Meeting Contraceptive Needs of College Students: Bringing Evidence Into Practice
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ABSTRACT
A pilot study assessed whether clinicians at an urban college health center met the reproductive needs (emergency contraception and contraception) of students. Physicians and nurse practitioners completed a 5-item survey about prescribing emergency contraception and contraception. Clinician prescribing practices varied, which may have resulted in contraceptive needs (for some students) not being met in a timely manner. Clinicians had different understandings of policies about prescribing contraceptives when on-call, when students called in, and for students who had graduated. Education and policies about handling EC and contraception requests are necessary so that clinicians meet students’ reproductive health needs.

Keywords: college health, contraception, emergency contraception, reproductive needs

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Meeting college students’ contraceptive needs (birth control and emergency contraception) is an essential function of college health services. About 80% of college-aged students are sexually active. Approximately 99% of sexually active women aged 15-44 have used at least 1 contraceptive method to prevent pregnancy. Hormonal contraceptive methods (pill, patch, implant, injectable, and vaginal ring forms), intrauterine devices (IUDs), and condoms are widely used. Hormonal methods are most commonly used. However, there are still misperceptions among clinicians about when to start or refill birth control. Many clinicians adhere to older standards in which Papanicolaou tests (Pap) and breast exams are required before initiating birth control, and that blood pressure (BP) checks are necessary before refilling hormonal contraception. Emergency contraception (EC) is a safe and effective strategy to prevent pregnancy. However, clinicians are often wary about prescribing EC because of their limited knowledge or negative attitudes about this form of contraception.

Most sexually active women aged 15-44 have used emergency contraception after unprotected intercourse or a contraceptive failure. College students at a single university campus were surveyed about their knowledge of EC. Students indicated their preferred sources to obtain information about EC were physicians (41%) and then community/campus clinics (33%). However, clinician attitudes about prescribing EC may inadvertently make it difficult for women to obtain EC in a timely manner. Likewise, misconceptions about EC (mechanism of action, safety of repeated use, and promoting risky behavior) contribute to prescribing barriers.

Plan B One-Step (levonorgestrel [Teva Pharmaceuticals. North Wales, PA]) or ella (ulipristal acetate [Afaxis, Charleston, SC]), the “morning after pill,” is taken when unprotected sex has occurred. Plan B is effective up to 3 days after unprotected sex, whereas ella is effective up to 5 days of unprotected sex (or 120 hours). Plan B One-Step does not require a prescription if age 15 or older, whereas ella requires a prescription regardless of age. Because the 2010 Affordable Care Act mandates that contraceptive methods be covered without cost or with only a small co-pay, a prescription for EC (Plan B or ella) ensures minimal cost to the patient. In addition, providing EC prescriptions with refills ensures that women can use EC in a timely manner as well as giving them control of their contraceptive and reproductive needs.

The United States Department of Disease Control and Prevention updated the Practice Recommendations for Contraceptive Use in 2013. These guidelines set eligibility criteria for contraceptive use. The guidelines recommend that healthy women can initiate
contraceptive methods (hormonal oral contraception, IUD, vaginal ring, implant, and injectable) at any time. Few exams and tests are needed when initiating hormonal contraception (BP check) and inserting IUDs (bimanual exam and cervical inspection). Implant, injectable, and progestin-only pill contraception do not require any exams or tests. After beginning contraception, previously recommended routine follow-ups (3–6 months) are generally not required. Further, in circumstances that require EC, some form of continuous contraception should be started immediately after EC. The copper IUD is an effective EC method if inserted within 5 days after having unprotected sex.\textsuperscript{13}

Knowing whether clinicians are meeting the reproductive needs of college students is necessary to ensure that students do not encounter barriers when requesting EC or other contraceptive methods. When clinicians do not prescribe EC or contraceptives, limit the number of refills, or request that students receive prescriptions in person, these women may experience unintended pregnancies or other adverse side effects.

This pilot study was undertaken to examine whether physicians (MDs) and nurse practitioners (NPs) working at a college health center prescribed EC and contraception in ways that would meet the reproductive health needs of students.

