CONTRACEPTIVE TECHNOLOGY UPDATE®

Interpreting News and Research on Contraceptives and STIs

May 2013: Vol. 34, No. 5
Pages 49 - 60

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Financial Disclosure: Consulting Editor **Robert A. Hatcher**, MD, MPH, Author **Rebecca Bowers**, and Executive Editor **Joy Dickinson** report no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies having ties to this field of study. **Sharon Schnare**, Nurse Reviewer, discloses that she is a retained consultant for Watson Laboratories and Dopomed; on the speakers' bureau for Meda Pharmaceuticals, Merck Sharpe & Dohme Corp., and Teva Women's Health; and on the speakers bureau and a retained consultant for Bayer HealthCare Pharmaceuticals.

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National statistics reveal that use of emergency contraception is growing

About 11% of women have used EC, compared to 4.2% in earlier stats

New national statistics show that about one in nine (11% or 5.8 million) women ages 15 to 44 had ever used emergency contraception (EC) in 2006-2010, up from 4.2% in 2002.[1] Young adult women ages 20-24 were the most likely to have ever used EC — about one in four (23%) indicated they had utilized the method.

The new report on emergency contraception describes trends and variation in the use of the method and reasons for its use among sexually experienced women ages 15-44 using the 2006–2010 National Survey of Family Growth. The survey gathers information on family life, marriage and divorce, pregnancy, infertility, use of contraception, and men's and women's health in the United States.

According to the report, most women who had ever used emergency contraception had done so once (59%) or twice (24%).[1] Almost one in five never-married women (19%), one in seven cohabiting women (14%), and one in 20 currently or formerly married women (5.7%) had ever used the method. About one in two women reported using emergency contraception because of fear of method failure (45%), and about one in two reported use because they had unprotected sex (49%).

EXECUTIVE SUMMARY

National statistics show that about one in nine (11% or 5.8 million) women ages 15 to 44 had ever used emergency contraception (EC) in 2006-2010, up from 4.2% in 2002.

- Young adult women ages 20-24 were the most likely to have ever used EC. About one in four (23%) indicated they had used the method.
- About one in two women reported using EC because of fear of method failure (45%), and about one in two reported use because they had unprotected sex (49%).
- Reproductive health activists continue to advocate removing the age restriction to over-the-counter EC access. Emergency contraceptives have a "dual label" in the United States, remaining behind the counter for consumers age 17 and older, and available only by prescription to women under 17.

Although insertion of a copper intrauterine device (ParaGard IUD, Teva North America, North Wales, PA) can be used for emergency contraception, the report focuses only on emergency contraceptive pills. While emergency contraceptive pills are more common, the copper intrauterine device is the most effective form of emergency contraception, states a recent committee opinion by the American College of Obstetricians and Gynecologists (ACOG).[2] *(See "Hope versus reality — Access to EC pills doesn't work," Contraceptive Technology Update, January 2013, p. 8.)*

"Since the failure rate of post-coital IUD insertion is one-tenth of emergency contraceptive pills — only 12 failures in more than 12,000 postcoital insertions of copper IUDs — programs wanting to get the most out of emergency contraception should switch from ECPs to postcoital insertions of ParaGard IUDs,"[3] says **Robert Hatcher**, MD, MPH, professor emeritus of gynecology and obstetrics at Emory University School of Medicine in Atlanta.

Push for access

Progestin-only emergency contraceptive pills, such as Plan B One-Step (Teva Pharmaceuticals, Woodcliff Lake, NJ), Next Choice One Dose (Watson Pharmaceuticals, Parsippany, NJ), Next Choice (Watson Pharmaceuticals) and Levonorgestrel Tablets (Perrigo, Allergan, MI) can be sold only at the pharmacy counter. Because emergency contraceptives have a "dual label" in the United States, they remain behind the counter for consumers age 17 and older and are available only by prescription to women under 17.

It is good news that so many women have been able to access emergency contraception, says **Susannah Baruch**, interim president and chief executive officer of the Washington, DC-based Reproductive Health Technologies Project, a reproductive health advocacy group. But there is evidence that women, couples, men, boyfriends, and teens have received misinformation or been wrongfully turned away by pharmacists in their pursuit of the method. A recent Boston University study of 943 pharmacies in five major cities revealed when callers posed as 17-year-olds seeking EC, one in five were incorrectly told they could not purchase EC under any circumstances.[4] *(See "Is EC easily found? Evidence says no," CTU, March 2012, p. 29.)*

