



Original Article

Reasons for Having Unprotected Sex Among Adolescents and Young Adults Accessing Reproductive Health Services

Sarah F. Nathan, MS, RN, FNP^{a,*}, Nancy F. Berglas, DrPH^b, Shelly Kaller, MPH^b, Aisha Mays, MD^c, M. Antonia Biggs, PhD^b

^aUniversity of California, San Francisco School of Nursing, Department of Family Health Care Nursing, San Francisco, California

^bAdvancing New Standards in Reproductive Health, Department of Obstetrics, Gynecology and Reproductive Sciences, University of California, San Francisco, Oakland, California

^cRoots Community Health Center, Oakland, California

Article history: Received 14 April 2022; Received in revised form 20 October 2022; Accepted 22 November 2022

A B S T R A C T

Introduction: Although research suggests that young people are more likely to have unprotected sex than adults, their reasons for doing so are not well-understood. Among a sample of young people accessing no-cost contraceptive services, we explored their reported reasons for having unprotected sex and their willingness to have unprotected sex in the future.

Methods: We recruited sexually active assigned female at birth youth at 10 family planning clinics in the San Francisco Bay Area ($n = 212$). Participants completed a self-administered survey reporting their reasons for having unprotected sex and willingness to do so in the future. We used bivariate analyses to assess associations between reasons for unprotected sex and age group (adolescents ages 14–19 vs. young adults ages 20–25) and willingness to have unprotected sex in the future.

Results: Most young people (69%) had recently engaged in unprotected sex and 41% were willing to in the future. The most common reported reasons for having unprotected sex included not planning to have sex, a preference for unprotected sex, and difficulty using contraception. Worrying about contraceptive side effects and a preference for unprotected sex were significantly associated with a willingness to have unprotected sex in the future ($p < .01$). Age group was not associated with most reasons for having unprotected sex.

Conclusions: Person-centered care should give attention to the range of reasons that may influence young people's sexual and contraceptive decision-making.

© 2022 The Authors. Published by Elsevier Inc. on behalf of Jacobs Institute of Women's Health, George Washington University. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

A limited body of evidence suggests that unprotected sex is common, even among those not desiring pregnancy. A national survey of people seeking family planning services found that nearly one-half (46%) of those not desiring pregnancy had recently engaged in unprotected sex, mostly owing to personal

preference, ambivalence toward pregnancy, and barriers to accessing contraceptive methods (Biggs, Karasek, & Foster, 2012). This same study also found that youth under age 25 were more likely than their older counterparts to have recently engaged in unprotected sex (Biggs et al., 2012). Similarly, a national survey of people seeking abortion found that young people ages 19 and under were more likely, compared with those in their 20s or 30s, to intend to have unprotected sex in the future (Foster, Higgins, Karasek, Ma, & Grossman, 2012).

Adolescents and young adults experience many structural barriers to accessing reproductive health care services, including confidentiality concerns, limited options for transportation to a clinic, and cost of services that impact their contraceptive use and decision-making (Decker, Dandekar, Gutmann-Gonzalez, & Brindis, 2021). Youth may also be influenced by personal preferences, pregnancy desires, concerns or experiences with

Supported by research grants from The William and Flora Hewlett Foundation (#2016–3868) and a core grant of Advancing New Standards in Reproductive Health, UCSF. The sponsors had no involvement in study design; in the collection, analysis and interpretation of data; in the writing of the report; or in the decision to submit the article for publication. The authors report no financial conflicts of interest.

* Correspondence to: Sarah F. Nathan, MS, RN, FNP, Assistant Clinical Professor/Doctoral Candidate, University of California, San Francisco School of Nursing, Department of Family Health Care Nursing, 2 Koret Way, Room N411Y, San Francisco, CA 94143.

E-mail address: sarah.nathan@ucsf.edu (S.F. Nathan).

contraceptive side effects, and relationship status (Harvey, Oakley, Washburn, & Agnew, 2018). However, experiencing these barriers to care does not account for all the reasons young people who do not desire pregnancy may have sex without contraception.