**STUDY ENVIRONMENT**

Students are seen for reproductive issues by MDs and NPs at a large urban college health center. Clinicians address contraceptive requests in-person, by e-mail, or by telephone. When on-call (after hours and weekends), MDs and NPs are expected to handle contraceptive matters by telephone. In addition, clinicians have remote access to electronic health records and therefore have the pertinent medical information needed to make prescribing decisions about EC and contraception requests. Clinicians are scheduled for on-call (for 1 week) approximately 3–4 times a year.

EC prescriptions are commonly requested by students. In 2010, there were 99 visits in which the diagnosis was postcoital contraception and 261 prescriptions were written for EC. In 2011, there were 85 visits in which the diagnosis was postcoital contraception, with 202 EC prescriptions written. As of February 9, 2012 (the day the survey was given to the clinicians), there were 14 EC prescriptions written.

**METHODS**

**Design**

The researcher (staff NP) developed a pilot study to determine whether clinicians were meeting the reproductive needs (EC and contraception prescriptions) of college students. The researcher developed a 5-item survey (consisting of yes-no responses and a comment section to explain responses) asking MDs and NPs about prescribing EC and contraception. The survey questions were: (1) Do you prescribe Plan B with refills? (2) Do you prescribe Plan B when condoms are the sole form of contraception? (3) Do you prescribe contraception when on-call? (4) Do you prescribe contraception when the student calls the health center? (5) Do you prescribe contraception to students who have graduated? Clinicians were asked to explain their “no” responses in the comment section (several also explained “yes” responses). The survey only asked about Plan B, because, at the time of the study, the clinic stocked this EC brand.

**Participants**

The sample consisted of 14 clinicians (7 MDs and 7 NPs).

**Data Analysis**

The yes-no responses were tabulated (frequency count). The comments were used to shed light on why MDs and NPs prescribed or did not prescribe EC or contraception. The entire comment section is provided in the Results section. Comments were edited for clarity purposes (edits are shown in brackets).

**RESULTS**

**Plan B Prescriptions**

Most clinicians (8) prescribed Plan B with refills. Most prescribed 1 refill and 1 clinician prescribed 6 refills. Clinicians who did not give refills commented:

\textit{I don’t hold the above belief very strongly, but it seems that since our services here are highly accessible, patients...}
should come in to be counseled regarding contraception every time they have a need for Plan B.

So that it will not give patients [the] OK for promiscuous behaviors, have never considered it.

Most clinicians (8) did not prescribe Plan B when condoms were the sole form of contraception. The reasons given were:

I don’t want patients to get the impression that condoms are likely to fail, as they are fairly reliable if used correctly.

They can contact Health Services as needed. It’s also available over the counter.

Never thought of doing so—patient seems happy and consistent with condom use.

We discuss that it is available without a prescription—but can call if they would like a prescription for a discount.

It is an additional step when already busy and often overworked.

**Oral Contraception Prescriptions**

When on-call clinicians were asked if they prescribe contraception, 6 clinicians indicated “yes,” 2 indicated they prescribed “sometimes,” and 1 indicated “no.” The clinician who did not prescribe noted that the student had time to discuss their prescription with their primary care provider.

One clinician, who sometimes prescribes, commented that on-call requests should only be for emergencies. Clinicians who do prescribe commented:

[I will prescribe] only for 1 month.

[Will only prescribe] for times when they do not have enough to last until we are open.

Only if [the patient] has refills on the original prescription.

If the patient is known, sometimes will prescribe.

Usually prescribe either 3-month supply if there is an initial prescription or 1 year supply. In both instances, patient has to see a provider for OCP management or [schedule] women’s health appointment.

When students telephoned the health center for contraception prescriptions (calls were directed to the patient’s appropriate practice group), 5 clinicians stated they would prescribe, 5 indicated they would not, 1 said “it depends,” and 1 clinician indicated “sometimes.” Comments provided for “not prescribing,” “depends,” or “sometimes prescribing,” were as follows:

Will prescribe if 1 year since coming in. I [will give] refills or if [patient] is traveling.

[Giving refills] depends on the context.

[I will prescribe] so, they don’t get lost [waiting] for women’s health appointments.

A clinician who does prescribe stated:

[I will prescribe] up to 3 months [because it is] cost-effective. But only [will prescribe] when not on-call, evenings, or weekends.

Most clinicians did not prescribe contraception to students who graduated (7); 4 providers did prescribe, and 1 provider answered “yes” and “no.” Clinicians who did not prescribe or sometimes prescribed commented:

My understanding is that we have no insurance coverage when prescribing to patients who are no longer students.