Reproductive health activists continue to press onward to remove the age restriction to over-the-counter access to EC. In February 2011, Plan B One-Step's manufacturer, Teva Pharmaceuticals, filed a supplemental new drug application to the Food Drug Administration (FDA) to allow unrestricted over-the-counter sale of its product. In December 2011, the Department of Health and Human Services (HHS) Secretary Kathleen Sebelius overruled the FDA and continued restricting Plan B One Step emergency contraception to its behind-the-pharmacy-counter status for women 17 and older. *(See "OTC access to EC blocked — What's next?" February 2012, p. 15.)*

Contraceptive Technology Update® (ISSN 0274-726X), including STI Quarterly™, is published monthly by AHC Media, a division of Thompson Media Group LLC, 3525 Piedmont Road, NE, Building Six, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodicals Postage Paid at Atlanta, GA 30304 and at additional mailing offices.

POSTMASTER: Send address changes to Contraceptive Technology Update®, P.O. Box 105109, Atlanta, GA 30348.

Opinions expressed are not necessarily those of this publication.

Subscriber Information
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"There is no reason for this safe and easy-to-use back-up method of birth control to be behind the pharmacy walls," says Baruch. "FDA's recommendation to make it available to all without a prescription was overturned by HHS, and it is time to put science before politics."

Write advance prescriptions for emergency contraception, particularly for females younger than age 17, to increase awareness and reduce barriers to immediate access, the 2012 ACOG committee opinion advocates.[2]

Teen access important

A 2012 policy statement by the American Academy of Pediatrics focuses on the use of emergency contraception and how it can reduce the risk of unintended pregnancy in adolescents.[5] Studies have shown that adolescents are more likely to use emergency contraception if it has been prescribed in advance of need.[6] However, most practicing pediatricians and pediatric residents don't routinely counsel patients about emergency contraception and haven't prescribed it.[7-10]

Many teens continue to engage in unprotected sexual intercourse, the statement notes. Rates of sexual assault among teens and young adults are higher than in any other group.[11] Nearly 80% of pregnancies in adolescents are unintended and result from contraceptive failure or nonuse.[12]

According to the new policy statement, clinicians can play an important role in counseling patients and providing prescriptions for teens in need of emergency contraception for preventing pregnancy. Be sure to counsel that emergency contraception does not protect against sexually transmitted infections (STIs). Providers should discuss the importance of STI testing, or treatment if needed, the statement states. Also, providers are encouraged to advocate for better insurance coverage and increased access to emergency contraception for teens, regardless of age.

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Many women unaware of facts regarding IUDs

While use of intrauterine devices (IUDs) represents a highly effective form of birth control, many women still are not getting proper information about it, results of a new survey indicate.[1] Only one-fifth of the women surveyed knew that intrauterine devices were more effective in preventing pregnancy than oral contraception, while only 29% knew that IUDs are cheaper over time than pills.

Researchers from the University of Washington in Seattle and the University of Pittsburgh surveyed more than 1,600 women ages 18-50 who visited one of four primary care clinics in Pennsylvania between October 2008 and April 2010. What prompted the team to look into women's perceptions regarding the IUD?

Rates of IUD use among women on the rise, but they still are low compared to other commonly used methods such as the birth control pill, says the paper's lead author **Lisa Callegari**, MD, clinical assistant professor in the Department of Obstetrics & Gynecology at the University of Washington. Prior research has indicated that one important reason for low IUD usage is women's persistent misperceptions about the device, which date back to concerns about an early

IUD, the Dalkon Shield, says Callegari.[2]

To be able to target counseling interventions, the researchers wanted to better understand women's specific misperceptions with regard to effectiveness, safety, and cost of IUDs versus the birth control pill, says Callegari. In addition, no prior studies had examined IUD perceptions among women visiting primary care clinics to see an internal medicine or family medicine physician, she points out. "This population may have a higher rate of medical comorbidities such as diabetes and hypertension than women who see gynecologists, and therefore may particularly benefit from IUDs, which have few medical contraindications," Callegari states.

More than half of the women (57%) knew that intrauterine contraception does not increase the risk of sexually transmitted infections, the study found. Few of the women surveyed had discussed IUDs with a healthcare provider. Five percent of the women were using an IUD, and another 5.8% had used one previously.[1]

Clear misperceptions

What can providers do to clear misperceptions about intrauterine contraception? All it takes is a minute or two of conversation, says one of the study co-authors, **Eleanor Bimla Schwarz**, MD, MS. Most women are aware they know little about IUDs, and most are interested in learning more about "the contraceptive my patients tend to like the best," says Schwarz, who serves as associate professor of medicine, epidemiology, and obstetrics, gynecology, and reproductive sciences and director of the Women's Health Services Research Unit at the University of Pittsburgh.