Efforts to increase contraceptive use among young people often have the underlying assumption that they will consistently use highly effective contraceptive methods if all barriers are removed (Peipert, Madden, Allsworth, & Secura, 2012). This assumption ignores the reality that current methods do not meet the needs of many individuals and that some people prefer methods that are less effective at preventing pregnancy or prefer to use no method at all (Berglas, Kimport, Mays, Kaller, & Biggs, 2021). A national survey of people seeking abortion found that although most found that the effectiveness, absence of side effects, and affordability were extremely important features in contraception, for 91% of participants no contraceptive method had all the features they thought were extremely important (Lessard et al., 2012). Although efficacy is an important factor, other features in a method are important, such as self-control to initiate and discontinue a method or maintaining a regular menstrual cycle, with notable differences in contraceptive preferences by age and race/ethnicity (Jackson, Karasek, Dehlendorf, & Foster, 2016; Lessard et al., 2012).

The literature has demonstrated that younger age is a factor in having unprotected sex (Biggs et al., 2012; Teal & Romer, 2013) and provided reasons that individuals of all ages may engage in this practice (Biggs et al., 2012; Lessard et al., 2012). A gap exists in understanding the reasons why specifically young people have unprotected sex and whether these reasons differ among adolescents (aged ≤ 19) and young adults (early 20s). Removing common structural barriers of cost and access to care, this study allows for an examination of other reasons for having unprotected sex.

Purpose of the Study

This study surveyed young people assigned female at birth seeking family planning services at San Francisco Bay Area clinics that offer comprehensive, no-cost contraceptive methods. In a context where the cost of contraception, a common structural barrier to care, has been addressed, this study aims to 1) investigate the reasons why young people engage in unprotected sex and 2) explore whether these reasons vary by age group and are associated with a willingness to have unprotected sex in the future.

Methods

Study Design

From May 2017 to February 2018, we recruited young people from 10 community and school-based clinics in the San Francisco Bay Area. The clinics serve youth from communities where the majority of people have low incomes and are people of color. All of the clinics offer a full range of contraceptive methods at no cost through California's state family planning program, Family PACT. Program eligibility is based on individual, rather than family, income, making nearly all youth eligible.

Inclusion criteria for the study were having been assigned female sex at birth, being sexually active in the past year with male partners (or male and female partners), seeking family planning services, not attempting or wanting to conceive, and

speaking English or Spanish. In California, minors can consent to sexual health services, so parental consent was not needed for participation in the study.

A research coordinator recruited participants at the clinics, inviting them to complete an eligibility survey on an electronic tablet or on paper. Recruitment sites also posted flyers in their clinics, allowing for participants to contact the researchers directly. Research coordinators obtained consent verbally for those recruited in person, or an electronic consent was included with the baseline survey. Participants received a \$10 gift card for completing the baseline survey. The study was approved by the Institutional Review Board of the University of California, San Francisco, which provided a waiver of parental consent because parental consent for reproductive health services is not required in California.

Measures

To describe the reasons for recent unprotected sex, we asked participants to select all that apply from a list of 22 reasons, derived from the existing literature (Biggs et al., 2012), in response to the question "In the past three months, did you ever have unprotected sex because of any of the following reasons?" We defined unprotected sex as "sex without using condoms, pills, or any other type of birth control." We grouped each reason for having unprotected sex into ten overarching themes, based on categories used in previous literature (Biggs et al., 2012).

To measure willingness to have unprotected sex, we asked participants how much they agreed or disagreed with the statement "I would be willing to have unprotected sex in the next 3 months," with five Likert response options that we dichotomized for analysis (strongly agree/agree, neither agree nor disagree vs. strongly disagree/disagree). We grouped neither agree nor disagree with strongly agree and agree because we theorized that ambivalence was more closely aligned with a willingness to have unprotected sex. We defined two age groups, representing adolescents (14–19 years) and young adults (20–25 years).

