaths. The CDC currently funds the efforts of 13 state perinatal quality collaboratives, which are state-based initiatives that focus on improving the quality of care for mothers and babies.

The committees will serve as an important link in determining care, said Barfield in a press telebriefing on the subject. The committees, which are multidisciplinary groups comprised of state or local experts, review maternal deaths and circumstances to better understand how to prevent future deaths, said Barfield.

"These committees examine all available data sources, including medical records and social services records, to determine the factors that contributed to the death, determine preventability, and suggest specific prevention strategies," stated Barfield. "This is a critical level of information we cannot get from reviewing just death certificates alone, and this is why MMRCs are so important to our understanding of this issue."

The committees have suggested prevention methods to address contributing factors at the healthcare provider, facility, and system levels, as well as at the patient and

community levels, said Barfield. For instance, at the healthcare facility and systems levels, work remains to standardize responses to obstetric emergencies to make sure women receive recommended care when hemorrhaging or experiencing infection.

Another strategy is to develop policies to ensure high-risk women are delivered at hospitals with specialized healthcare providers and equipment. Also, cross-communication and collaboration among providers must be encouraged, said Barfield.

How can clinicians reduce pregnancy-related deaths? By helping patients manage chronic conditions, communicating about warning signs, and using tools to flag warning signs early. Educate patients about warning symptoms of complications, and what to do when they occur. *(The federal Office on Women's Health offers links to free, reproducible fact sheets on many conditions at: https://bit.ly/2PdEies.)*

During delivery, help standardize patient care by seeing that high-risk women are delivered at hospitals with specialized providers and equipment. After delivery, continue to communicate with patients about warning signs and encourage prompt follow-up care.

"Ensuring quality care for mothers throughout their pregnancies and postpartum should be among our nation's highest priorities," said CDC Director **Robert Redfield**, MD. "Though most pregnancies progress safely, I urge the public health community to increase awareness with all expectant and new mothers about the signs of serious pregnancy complications and the need for preventive care that can and does save lives." ■

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Many Teens Do Not Fill ED Prescriptions for STI Treatment

Results from a recent study of U.S. teens ages 13-19 show that when they are prescribed antibiotics for sexually transmitted infections (STIs) during ED visits, some 60% fail to fill the prescriptions.[1] The findings are a concern for providers, since adolescents represent nearly half of all diagnosed STIs annually.[2] In 2017, more than 1.7 million cases of chlamydia were diagnosed, with 45% of cases found among young women ages 15 to 24.[3]

"We were astonished to find that teenagers' rates of filling STI prescriptions were so low," says **Monika Goyal**, MD, MSCE, assistant chief of the Division of Emergency Medicine and Trauma Services at Children's National Health System at George Washington University, and the study's senior author. "Our findings demonstrate the imperative need to identify innovative methods to improve treatment adherence for this high-risk population."

Goyal and colleagues studied information from two EDs affiliated with Children's National Medical Center. The study population included teens ages 13-19 who were prescribed antimicrobial treatment from Jan. 1, 2016, to Dec. 31, 2017, after they were diagnosed with pelvic inflammatory disease (PID) or tested positive for chlamydia. Data indicate that of 696 ED visits for diagnosed STIs, 208 teenagers received outpatient prescriptions for antimicrobial treatments, with just 54.1% of those prescriptions filled.[1]

Out-of-pocket cost, access to transportation, and confidentiality concerns are just some of the hurdles

EXECUTIVE SUMMARY

Results from a recent study of U.S. teens ages 13-19 show that when they are diagnosed and prescribed antibiotics for sexually transmitted infections (STIs) during ED visits, some 60% fail to fill the prescriptions.

- The findings are a concern for providers, since adolescents represent nearly half of all diagnosed STIs annually. More than 1.7 million cases of chlamydia were diagnosed in 2017, with 45% of cases found among young females ages 15 to 24.
- Recent research indicates that one of every eight sexually experienced teenagers and young adults on their parents' health insurance plan said they would not seek out sexual or reproductive healthcare advice because their parents might find out.

teenagers may face when it comes to STI treatment, Goyal noted in a press statement.

Confidentiality Concerns Are a Barrier

Recent research published by the CDC indicates that one of every eight sexually experienced teenagers and young adults on their parents' health insurance plan said they would not seek out sexual or reproductive healthcare advice because their parents might find out.[4]

In the last 30 years, more states have widened minors' authority to consent to healthcare, including care related to sexual activity, according to information from the Guttmacher Institute. As of June 2019, all 50 states and the District of Columbia permit most minors to consent to STI testing and treatment, with many states including testing and treatment of HIV. Many states permit providers to inform parents that the minor is seeking or receiving STI services when they deem it in the best interests of the patient. *(Current updates are available at: https://bit.ly/2K9X2Zw.)*

The Society for Adolescent Health and Medicine, the American Academy of Pediatrics, and the American College of Obstetricians and Gynecologists have endorsed that "healthcare providers should be able to deliver confidential health services to consenting adolescents and young adults covered as dependents under a family's health insurance plan."[5] These services include care related to "STIs, contraception, pregnancy, substance use/abuse, and mental health, as well as care for other health issues that an adolescent or young adult considers sensitive."[5]

Several states have adopted provisions to address confidentiality in the private healthcare billing and insurance claims process. These approaches include identifying situations in which sending an explanation of benefits (EOBs) is not required; sending EOBs for sensitive services to the patient at an address specified by that patient; and specifying that the care to which the minor can consent must be confidential, including in the healthcare billing process.[5]

Protecting confidentiality in healthcare billing and insurance claims is essential in providing healthcare for adolescents and young adults, according to the consensus statements. Healthcare providers must be able to deliver confidential health services to young people covered as dependents under a family's health insurance plan, the organizations agree.

"Policies and procedures should be established so that EOB notifications do not impede the otherwise confidential provision of healthcare services to adolescents and young adults," the statement reads. ■

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CME/CE QUESTIONS

1. **What is the one-year failure rate of the copper-T intrauterine device?**

   a. 0.8 per 100 women
   b. Five per 100 women
   c. Seven per 100 women
   d. 13 per 100 women

2. **What is the dosage in the active pills in the progestin-only pill, Slynd?**

   a. 3 mg drospirenone
   b. 4 mg drospirenone
   c. 2 mg norethindrone acetate
   d. 4 mg norethindrone acetate

3. **According to a recent review of published medical evidence, what drug may be effective for medication abortion?**

   a. Drospirenone
   b. Moxifloxacin
   c. Ulipristal acetate
   d. Misoprostol

4. **According to a recent study, what are the overall causes of death throughout pregnancy and after delivery?**

   a. Heart disease and stroke
   b. Heart disease and deep vein thrombosis
   c. Diabetes and stroke
   d. Cardiomyopathy and stroke

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.