"I do refill oral contraceptives when women ask for them, but before doing so, I always pause to make sure my patients know that they have other options which are about 20 times as effective and safer for many women," Schwarz explains. "I generally encourage women to try an IUD to see if they like it, saying, 'If for any reason you don't, we can pull it right out, and you can get right back on your pills.'"

Talk with women about the efficacy of intrauterine contraception, says **Robert Hatcher**, MD, MPH, professor emeritus of gynecology and obstetrics at Emory University School of Medicine in Atlanta. The copper-T IUD (ParaGard IUD, Teva North America, North Wales, PA) and the levonorgestrel intrauterine contraceptive (Mirena LNG IUC, Bayer HealthCare Pharmaceuticals, Wayne, NJ) are in the top tier of contraceptive effectiveness, along with surgical sterilization and implants, he notes.[3]

According to Contraceptive Technology, the overall pregnancy rate with all methods of tubal sterilizations in the United States is 1.3% at five years and 1.9% at 10 years. The first-year pregnancy rate for the Copper T IUD is between 0.5% and 0.8%, with the cumulative pregnancy rate at seven years at 1.4% to 1.6%. The first-year pregnancy rate for the LNG IUC is at 0.1% to 0.2%; at seven years of continuous use, the cumulative pregnancy rate is at 0.5% to 1.1%. Thus, the effectiveness of the copper T IUD is comparable to tubal sterilization, while the LNG IUC appears to be superior.[3]

"The fact is the failure rate of the Mirena IUD is well under the failure rate of tubal sterilization," says Hatcher. "The same holds true for the contraceptive implant."

Providers missing facts

Patients aren't the only ones missing important information on the safety and efficacy of current IUDs. According to a survey of 635 office-based providers and 1,323 Title X clinicians, about 30% of respondents had misconceptions about the safety of IUDs for nulliparous women.[4]

Intrauterine contraception is safe for nulliparous women. The American College of Obstetricians and Gynecologists issued a 2012 committee opinion stating that long-acting reversible contraceptives such as the intrauterine device (IUD) and the contraceptive implant are safe, effective, and appropriate options for adolescents.[5] *(See "Long-acting methods safe for teens — include options in your counseling," December 2012, p. 133.)*

Help nulliparous young women achieve success with IUDs. Because more than one-half of such women report discomfort with IUD insertion, anticipatory guidance regarding pain and provision of analgesia during IUD insertion should be considered.[6] Such approaches as supportive care, nonsteroidal anti-

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- Only one-fifth of the women surveyed knew that intrauterine devices were more effective in preventing pregnancy than oral contraception, while only 29% knew that IUDs are cheaper over time than pills.
- More than half of the women (57%) surveyed knew that intrauterine contraception does not increase the risk of sexually transmitted infections. Few of the women surveyed had discussed IUDs with a healthcare provider.

inflammatory drugs (NSAIDS), narcotics, anxiolytics, or paracervical blocks may be used.[5]

The more providers talk about IUDs, the better chance women will have more accurate information about the method, the new study shows. Women who had discussed IUDs with a provider had approximately twice the odds of having accurate perceptions, compared to women who had not discussed IUDs with a provider.[1]

"Health care providers therefore have a critical role to play in providing women with high quality counseling that enables them to make informed decisions about their contraceptive options," say study authors.

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New research emerges on DMPA fracture risks

Results of a current study of women using the contraceptive injection depot medroxyprogesterone acetate (DMPA, Depo-Provera, Pfizer, New York City; Medroxyprogesterone Acetate Injectable Suspension USP, Teva Pharmaceuticals USA, North Wales, PA) indicate a modest increase in fracture risk compared with women using other contraceptive methods; however, the increased risk of fracture preceded the start of method use, analysis shows.[1] The difference in fracture risk was primarily in fractures associated with trauma rather than those typical of osteoporosis, the research suggests.

Two earlier case-control reports have suggested that DMPA users might experience a higher risk of fractures during their reproductive years then women who use other contraceptives, notes **Andrew Kaunitz**, MD, professor and associate chair in the Obstetrics and Gynecology Department at the University of Florida College of Medicine — Jacksonville and a co-author of the current paper.[2,3]

The new analysis, which is based on the same United Kingdom Family Practice Research database as the British case-control study,[2] points out the elevated fracture risk in DMPA users is real, but begins before women start DMPA injections, states Kaunitz. Therefore, the DMPA itself could not have been the cause of this elevated fracture risk, Kaunitz observes.