We measured pregnancy intentions using two domains of the prospective Desire to Avoid Pregnancy scale (Rocca, Ralph, Wilson, Gould, & Foster, 2018). Scaling the 10 items, we generated a mean score from 0 to 4, with higher scores corresponding with a greater desire to avoid pregnancy.

Analysis

We used descriptive statistics to describe participant demographic characteristics, their reasons for recently engaging in unprotected sex, and their willingness to engage in unprotected sex in the next 3 months. We used logistic regression analyses to conduct bivariate analyses to analyze the association between each categorized reason for having unprotected sex by age group (14–19 and 20–25 years old) and willingness to have unprotected sex in the next 3 months. We used clustered standard errors to account for potential intragroup observations not being independent. We used Stata version 17 software for all analyses.

Results

Sample Description

Of the 295 young people approached, 264 were eligible to participate, 222 consented to be in the study, and 215 completed

the baseline survey. We excluded three respondents who were more than 25 years of age, leaving a final analytic sample of 212. Participants ranged from 14 to 25 years of age (mean, 19.0 ± 2.7 years); the majority (64%) were aged 14–19 years. Most participants did not have any out-of-pocket costs for the visit (96%). All participants had initiated sexually activity, more than one-half (56%) were in a very committed relationship, and most had a high desire to avoid pregnancy (Desire to Avoid Pregnancy scale mean, 2.9 ± 0.9) (Table 1).

Reasons for having unprotected intercourse

Most participants (69%) reported that they had engaged in unprotected sex in the past 3 months, and close to one-half (41%) said that they were willing to engage in unprotected sex in the next 3 months (Table 1).

Among those who had recently engaged in unprotected sex ($n = 146$), the most common categories for reasons included that they were not planning on having sex (23%), preferred unprotected sex (20%), had difficulty using contraception (19%), and faced barriers accessing contraception (18%). The following individual reasons were the most frequently selected by participants from any of the categories: “unprotected sex feels better” ($n = 37$ [17%]) and “I wasn’t planning on having sex” ($n = 32$ [15%]) (Table 2).

Reasons for and willingness to have unprotected sex

In bivariate analyses, 2 of the 10 categories for reasons for unprotected sex differed by age group and willingness to have unprotected sex in the future (Table 3). Young adults were significantly more likely than adolescents to cite worry about side effects of contraception (20% vs. 11%; $p = .044$) and ambivalence about pregnancy (7% vs. 1%; $p = .03$) as reasons for having unprotected sex. People who reported being worried about the side effects of contraception (18% vs. 11%; $p = .002$) and a preference for unprotected sex (25% vs. 18%; $p = .006$) as reasons for

Table 1
Participant Characteristics ($n = 212$)

Variable	n (%)
Age, years (mean \pm standard deviation)	19 ± 2.7
14–17	80 (38)
18–19	26 (26)
20–22	41 (19)
23–25	35 (17)
Relationship status	
In very committed relationship	115 (56)
In somewhat committed relationship	30 (15)
Friend with benefits	31 (15)
Not in relationship	30 (15)
Out of pocket costs for visit or contraceptive method	
Yes	2 (1)
No	198 (96)
Don't know	6 (3)
Highest level of mother's education	
Less than high school diploma	53 (25)
High school graduate or equivalent	38 (18)
Some college and no degree	43 (20)
College degree or higher	43 (20)
Don't know/missing	35 (17)
Had unprotected sex in past 3 months	
Yes	146 (69)
No	66 (31)
Willing to have unprotected sex in next 3 months	
Yes	83 (41)
No	119 (59)
Desire to Avoid Pregnancy scale (mean \pm standard deviation)	2.9 ± 0.9

Table 2

Reasons for Having Unprotected Sex in Past 3 Months, Among Those Who Have Had Unprotected Sex ($n = 146$)