Legally, I am authorized to prescribe for patients under my care. Graduated patients are no longer under my care. The student is no longer part of a panel and [I] unable to document the encounter.

It is my understanding that we are not supposed to treat alumni.

For clinicians who did prescribe, their reasons were:

I give them refills for 1 year after graduation. When [they] call again, [I] remind them they need a new PCP.

[I will give refills if I have seen [them] within 1 year.

[I will prescribe] no more than 2 months until get new provider.

If [student has] very recently graduated, [I] will refill for 6 months.

[I will only prescribe] if they do not have enough to last until they see new provider.

**DISCUSSION**

Meeting the reproductive needs of college students often rested on the individual clinicians’ understanding of how and when to prescribe EC and contraception (ascertained by the comments provided by the clinicians). In addition, prescribing practices of clinicians had a role in how easily college students obtained contraceptive prescriptions (prescription called-in vs. student must come in for prescription). Also, clinician prescribing practices varied, which may have resulted in contraceptive health needs (for some students) not being met in a timely manner (eg, no refills vs. insufficient number,
expectation that counseling needed for every EC prescription, and decision not to prescribe). Further, clinicians’ understanding of contraceptives may have inadvertently erected barriers around accessing EC and contraceptive prescriptions (eg, EC promotes promiscuity, student can wait for prescription, student has over-the-counter access, and condoms do not fail). Moreover, clinicians had different understandings of policies about prescribing contraceptives when on-call, when students called-in, and for students who had graduated.

**Limitations**

This pilot study was designed to ascertain whether clinicians were meeting the reproductive needs of college students by looking at their prescribing practices around EC and contraception (mostly over-the-counter methods). The small sample size may limit the diversity of opinions and prescribing conventions. Generalizations in quality improvement studies are limited to a specific population, and thus cannot be applied to the broader college health population. Future studies should examine whether prescribing patterns change after developing guidelines for prescribing EC and contraception when clinicians are on-call, when students call-in, and for students who have graduated.

**CONCLUSION**

Guidelines established by the United States Department of Disease Control and Prevention make clear that all forms of contraception be obtainable without undue barriers. When initiating combined hormonal contraception, BP checks are required but not for other contraceptive methods (implant, injectable, progestin-only pills, IUDs). IUDs (copper or levonorgestrel) do require bimanual examination and cervical inspection, yet the other contraceptive methods do not. Routine follow-up after contraception initiation is not necessary; however, patients should be encouraged to return at any time to discuss problems or side effects. When EC is warranted, women can begin some form of continuous contraception on the same day.13

Augmenting clinicians’ knowledge about prescribing EC and contraception will lead to improving evidence-based practice. EC education is particularly important because studies have demonstrated that misconceptions persist.

Family medicine clinicians in 2004 were surveyed about giving patients EC prescriptions in advance of needing the medication. The researchers found that patients did not receive EC prescriptions because clinicians were concerned that: (a) EC prescriptions sent the wrong message to patients; (b) EC prescriptions would increase unprotected sex and sexually transmitted diseases; and (c) EC prescriptions meant failing to plan contraception.7

Adolescents may face additional biases and barriers regarding EC prescriptions. In 2011, physicians, NPs, and nurses working in a pediatric emergency department participated in focus groups conducted about prescribing EC to adolescents. Many clinicians did not support advance EC prescriptions, were not clear about the legality of giving adolescents EC, and expressed punitive attitudes toward sexually active adolescents who they considered irresponsible, and many clinicians acknowledged their lack of knowledge about how to and when to prescribe EC.14

Kaiser Permanente surveyed their clinicians in 2001 about prescribing EC. Of the 102 clinicians, 64% of physicians and 36% of midlevel clinicians prescribed EC. After an educational program, the frequency of EC prescriptions increased 20% from baseline to follow-up, due to improved knowledge about EC. In addition, barriers to prescribing EC decreased.15

To ensure that college students’ reproductive health needs are met, clinicians need more education about the safety and role of EC and the initiation and follow-up requirements for birth control methods. In addition, policies are needed on how to handle prescription requests for EC and contraception when clinicians are on-call, when students call-in, and for students who have graduated.

**References**


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