To estimate the extent to which DMPA might increase fracture risk, researchers in the current paper undertook a retrospective cohort study of fractures in DMPA users and users of non-DMPA contraceptives, using the General Practice Research Database, which contains deidentified data from more than 350 general practices in the United Kingdom. The study was funded by the drug's manufacturer, Pfizer.

Women who used DMPA and were younger than age 50 at the qualifying first contraceptive prescription were included in the study. Users were classified by DMPA exposure (cumulative and time of last dose) based on prescription records. All incident fractures were included. Fracture incidence and risk factors before starting contraceptive use (DMPA or other) also were estimated.

Analysis identified 11,822 fractures in 312,395 women during 1,722,356 person-years of follow-up. Before contraceptive use started, DMPA users had higher fracture risk than nonusers [incidence rate ratio 1.28, 95% confidence interval (CI) 1.07-1.53]. After DMPA started, crude fracture incidence was 9.1 per 1,000 person-years for DMPA users and 7.3 for nonusers (crude incidence rate ratio 1.23, 95% CI 1.16-1.30).

Researchers found that fracture risk in DMPA

EXECUTIVE SUMMARY

Results of a study of women using the contraceptive injection depot medroxyprogesterone acetate (DMPA) indicate a modest increase in fracture risk compared with women using other contraceptive methods; however, the increased risk of fracture *preceded* the start of method use, analysis shows.

- The difference in fracture risk was primarily in fractures associated with trauma rather than those typical of osteoporosis, the research suggests.
- Data in the study suggest that the elevated fracture risk in DMPA users is real, but begins before women start DMPA injections. Therefore, the DMPA itself could *not* have been the cause of this elevated fracture risk, results indicate.

users did not increase after starting DMPA (incidence rate ratio after or before 1.08, 95% CI 0.92-1.26). There was little confounding by age or other factors that could be measured. Fracture incidence was 9.4 per 1,000 person-years in low-exposure (one to seven injections) DMPA users, and 7.8 per 1,000 in high-exposure (at least eight injections) DMPA users. The DMPA users had higher fracture risk than nonusers at the start of contraceptive use, with no discernible induction period.

"Although DMPA users experienced more fractures than nonusers, this association may be the result of confounding by a pre-existing higher risk for fractures in women who chose DMPA for contraception," researchers conclude.[1]

DMPA not culprit

Women who choose specific contraceptives often are different from women who choose other contraceptives, observes Kaunitz. For example, a Baltimore study found that prior to initiating DMPA, women who chose DMPA had a higher baseline prevalence of chlamydia infections than women who chose other contraceptives.[4] In the Danish case control study, researchers found that women who chose DMPA were far more likely to abuse alcohol than women who used other contraceptives,[3] says Kaunitz.

Data in two studies indicate that use of DMPA by reproductive-age women does not cause osteoporosis in menopausal women, says Kaunitz.[5,6] In view of the current study, the language in the "black box" in the DMPA package labeling should be revised, he says. The language in the black box says, "It is unknown if use of Depo-Provera Contraceptive Injection during adolescence or early adulthood, a critical period of bone accretion, will reduce peak bone mass and increase the risk for osteoporotic fracture in later life." The warning cautions users that DMPA should be used as a long-term birth control method (longer than two years) only if other birth control methods are inadequate. A 2011 editorial called for its repeal.[7] *(See the* Contraceptive Technology Update *article, "DMPA: Time to repeal black box warning?" October 2011, p 112.)*

"DMPA does not cause fractures in reproductive-age women," says Kaunitz. "Concerns regarding skeletal health should not impact the decision to initiate or continue DMPA contraception."

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Preconception health is vital for all women

A new campaign launched Valentine's Day 2013 is stressing the importance of preconception health for every young woman, not just those who are planning a pregnancy.

The "Show Your Love" campaign, developed by the Centers for Disease Control and Prevention's (CDC) National Preconception Health Consumer Workgroup, is targeting two primary audiences: women ages 18-44 who are planning a pregnancy, and women in the same age group who are not planning to become pregnant.

The goal is to ensure that every woman who hopes to become a mother one day understands the importance of preconception health, according to **Coleen Boyle**, PhD, MSHyg, the director of the CDC's National Center on Birth Defects and Developmental Disabilities. "By taking steps to improve her health before pregnancy, a woman will be her very best self, and her family will thank her for it, says Boyle. "And for those women who don't want to start a family, our message is that she should be healthy and love and take care of herself — for her, so she can achieve the goals and dreams she has for herself."