Reasons for Having Unprotected Sex (Categories and Individual-level Reasons)	n (%)
Wasn't planning on having sex	48 (23)
I wasn't planning on having sex	32 (15)
I don't have sex often	23 (11)
Preference for unprotected sex	43 (20)
Unprotected sex feels better	37 (17)
I didn't want to use a method	14 (6)
Difficulty using contraception	40 (19)
I didn't have a condom	29 (14)
I forgot to take my birth control method	10 (5)
Condoms are too difficult to use	5 (2)
Barriers to accessing birth control	39 (18)
I ran out of birth control	20 (9)
I could not get to clinic	8 (4)
I didn't have enough money	7 (3)
Did not know where to go to get birth control	6 (3)
I did not know what method to use	5 (2)
I did not want to go to clinic or see a doctor	4 (2)
I could not get appointment	3 (1)
Worried about side effects	30 (14)
I was worried about the effect of birth control on my body	18 (8)
Birth control side effects are unpleasant	15 (7)
I previously had side effects from using birth control	12 (6)
Infertility beliefs	
I thought it unlikely I would become pregnant	24 (11)
Plan for use of emergency contraceptive	
I was planning to use the morning after pill or Plan B	18 (9)
Partner prevented use of method	
My partner did not want me to use a method	13 (6)
Pregnancy intention ambivalence/pregnancy desired	7 (3)
I wasn't sure if I wanted to become pregnant or not	5 (2)
I was wanting to become pregnant	3 (1)
Perception of lack of efficacy	
Didn't think birth control or condoms would work	2 (.09)

unprotected sex were significantly more likely to be willing to have unprotected sex in the future (Table 3).

Discussion

The majority of young people in this study had previously engaged in unprotected sex (69%), and many (41%) were willing to do so in the future, suggesting that unprotected sex is common and even desired among young people with access to contraceptive methods at no cost. The reasons for having unprotected sex were varied and findings were largely consistent with those from previous research among young adults (Biggs et al., 2012; Nettleman, Chung, Brewer, Ayoola, & Reed, 2007).

Age group was not associated with most reasons given for having unprotected sex, suggesting that older and younger adolescents have unprotected sex for similar reasons. However, we note that young adults were more likely than their adolescent counterparts to cite a concern for contraceptive side effects and ambivalence or desire for pregnancy as reasons for having unprotected sex. It is possible that young adults, compared with adolescents, have more experience using contraception, which shapes their opinions on method use. Developmentally, young adults may also be more likely to view pregnancy as a viable option because they have finished school, have jobs, or see parenting as fitting in with their life goals.

Overall, the most common category of reasons for having unprotected sex was not planning on having sex, selected by about one-quarter of participants. Sexual intercourse among

Table 3
Bivariate Associations Between Categories of Reasons for Having Unprotected Sex and Age Group and Willingness to Have Unprotected Sex in the Next 3 Months Among Those Who Recently Had Unprotected Sex

Categories of Reasons for Having Unprotected Sex	Age Group			Willingness to Have Unprotected Sex in the Next 3 Months		p Value
	14–19 Years	20–25 Years	p Value	Yes/Unsure	No	
	n = 92	n = 54		n = 67	n = 69	
	n (%)	n (%)		n (%)	n (%)	
Wasn't planning on having sex	28 (21)	20 (26)	n.s	22 (27)	25 (21)	n.s
Preference for unprotected sex	29 (21)	14 (18)	n.s	21 (25)	21 (18)	.006
Difficulty using contraception	23 (17)	17 (22)	n.s	19 (23)	20 (17)	n.s
Barriers accessing contraception	28 (21)	11 (15)	n.s	18 (22)	20 (17)	n.s
Worried about contraceptive side effects	15 (11)	15 (20)	.044	15 (18)	13 (11)	.002
Infertility beliefs	17 (13)	7 (9)	n.s	11 (13)	13 (11)	n.s
Plans to use emergency contraception	15 (11)	3 (4)	n.s	9 (11)	9 (8)	n.s
Partner prevented use of method	8 (6)	5 (7)	n.s	7 (8)	6 (5)	n.s
Pregnancy desired/ambivalence	2 (1)	5 (7)	.032	2 (2)	3 (3)	n.s
Perception of lack of contraceptive efficacy	1 (0.7)	1 (1)	*	2 (2)	0 (0)	*

Abbreviation: n.s., not significant at $p < .05$ based on logistic regression model with standard errors clustered by site.

