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Factors Associated With Interest in Same-Day Contraception Initiation Among Females in the Pediatric Emergency Department

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A B S T R A C T

Purpose: The purposes were to describe interest in hormonal contraception initiation among female adolescent in the emergency department (ED) and to assess for associations with factors known to increase pregnancy risk such as violence victimization.
Methods: We used a computerized survey to assess sexual and dating practices, pregnancy history/likelihood, contraception use (including long-acting reversible contraception [LARC]) and concerns, contraception initiation interest, violence victimization, medical utilization, and demographics among sexually experienced females aged 14–19 years in our ED. The primary outcome was interest in contraception initiation. We compared responses between subgroups using the chi-square test.
Results: A total of 168 adolescents participated (82% of approached; mean age 16.6 years; 41% white; 48% black; 21% commercial insurance). Interest in contraception initiation was high: 60% overall and 70% among those not using hormonal contraception (n = 96). Among those using non-LARC contraception (n = 59), 29% were interested in LARC initiation. Contraception/LARC interest was positively associated with lack of recent well care ($p < .06$) and concerns about cost ($p < .01$), privacy ($p = .03$), and where to obtain contraception ($p < .01$). Nearly all planned on avoiding pregnancy, although many (23%) used no contraception at last intercourse. One third (36%) reported violence victimization. Most (70%) reported ≥1 concern about contraception (most commonly cost).
Conclusions: Many reported behaviors and exposures, including violence victimization, that increase their risk for pregnancy and most expressed interest in same-day initiation of hormonal contraception, including LARC. These findings may inform novel strategies for increased adolescent access to contraception and pregnancy prevention through use of nontraditional sites such as EDs.

IMPLICATIONS AND CONTRIBUTION

Many adolescent females in this emergency department are at-risk for unintended pregnancy. Most (60%) were interested in initiation of hormonal contraception. Contraception interest was associated with lack of recent well care and concerns about cost, privacy, and where to obtain contraception. These findings can inform emergency department initiatives to prevent pregnancy.

Although highly preventable, unintended pregnancy among adolescents remains a significant public health problem in the United States, where at least 80% of adolescent pregnancies are unintended [1,2]. Despite recent declines in the overall U.S. birth rate, the rate among adolescents remains one of the highest among other industrialized countries [3].

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Recent studies demonstrate that unintended pregnancy risk is high among adolescents in the emergency department (ED) population [4,5]. Many adolescents cared for in EDs report patient- and system-level factors associated with increased pregnancy risk including early initiation of sexual activity, infrequent or inconsistent contraception use, violence victimization, and lack of access to regular care [6–8]. Previous adolescent relationship abuse (ARA) victimization among female adolescents in the pediatric ED is common [9–11], and those reporting ARA are more likely to be sexually experienced and less likely to have used condoms, compared with females without ARA history [6].

For several million high-risk adolescents, the ED is their only or primary contact with health care [12,13]. Thus, the ED is an important nontraditional setting for targeted pregnancy prevention interventions, and there is growing support to use the ED to improve adolescent sexual health outcomes, specifically increasing access to contraception [11,14–17]. Furthermore, ED-based interventions targeting sexual health and pregnancy prevention are highly acceptable among adolescent ED users and their parents [3,8,18,19].

The ED has been used successfully to target some aspects of adolescent sexual health, but most efforts have focused on testing for STIs/HIV [20–23], and information is lacking about potential contraception uptake among adolescents in this setting. In this work, we sought to assess interest in same-day initiation of a hormonal contraceptive method (including long-acting reversible contraception [LARC]) and describe factors associated with interest in contraception initiation. We hypothesized that interest in contraception initiation would be more likely among those who reported ARA victimization.

Methods

We conducted a cross-sectional survey of adolescents in the ED from a Midwestern children's hospital system. The urban ED is a Level 1 trauma center and has approximately 70,000 annual visits. The patients are primarily nonwhite (67%) with public or no insurance (71%). The hospital's institutional review board approved this study and waived the requirements for parental and written informed consent.

Subject enrollment

We included female patients if they were seeking care for any reason, reported previous sexual activity, and were aged 14–19 years. Because the initiations of various types of sex (e.g., oral, vaginal) appear to occur closely together, we included adolescents who reported oral, vaginal, and/or anal sex [24]. Subjects were excluded if they did not speak English, had significant impairment that would impede participation as determined by the ED provider (e.g., severe illness, developmental delay, intoxication), had complaints involving sexual assault or psychiatric issues, had previously completed the survey, or were wards of the state. We obtained a convenience sample across a wide range of hours (generally 8:00A.M.–12:00P.M. each day), based on research assistant (RA) availability to recruit.

Trained RAs identified potential subjects through computerized tracking boards, which log visit information in real time, then asked the treating ED provider about suitability for recruitment. The RA obtained verbal consent/assent from willing adolescents, and the participant completed a self-administered computerized survey, whereas the adolescent and RA were alone in a private room [25]. One of the first questions was assessed for previous sexual activity; those who reported no previous activity exited the survey at that point.

Survey tool

A multidisciplinary team developed the assessment tool, based in large part on national surveys and review of the pertinent literature. The survey included questions on demographic factors (4) [26], use of medical care (4) [27], sexual and dating practices (9) [26,28], pregnancy likelihood and intentions (3) [29,30], pregnancy history and contraception use (5) [28], concerns about contraception initiation (7) [31], interest in contraception initiation (4), and violence victimization (ARA [5] [9,32], reproductive coercion [10] [33], and forcible rape [1] [26]). Medical insurance type (dichotomized into commercial vs. other) and previous ED or primary care hospital system visits in the previous 12 months (dichotomized into none vs. any) were determined by medical record review during the visit; all other responses were self-reported. We pilot tested this survey with 10 adolescents for ease of use; no significant issues were identified with the final version which took about 15 minutes to complete.

Adolescent relationship abuse

We assessed for sexual and physical abuse with five questions extensively tested with adolescents, including in the pediatric ED setting (Table 1) [9,32]. Subjects with a positive response to any one question were defined as having experienced ARA. We also assessed for recent exposure to ARA ("has this happened in the last three months?").

Reproductive coercion

We assessed for reproductive coercion using 10 items from an assessment previously developed by one of the investigators [33]. These items collectively assessed for pregnancy coercion (e.g., "has someone you were dating or going out with ever said he would leave you if you did not get pregnant?") and birth control sabotage (e.g., "has someone you were dating or going out with ever made you have sex without a condom so you would get pregnant?"). Subjects with a single positive response to any item were defined as having experienced reproductive coercion. We also assessed for recent reproductive coercion ("has this happened in the last 3 months?").

Table 1
Questions used to screen for adolescent relationship abuse (answered "yes" or "no")

The next questions ask about things that may have happened to you while you were dating someone:
1. Do you feel unsafe in your current relationship?
2. Is there someone you used to date who is making you feel unsafe now?
3. Has someone you were going out with or hooking up with ever hit, pushed, slapped, choked, or otherwise physically hurt you? (include such things as being hit, slammed into something, or injured with an object or weapon)
4. Has someone you were dating ever used force or threats to make you have sex (vaginal, oral, or anal sex) when you did not want to?
5. Have you ever had sex with someone you were dating when you did not want to, because you felt like you did not have a choice, although they did not use physical force or threats?