Preconception health is the time in a woman's health before pregnancy. By improving her health before becoming pregnant, a woman can be better prepared for pregnancy and be as healthy as possible during and after pregnancy, say CDC experts. These

health improvement steps include such actions as eating a healthy diet, maintaining a healthy weight, quitting smoking, limiting alcohol intake, and addressing chronic health conditions such as diabetes and high blood pressure.

There is increasing evidence that improving women's health before pregnancy is important for healthy mothers and babies.[1] In addressing preconception health, public health officials aim to provide health promotion and education, screen for diseases, and deliver medical care to women of childbearing age to improve their health and to address factors that might affect future pregnancies.[2]

Why is it so important to stress preconception health to women who are not planning a pregnancy? A woman who does not plan to get pregnant might not manage her chronic disease well or avoid environmental exposures, such as toxic chemicals, note CDC officials.

The New York City-based Guttmacher Institute estimates that there are 62 million women in the United States of childbearing age; 43 million are sexually active, but do not want to become pregnant.[3] Although many of these women use effective contraception or are otherwise unable to conceive, there also are women who do not use contraception correctly and consistently. It is estimated that 49% of pregnancies in the United States are unintended.[4] Women who experience unplanned pregnancies might not be in their best health or are engaged in behaviors that could harm them and/or the fetus.

Two groups targeted

In the new campaign, focus is placed on two sets of women: "currently planning," those who want to get pregnant in the next year or so and those "not currently planning," who are those women who do not want to get pregnant within the next year or so, those who have children already and do not want more, and those who are unable to get pregnant.

In a statement during the campaign kickoff, **Sarah Verbiest**, DrPH, MSW, MPH, said, "While most women know that improving their health once they become pregnant is important, many women don't know that improving their health before pregnancy — even long before it's a consideration — is also important." Verbiest is executive director at the University of North Carolina at Chapel Hill's Center for Maternal and Infant Health and CDC senior advisor to the National Preconception Health and Health Care Initiative.

Research conducted by the Preconception Health and Health Care Initiative indicates that separate products, messages, and communication strategies are important to reach women who are planning a pregnancy, as well as for those who are not. Online access to these resources is available at www.cdc.gov/showyourlove.

Preconception health behaviors to emphasize to women, which are part of the CDC campaign, include:

- Plan pregnancies.
- Eat healthy foods.
- Be active.
- Take 400 mcg of folic acid daily.,
- Protect against sexually transmitted infections.
- Protect from other infections.
- Avoid harmful chemicals and toxins.
- Update vaccinations.
- Manage and reduce stress and get mentally healthy.
- Learn about your family's health history.

Be sure to download free campaign materials from www.cdc.gov/showyourlove, such as posters, checklists, and public service announcements. Use the free e-cards from the website to send messages to patients to remind them about the importance of preconception care.

EXECUTIVE SUMMARY

The "Show Your Love" campaign, developed by the Centers for Disease Control and Prevention's National Preconception Health Consumer Workgroup, is targeting two primary audiences: women ages 18-44 who are planning a pregnancy, and women in the same age group who are not planning to become pregnant.

- The program's goal is to ensure that every woman who hopes to become a mother one day understands the importance of preconception health.
- It is estimated that 49% of pregnancies in the United States are unintended. Women who experience unplanned pregnancies might not be in their best health or are engaged in behaviors that could harm them and/or the fetus.

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Time to boost numbers for HPV vaccination

Bivalent and quadrivalent human papillomavirus (HPV) vaccines are safe and effective, with the potential to prevent a large burden of cancers and diseases. However, while national adolescent vaccination rates have continued to climb for vaccines for tetanus-diphtheria-pertussis and meningococcal infection, for the third year in a row, the rise in coverage for HPV vaccine is half of the increases seen for the other two vaccines.[1] *(*Contraceptive Technology Update *reported on the statistics in "HPV vaccine rates trail teen vaccines," November 2011, p. 126.)*

It is critical that providers improve communication with parents and patients to strengthen their HPV vaccine recommendations by providing accurate, overall messages about the HPV vaccine and anticipating and preparing to respond to specific concerns from parents, said **Amy Middleman**, MD, MSEd, MPH, associate professor and director of the Adolescent and Young Adult Immunization program at Texas Children's Hospital Center for Vaccine Awareness and Research in Houston. Middleman served as a panel member of a February 2013 Centers for Disease Control and Prevention (CDC) Public Health Grand Rounds presentation, "Reducing the Burden of HPV-associated Cancer and Disease through Vaccination in the U.S." *(Clinicians can access a video of the presentation at http://1.usa.gov/X1MlrR.)*

Providers also can use clinical practice strategies shown to improve immunization rates such as recall systems, screening tools, and standing orders to help boost immunization numbers, said Middleman.