* Unable to compute because age and willingness to have unprotected sex predict outcome perfectly.

youth has decreased in the past decade (Herbenick, Rosenberg, Golzarri-Arroyo, Fortenberry, & Fu, 2022). Young people who are not sexually active on a regular basis might engage in social situations that lead to spontaneous sex, and the absence of preplanning for such sexual encounters makes use of hormonal contraceptive options less likely. Although a benefit of intrauterine devices, implants, and other hormonal methods is that they provide continuous protection for unexpected sexual encounters, they also require planning and a clinical visit, which is likely less appealing and less feasible for unanticipated sexual activity.

One-fifth of young people reported that they preferred to have sex without a contraceptive method. This preference may stem from a desire to avoid real and perceived contraceptive side effects, a lack of available methods that match their preferences, or because contraception may interfere with sexual pleasure. According to a narrative literature review, an important factor in choosing a contraceptive method is its sexual acceptability, which includes the application of the method as well as its interference or impact on sexual intimacy (Higgins & Smith, 2016). In a longitudinal study of people seeking a new contraceptive method at family planning health centers in Utah, Higgins, Wright, Turok, and Sanders (2020) found that most study participants (18–45 years old) wanted a contraceptive method that did not decrease their sexual experience, in addition to being safe and effective at preventing pregnancy. Although some providers focus on efficacy in counseling, patients may have additional priorities and preferences (Biggs et al., 2020). Berglas, Kimport et al. (2021), in a qualitative study, found young women (15–25 years old) had many reasons for using lower efficacy methods, including preferring flexibility over continuous use, concern for side effects, and satisfaction with the level of efficacy that these methods provide. Provider bias toward higher efficacy methods such as intrauterine devices and implants can result in coercive counseling practices that discourage the use of less effective methods, potentially alienating the patient (Biggs et al., 2020). When young people feel respected and not judged by their provider, they are more likely to continue to engage in care (Biggs, Kimport, Mays, Kaller, & Berglas, 2019). Our study shows that some youth prefer not to use a contraceptive method, a preference that should be respected.

Limitations of this study are that the findings may not be generalizable to young people without access to no-cost contraception at youth-serving clinics. Additionally, the sample size of this study may limit the power to detect differences between groups. We dichotomized the outcome variable of willingness to have unprotected sex in the future. By combining those who were ambivalent about having unprotected sex and those who were willing to have unprotected sex, some nuance may have been missed.

Implications for Practice and/or Policy

This study showed that, among a population of young people receiving care in youth-serving clinics that offer no-cost contraception, nearly one in five (18%) cited barriers to accessing contraception, including running out of birth control and difficulty getting to a clinic. For hormonal methods such as the pill, patch, or ring, providing 1-year supply instead of 1–3 months at a time, telehealth provision, and removing the prescription requirement are likely to decrease barriers related to running out of birth control and clinic access (Foster, Hulett, Bradsberry, Darney, & Policar, 2011). Moving oral contraception over the counter may help to decrease some of these stated barriers. Grossman et al. (2013) found that it was acceptable to participants to receive oral contraceptive pills without a prescription, and those using less effective or no contraceptive were more likely to start a method if it was available over the counter. Importantly, as has been observed with emergency contraception, moving a medication over the counter will not remove all barriers to use (Haeger, Lamme, & Cleland, 2018). However, removing requirements for prescriptions could allow patients flexibility and facilitate method use.