In a 2012 study, adolescents who received reminder recall messages experience higher coverage rates for adolescent vaccines, including an approximately 73% higher rate for HPV vaccines, than those who did not receive such messages, Middleman noted.[2]

EXECUTIVE SUMMARY

Bivalent and quadrivalent human papillomavirus (HPV) vaccines are safe and effective, with the potential to prevent a large burden of cancers and diseases. However, while national adolescent vaccination rates have continued to climb for vaccines for tetanus-diphtheria-pertussis and meningococcal infection, for the third year in a row, the rise in coverage for HPV vaccine is half of the increases seen for the other two vaccines

- Providers must improve communication with parents and patients to strengthen their HPV vaccine recommendations by providing accurate, overall messages about the HPV vaccine and anticipating and preparing to respond to specific concerns from parents.
- Recall systems, screening tools, and standing orders can help boost immunization numbers.

"Quick visits" can help

What are some other ways that providers can help? Check the following tips offered by **Lauri Markowitz**, MD, another panel member and team leader of the Epidemiology and Statistics Branch in the CDC's Division of STD Prevention's National Center for HIV, Viral Hepatitis, STD and TB Prevention.

- Arrange for "quick visits" in which patients come in, get the vaccine, and leave, with no appointment necessary.
- Let parents and teens know that the HPV vaccine is an anti-cancer vaccine that is safe and effective.

Results of a 2011 paper indicate a provider's recommendation is the single most important factor in the decision by adolescents and parents to initiate and complete the HPV vaccination series.[3]

There are two, if not more, issues with uptake of the HPV vaccine, observes **Susan Wysocki**, WHNP-BC, FAANP, president & chief executive officer of iWomansHealth in Washington, DC, which focuses on information on women's health issues for clinicians and consumers. One issue centers around whether providers offer the vaccine onsite. Some providers might not stock the vaccine, because overhead costs range from about 17% to 28% of the cost of the vaccine, according to a 2010 published report.[4]

Another issue is the convenience to the patient to complete the series, notes Wysocki.

"If it is possible, as it is in some states, to offer initial or series completion at local pharmacies with a provider's script, it is worth the effort," states Wysocki. According to the American Pharmacists Association, 43 states have regulations allowing pharmacists to administer the HPV vaccine. Visit http://bit.ly/Y0T7Rv to see the listing.

"Anything that makes things easier for the patient and the provider is a step in the right direction," says Wysocki.

Why parents hesitate

Just-published results from a national survey show more than two in five parents surveyed believe the HPV vaccine is unnecessary, and a growing number

worry about potential side effects.[5]

Previous research has examined the top five reasons parents have cited for not vaccinating their daughters with the HPV shot. About one-quarter (23.2%) said it was not needed or necessary; about one-fifth (19.5) said their daughters were not sexually active; and 19.3% cited safety concerns regarding side effects. Lack of knowledge was cited by 15.2%; and about 10% said it had not recommended by their provider.[6]

Clinician interaction is going to play an important role in uptake of the HPV vaccine in young males. In 2009, the quadrivalent HPV vaccine was approved and permissively recommended for U.S. males ages 9-26 to protect against genital warts. The recommendation was moved to routine use in 2011. *(See "Finally! HPV male shot routinely recommended," January 2012, p. 6.)* Data from the 2010 National Health Interview Survey were obtained to assess vaccination status uptake among males ages 9-17 during the first year following the permissive recommendation. Overall, just 55% of parents with sons were aware of the HPV vaccine. Only 2.0% and 0.5% of males ages 9-17 initiated one or more doses and completed the vaccine series, respectively.[7]

Given the brief amount of time allotted for counseling during patient visits, what are the most important things providers should cover regarding the HPV vaccine?

The most important area to emphasize is that the HPV vaccine is an anti-cancer vaccine that is one of medicine's most effective vaccines, said Markowitz. It is recommended for boys and girls at 11 or 12 years, which is a great age to give the vaccine, she stated.

"We know the immune response to the vaccination is very good at this age, and it can be delivered before any potential exposure to the virus," stated Markowitz.

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Talk to patients about trichomoniasis risks

Trichomoniasis, or "trich," is the most common curable sexually transmitted infection (STI) in the United States, yet only one in five women are familiar with it, according to a new survey commissioned by the American Sexual Health Association (ASHA) in Research Triangle Park, NC.

According to survey results, many women perceive trichomoniasis as the least common STI, when in reality there are more new cases of trich annually in the United States than syphilis, chlamydia, and gonorrhea combined.

"Despite the high prevalence, trich is very much the forgotten STD. The majority of cases don't have symptoms, and when symptoms do occur, they can be confused with other common vaginal infections," notes **Lynn Barclay**, association president and chief executive officer. Other factors come into play, notes Barclay. Trichomoniasis is not a reportable disease. Also, social and economic factors weigh in, with the greatest disease burden found among African American women, she notes.

Women might not be as concerned about trichomoniasis as they are other STIs such as chlamydia, gonorrhea, and HIV because the infection does not have as many adverse health sequelae and there is no routine screening test for it, according to **Anita Nelson**, MD, professor in the Obstetrics and Gynecology Department at the David Geffen School of Medicine at the University of California in Los Angeles.

Trichomoniasis is caused by a protozoan parasite, *Trichomonas vaginalis*, that is passed from an infected person to an uninfected person during sex. About 70% of those who are infected display no symptoms. Symptoms in females with the infection include itching, burning, redness or soreness of the genitals, discomfort with urination, or a thin discharge with an unusual smell that can be clear, white, yellowish, or greenish. Men with trichomoniasis might feel itching

or irritation inside the penis, burning after urination or ejaculation, or some penile discharge.

The Centers for Disease Control and Prevention (CDC) recommends that any sexually active woman seeking treatment for vaginal discharge be tested for trichomoniasis. However, 65% of women participating in the recent survey said they would not seek medical attention if they experienced symptoms. The women indicated they would wait to see if the symptoms would go away or treat themselves with over-the-counter medicine, which are ineffective against such infection.

What are the possible complications with trichomoniasis infection? Pregnant women who are infected are more likely to have preterm or low birth weight babies. Trichomoniasis also increases the risk of acquiring and transmitting HIV, the virus that causes AIDS. Among women surveyed who were concerned about contracting an STI, nearly half (49%) said they worried about trich increasing their risk of HIV.

Boost partner testing

While testing your patients is important, it also is important to emphasize testing their partners as well, say ASHA officials. One in five people can be reinfected within three months of treatment, according to the CDC.[1]

Women can be at risk for trich even if they have only one sexual partner, says Barclay. Because the infection is symptomless and can last for many months without treatment, a person can be infected before meeting his or her current partner, she notes. According to the ASHA survey, 63% of women cite having only one sex partner as a reason they would not get tested for infection.

By offering women testing at their routine visits, clinicians could increase awareness of this STI, says **Jane Schwebke,** professor of medicine in the Infectious Disease Division at the University of Alabama at Birmingham and medical director for the Jefferson County Department of Health's STD clinic.

Clinicians commonly use wet mount microscopy to test for trichomoniasis due to its wide availability, low cost, and rapid results; however, it is one of the least sensitive *Trichomonas vaginalis* tests available.[2] Culture is considered the gold standard for detecting the Trichomonas parasite, but it can be costly, time-consuming, and only moderately sensitive.[3]

Two point-of-care tests approved by the Food and Drug Administration — Affirm VPIII (Becton Dickinson, Sparks, MD) and OSOM Trichomonas Rapid Test (Sekisui Diagnostics, Lexington, MA) — are more sensitive than wet mount microscopy, but use is limited to vaginal specimens from symptomatic patients.[2]

The only federally approved nucleic acid amplification test for trichomoniasis is the APTIMA TV assay (Gen-Probe, San Diego). *(*Contraceptive Technology Update *reported on the approval in its* STI Quarterly *supplement; see Test now for trichomonas infection; new data shows spread of disease," September 2011, supplement p. 1.)* The amplified nucleic acid assay may be used to test clinician-collected endocervical or vaginal swabs, urine, and specimens collected in PreservCyt solution from symptomatic or asymptomatic women. Trichomoniasis can be cured with a single dose of a prescription antibiotic medication, either metronidazole or tinidazole, both of which can be taken by mouth.

To raise awareness, Barclay says getting the word out to women about trichomoniasis is key, including information about how common it is, how one gets it, when to be tested, and the ease with which it is cured.

"We also can do a better job educating healthcare providers, so they are testing for trich in women with vaginal symptoms and counseling their patients about trich and other STIs," Barclay says.

EXECUTIVE SUMMARY

Trichomoniasis, or "trich," is the most common curable sexually transmitted infection (STI) in the United States, yet only one in five women are familiar with it, according to a new survey.

- Caused by a protozoan parasite, *Trichomonas vaginalis*, trichomoniasis is passed from an infected person to an uninfected person during sex. About 70% of those who are infected display no symptoms.
- Symptoms in females include itching, burning, redness or soreness of the genitals, discomfort with urination, or a thin discharge with an unusual smell that can be clear, white, yellowish, or greenish. Men with trichomoniasis might feel itching or irritation inside the penis, burning after urination or ejaculation, or some penile discharge.