An important part of providing patient-centered care that respects patient autonomy is recognizing emergency contraception as a viable option for pregnancy prevention (Berglas, Kaller, et al., 2021). Emergency contraception is an effective, safe choice for those who did not use a method or had a method failure during sex (Cleland, Raymond, Westley, & Trussell, 2014). In our study, 9% of those who had engaged in unprotected sex did so because they planned to use emergency contraception. This finding emphasizes that there are individuals who do not

use a method while having sex because they know emergency contraception is an option postcoitally, and they are comfortable with that. A reason given in our study for having unprotected sex was not planning to have sex (15%). The use of emergency contraception, because it is taken after sex, could be a useful option for these individuals. To facilitate use, providers can offer a prescription or ideally the physical medicine to patients, so they have it accessible when they need it. Research has shown that advanced provision of emergency contraception does increase its use, and its provision does not change sexual behaviors (Raine et al., 2005). Providers can play an active role in offering and educating on this method, giving more options to patients.

Similarly, withdrawal may be a method useful for those who were not planning to have sex and want to avoid pregnancy (Berglas, Kimport, et al., 2021). Withdrawal can be 96% effective at preventing pregnancy (Lindberg, Santelli, & Desai, 2018), yet is often discouraged and downplayed by providers, left out of counseling, and excluded from educational resources on contraception (Higgins & Smith, 2016; Kimport, 2018). Withdrawal is often used in conjunction with other methods, as a backup for contraceptive failure, or for those who have difficulty using condoms (Jones, Fennell, Higgins, & Blanchard, 2009). Higgins and Wang (2015) found that youth aged 15 to 24 who thought condoms decreased pleasure were more likely to use withdrawal. In our study, among those previously having unprotected sex, 20% did so because they preferred it, highlighting the importance of acknowledging the sexual pleasure component of contraceptive decision-making. Withdrawal should be included within the range of options offered to a patient, because it might have some patients' preferred features.

In this study, we find that unprotected sex remains an acceptable or preferable option to some young people, even those who are accessing reproductive health services. Providers must adopt a patient-centered contraceptive counseling approach that focuses on the patient's individual preferences, including a preference to not use contraception (Dehlendorf et al., 2016).

Conclusions

Young people describe a range of reasons for having unprotected sex, including a preference for unprotected sex over using contraception. This study emphasizes the importance of medical providers delivering an inclusive, nonjudgmental message to patients around contraceptive use or nonuse.

Acknowledgments

The authors thank the partner clinics throughout the San Francisco Bay Area for their collaboration.

References

- Berglas, N. F., Kaller, S., Mays, A., & Biggs, M. A. (2021). The role of health care providers in young women's attitudes about and willingness to use emergency contraceptive pills. *Womens Health Issues*, 31(3), 286–293. <https://doi.org/10.1016/j.whi.2020.12.010>
- Berglas, N. F., Kimport, K., Mays, A., Kaller, S., & Biggs, M. A. (2021). It's worked well for me": Young women's reasons for choosing lower-efficacy contraceptive methods. *Journal of Pediatric and Adolescent Gynecology*, 34(3), 341–347. <https://doi.org/10.1016/j.jpjag.2020.12.012>
- Biggs, M. A., Karasek, D., & Foster, D. G. (2012). Unprotected intercourse among women wanting to avoid pregnancy: attitudes, behaviors, and beliefs.

- Womens Health Issues*, 22(3), e311–e318. <https://doi.org/10.1016/j.whi.2012.03.003>
- Biggs, M. A., Kimport, K., Mays, A., Kaller, S., & Berglas, N. F. (2019). Young women's perspectives about the contraceptive counseling received during their emergency contraception visit. *Womens Health Issues*, 29(2), 170–175. <https://doi.org/10.1016/j.whi.2018.09.004>
- Biggs, M. A., Tome, L., Mays, A., Kaller, S., Harper, C. C., & Freedman, L. (2020). The fine line between informing and coercing: Community health center clinicians' approaches to counseling young people about IUDs. *Perspectives on Sexual and Reproductive Health*, 52(4), 245–252. <https://doi.org/10.1363/psrh.12161>
- Cleland, K., Raymond, E. G., Westley, E., & Trussell, J. (2014). Emergency contraception review: Evidence-based recommendations for clinicians. *Clinical Obstetrics and Gynecology*, 57(4), 741–750. <https://doi.org/10.1097/grf.0000000000000056>
- Decker, M. J., Dandekar, S., Gutmann-Gonzalez, A., & Brindis, C. D. (2021). Bridging the gap between sexual health education and clinical services: Adolescent perspectives and recommendations. *Journal of School Health*, 91(11), 928–935. <https://doi.org/10.1111/josh.13084>
- Dehlendorf, C. M. D., Henderson, J. T. P., Vittinghoff, E. P., Grumbach, K. M. D., Levy, K., Schmittiel, J. P., ... Steinauer, J. M. D. (2016). Association of the quality of interpersonal care during family planning counseling with contraceptive use. *American Journal of Obstetrics and Gynecology*, 215(1), 78.e71–78.e79. <https://doi.org/10.1016/j.ajog.2016.01.173>
- Foster, D. G., Higgins, J. A., Karasek, D., Ma, S., & Grossman, D. (2012). Attitudes toward unprotected intercourse and risk of pregnancy among women seeking abortion. *Womens Health Issues*, 22(2), e149–e155. <https://doi.org/10.1016/j.whi.2011.08.009>
- Foster, D. G., Hulett, D., Bradsberry, M., Darney, P., & Policar, M. (2011). Number of oral contraceptive pill packages dispensed and subsequent unintended pregnancies. *Obstetrics and Gynecology*, 117(3), 566–572. <https://doi.org/10.1097/AOG.0b013e3182056309>
- Grossman, D., Grindlay, K., Li, R., Potter, J. E., Trussell, J., & Blanchard, K. (2013). Interest in over-the-counter access to oral contraceptives among women in the United States. *Contraception*, 88(4), 544–552. <https://doi.org/10.1016/j.contraception.2013.04.005>
- Haeger, K. O., Lammie, J., & Cleland, K. (2018). State of emergency contraception in the U.S., 2018. *Contraception and Reproductive Medicine*, 3(1), 20. <https://doi.org/10.1186/s40834-018-0067-8>
- Harvey, S. M., Oakley, L. P., Washburn, I., & Agnew, C. R. (2018). Contraceptive method choice among young adults: Influence of individual and relationship factors. *Journal of Sex Research*, 55(9), 1106–1115. <https://doi.org/10.1080/00224499.2017.1419334>
- Herbenick, D., Rosenberg, M., Golzarri-Arroyo, L., Fortenberry, J. D., & Fu, T. C. (2022). Changes in Penile-vaginal intercourse frequency and sexual repertoire from 2009 to 2018: Findings from the National Survey of Sexual Health and Behavior. *Archives of Sexual Behavior*, 51(3), 1419–1433. <https://doi.org/10.1007/s10508-021-02125-2>
- Higgins, J. A., & Smith, N. K. (2016). The sexual acceptability of contraception: Reviewing the literature and building a new concept. *Journal of Sex Research*, 53(4–5), 417–456. <https://doi.org/10.1080/00224499.2015.1134425>
- Higgins, J. A., & Wang, Y. (2015). Which young adults are most likely to use withdrawal? The importance of pregnancy attitudes and sexual pleasure. *Contraception (Stoneham)*, 91(4), 320–327. <https://doi.org/10.1016/j.contraception.2014.12.005>
- Higgins, J. A., Wright, K. Q., Turok, D. K., & Sanders, J. N. (2020). Beyond safety and efficacy: Sexuality-related priorities and their associations with contraceptive method selection. *Contracept X*, 2, 100038. <https://doi.org/10.1016/j.conx.2020.100038>
- Jackson, A. V., Karasek, D., Dehlendorf, C., & Foster, D. G. (2016). Racial and ethnic differences in women's preferences for features of contraceptive methods. *Contraception (Stoneham)*, 93(5), 406–411. <https://doi.org/10.1016/j.contraception.2015.12.010>
- Jones, R. K., Fennell, J., Higgins, J. A., & Blanchard, K. (2009). Better than nothing or savvy risk-reduction practice? The importance of withdrawal. *Contraception*, 79(6), 407–410. <https://doi.org/10.1016/j.contraception.2008.12.008>
- Kimport, K. (2018). Talking about male body-based contraceptives: The counseling visit and the feminization of contraception. *Social Sciences and Medicine*, 201, 44–50. <https://doi.org/10.1016/j.socscimed.2018.01.040>
- Lessard, L. N., Karasek, D., Ma, S., Darney, P., Deardorff, J., Lahiff, M., ... Foster, D. G. (2012). Contraceptive features preferred by women at high risk of unintended pregnancy. *Perspectives on Sexual and Reproductive Health*, 44(3), 194–200. <https://doi.org/10.1363/4419412>
- Lindberg, L. D., Santelli, J. S., & Desai, S. (2018). Changing patterns of contraceptive use and the decline in rates of pregnancy and birth among U.S. adolescents, 2007–2014. *Journal of Adolescent Health*, 63(2), 253–256. <https://doi.org/10.1016/j.jadohealth.2018.05.017>
- Nettleman, M. D., Chung, H., Brewer, J., Ayoola, A., & Reed, P. L. (2007). Reasons for unprotected intercourse: Analysis of the PRAMS survey. *Contraception*, 75(5), 361–366. <https://doi.org/10.1016/j.contraception.2007.01.011>
- Peipert, J. F., Madden, T., Allsworth, J. E., & Secura, G. M. (2012). Preventing unintended pregnancies by providing no-cost contraception. *Obstetrics and Gynecology*, 120(6), 1291–1297. <https://doi.org/10.1097/AOG.0b013e318273eb56>