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CTUPDATES
News ■ Resources ■ Events

Sign up now for vaginal therapy webinar

The Association of Reproductive Health Professionals is conducting a free live webinar, "Reducing Clinician and Patient Biases against Vaginal Insert Therapies," at 4 p.m. May 30. The webinar will allow clinicians to attend a web-based session in real time and receive immediate answers to their questions.

At the conclusion of the presentation, providers should be able to explain the potential benefits, uses, indications, efficacy, and adverse effects of vaginal insert therapies, as well as use evidence-based resources to effectively dispel patient fears and misconceptions about the vagina, female anatomy, and vaginal insert therapies from adolescence to menopause and beyond.

To sign up for the webinar, visit the ARHP web page, http://bit.ly/KAycuU. ■

Use new tools to enhance use of USMEC

The Centers for Disease Control and Prevention (CDC) has developed several new tools to assist health care providers in accessing and using the U.S. Medical Eligibility Criteria for Contraceptive Use, 2010 (USMEC).

The compendium of knowledge comprises more than 1,800 recommendations for the safety of contraceptive methods among women and men with certain characteristics or medical conditions.

Visit the CDC USMEC web site, http://1.usa.gov/chY2AV, to check out the following items:

• **USMEC application for iPhone/iPad:** Click on the link on the USMEC web page to download the application onto your iPhone or iPad from iTunes. The app allows clinicians to access the USMEC from their handheld devices.

• **USMEC color-coded summary charts, available in English and Spanish:** Links on the web page allow clinicians to print both charts. Both charts can be printed double sided and laminated so clinicians have hard copies of charts close at hand.

• **USMEC wheel:** Wheels are disseminated through professional organizations, academic institutions, and healthcare provider groups. Wheels can be obtained by e-mailing requests to drhinfo@cdc.gov.

In addition, a continuing medical education (CME) opportunity, "2013 Update: US Medical Eligibility Criteria for Contraceptive Use," is available on the Medscape web site. The webcast addresses the risks versus benefits of specific contraceptive methods for women with existing medical conditions. Go to the site at http://www.medscape.org/womenshealth. Under "Knowledge & Practice," select "Update: US Medical Eligibility Criteria for Contraceptive Use." Clinicians must register on the site to earn CME credit. ■

COMING IN FUTURE MONTHS

- Vaginal ring eyed for HIV prevention
- Chlamydia cases climb — What clinicians must do
- How to enhance contraceptive adherence
- Counsel on effective condom use

CNE/CME OBJECTIVES & INSTRUCTIONS

To earn credit for this activity, please follow these instructions.

1. Read and study the activity, using the provided references for further research.
2. Log on to www.cmecity.com to take a post-test; tests can be taken after each issue or collectively at the end of the semester. First-time users will have to register on the site using the 8-digit subscriber number printed on their mailing label, invoice or renewal notice.
3. Pass the online tests with a score of 100%; you will be allowed to answer the questions as many times as needed to achieve a score of 100%.
4. After successfully completing the last test of the semester, your browser will be automatically directed to the activity evaluation form, which you will submit online.
5. Once the completed evaluation is received, a credit letter will be e-mailed to you instantly.

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

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

CNE/CME QUESTIONS

1. What is the failure rate of postcoital insertion of the copper T intrauterine device for emergency contraception?
   A. 12 failures in more than 12,000 postcoital insertions
   B. 20 failures in more than 20,000 postcoital insertions
   C. 30 failures in more than 45,000 postcoital insertions
   D. 50 failures in more than 100,000 postcoital insertions

2. What is the first-year pregnancy rate for the levonorgestrel intrauterine contraceptive?
   A. 0.1% to 0.15%
   B. 0.1% to 0.2%
   C. 1% to 1.5%
   D. 1% to 2%

3. What vaccine is indicated vaccine is approved and recommended for U.S. males ages 9-26 to protect against genital warts?
   A. The bivalent HPV vaccine
   B. The quadrivalent HPV vaccine
   C. The Coridon vaccine
   D. The VGX-3100 vaccine

4. What drugs are indicated for treatment of trichomoniasis?
   A. Acyclovir or famciclovir
   B. Tinidazole or trimethoprim-sulfamethoxazole
   C. Metronidazole or doxycycline
   D. Metronidazole or tinidazole

Contraceptive Technology Update is endorsed by the National Association of Nurse Practitioners in Women's Health and the Association of Reproductive Health Professionals as a vital information source for healthcare professionals.