- Raine, T. R., Harper, C. C., Rocca, C. H., Fischer, R., Padian, N., Klausner, J. D., & Darney, P. D. (2005). Direct access to emergency contraception through pharmacies and effect on unintended pregnancy and STIs: A randomized controlled trial. *JAMA*, 293(1), 54–62. <https://doi.org/10.1001/jama.293.1.54>
- Rocca, C. H., Ralph, L. J., Wilson, M., Gould, H., & Foster, D. G. (2018). Psychometric evaluation of an instrument to measure prospective pregnancy preferences: The Desire to Avoid Pregnancy Scale. *Medical Care*, 57(2), 152–158. <https://doi.org/10.1097/MLR.0000000000001048>
- Teal, S. B., & Romer, S. E. (2013). Awareness of long-acting reversible contraception among teens and young adults. *Journal of Adolescent Health*, 52(4 Suppl), S35–S39. <https://doi.org/10.1016/j.jadohealth.2013.01.013>

Author Descriptions

Sarah Nathan, MS, RN, FNP, is an Associate Clinical Professor and doctoral candidate at the University of California, San Francisco (UCSF) School of Nursing, Department of Family Health Care Nursing. Her research interests include pregnancy preferences and sexual health access for adolescents and youth.

Nancy F. Berglas, DrPH, is an Associate Professional Researcher at Advancing New Standards in Reproductive Health, Department of Obstetrics, Gynecology and

Reproductive Sciences, University of California, San Francisco. Her research interests include adolescent sexual health and rights, access to sexual health services, and development of sexual health programs.

Shelly Kaller, MPH, is a Project Director at Advancing New Standards in Reproductive Health, Department of Obstetrics, Gynecology and Reproductive Sciences, University of California, San Francisco. Her research interests include expanding access to medication abortion and evaluation of adolescent health programs and school-based health center services.

Aisha Mays, MD, is the Director of Adolescent and School-Based Programs at Roots Community Health Center. She works as a family physician with youth and has expertise in training, educating, and researching childhood commercial sexual exploitation.

M. Antonia Biggs, PhD, is an Associate Researcher at Advancing New Standards in Reproductive Health, Department of Obstetrics, Gynecology and Reproductive Sciences, University of California, San Francisco. Her research interests included reasons people do not use contraception, mental health outcomes of those receiving abortions, and impact of parental consent laws on youth access to abortion services.