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Is Long-Acting Reversible Contraceptive Use Increasing? Assessing Trends Among U.S. College Women, 2008–2013

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Abstract

Objective To assess LARC use trends among college women (18–24 years) and identify groups that have increased LARC use. *Methods* Data were extracted from the National College Health Assessment-II (NCHA-II) fall 2008–2013 surveys. Logistic regression statistics were used to assess LARC use. *Results* Although LARC use increased from 2008 to 2013 (aOR = 2.62; 95% CI 2.23–3.07), less than half of the sample (44%) reported using contraception at last vaginal sex. Only 2.5% of college women in this study reported using a LARC method; of LARC users, 90% reported using an intrauterine device. Nearly all sociodemographic factors were significantly associated with increases in LARC use including: age, sexual orientation, and insurance status. *Conclusions* LARC use significantly increased among college women. However, less effective methods such as condoms and short-acting reversible contraceptives are used more frequently. Promoting LARC use for women who desire to effectively prevent pregnancy can reduce unintended pregnancy and improve health outcomes for women while in college. Future work should examine the importance of individual and lifestyle factors that influence college women's decision to choose a LARC method and seek to eliminate barriers to college women choosing a contraceptive method they believe works best for them.

Keywords Long-acting reversible contraception · LARC · Unintended pregnancy · College women · Birth control · NCHA

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Significance

This study adds to the current literature regarding long-acting reversible contraceptive (LARC) use among college women. Findings suggest that college women are increasing their use of LARC, which is recommended by professional organizations such as the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists as the most effective reversible contraception available. Promoting LARC use for women who desire to effectively prevent pregnancy can reduce unintended pregnancy and improve health outcomes for women while in college.

Introduction

Unintended pregnancy in the U.S. has recently declined to 45% of all pregnancies (Finer and Zolna 2016). Yet, younger women (18–24 years) continue to have higher rates of unintended pregnancy overall (Finer and Zolna 2016; Martin et al. 2015) and have higher rates of unintended pregnancy

resulting in childbirth compared to other age groups (Finer 2010). College women are at risk of unintended pregnancy due to unprotected and unplanned sex and multiple sexual partners (Fielder and Carey 2011; Turrisi et al. 2006). Among this population, unintended pregnancy can have serious and long-lasting consequences, such as decreased likelihood of college completion (Finer and Zolna 2011), reduced potential lifetime earnings, and lower overall health and wellness (Dehlendorf et al. 2010; Eisenberg et al. 2013). College attendance is also a significant period in the life course because it poses potential biopsychosocial benefits and risks that can alter women's future health (Braveman 2014). Given the point in their educational careers, college women may desire to delay childbirth. Nonetheless, only 56% of college women used contraception during last vaginal sex (American College Health Association 2015). Furthermore, when college women used a form of contraception, they were more likely to use oral contraceptive pills or male condoms, compared to more effective methods, such as long-acting reversible contraception (LARC) (ACHA 2015).

LARC, which includes intrauterine devices (IUD) and the subdermal hormonal implant, can provide effective pregnancy prevention for 3–10 years (Cheng and Van Leuven 2015). Low rates of LARC use among young women exist even though LARC serves as one of the most effective forms of pregnancy prevention (Daniels et al. 2014; Kavanaugh et al. 2015a, b). Health promotion campaigns have long focused on oral contraceptive pills and condom use as the best options for young women (Jones et al. 2015); yet, these methods are inferior in effectiveness due to the necessity of consistent and correct use. Therefore, young women feel a false sense of protection against unintended pregnancy (Cheng and Van Leuven 2015) and overestimate the effectiveness of OCPs (Sundstrom et al. 2015). College women may face access and psychosocial barriers to choosing LARC, such as low knowledge and negative attitudes and beliefs about LARC (Hall et al. 2016). Additionally, clinicians may possess limited knowledge about LARC and report not knowing enough about methods to encourage young patients to use them, thus reducing patient's access to contraception-related information and services (American College of Obstetricians and Gynecologists 2012; Cheng and Van Leuven 2015; Fleming et al. 2010; Harper et al. 2008). Current guidance from the American Academy of Pediatrics (AAP 2014) and the American College of Obstetricians and Gynecologists (ACOG 2012) addresses consumers' and clinicians' reluctance to use LARC by formally recommending young women use LARC to prevent unintended pregnancies.

LARC use among U.S. women ages 15–44 has significantly increased from 8.6 to 11.6% over a 5 year span (Daniels et al. 2014). More specifically, across age, race, ethnicity and relationship status, LARC use increased while overall contraceptive use rates remained stable (Daniels et al. 2014).

In general, LARC use appears to have increased among U.S. women, but little is known if similar trends are occurring among college women. Thus, the purpose of this study was to describe: (1) trends in LARC use among college women ages 18–24 years from 2008 to 2013 and (2) specific subgroups of college women that have increased LARC use and those that may benefit from additional public health efforts.

Methods

Sample

This study explored LARC use trends among a sample of sexually active college women that completed the National College Health Assessment Survey-II (NCHA-II) (2008–2013). The NCHA-II survey is administered twice each year and is limited to institutions that opt-in by paying to participate. Institutions decide survey administration methods, which may explain variation in response rates by institution (19–36%) (ACHA n.d.). For fall 2013, the mean response rate was 20% (ACHA 2014). This study received an exempt status from the university's Institutional Review Board.

Data were from fall survey periods (2008–2013, N = 179,961) and restricted to females (N = 116,627) and those 18–24 years (N = 97,376). List-wise deletion was used for missing data, which accounted for < 4% of the sample. The final dataset included 92,578 women.

Measures

LARC use was defined as IUD or a subdermal hormonal implant use at last vaginal sex encounter. Additional categories of contraception use at last vaginal sex were operationalized as: *any contraception* (yes to any contraceptive method use), *short-acting reversible contraception* (SARC: pill, shot, patch, or ring), *condom* (male or female condom), and *other contraception* (diaphragm/cervical cap, contraceptive sponge, spermicide, fertility awareness, withdrawal, sterilization, or other method). Covariates that have been used in previous studies (Daniels et al. 2014; Ernst et al. 2015) were included in this analysis: *age* (18–20 and 21–24 years), *race/ethnicity* (white non-Hispanic, black non-Hispanic, Asian, multi-racial, other, Hispanic), *sexual orientation* (heterosexual, sexual minority), *relationship status* (not in relationship; in a relationship, not living together; in a relationship, living together; married/partnered; other), and *insurance status* (insured or not insured). NCHA modified race/ethnicity variables in 2011; therefore, these demographic variables are segmented into two time periods, 2008–2010 and 2011–2013.

Statistical Methods

Frequencies of contraceptive use were calculated by study year and bivariate regression analyses were used to assess contraceptive use trends. To evaluate trends of each contraceptive method, adjusted logistic regression models were estimated controlling for known factors around contraceptive use, such as effects of age, race/ethnicity, sexual orientation, relationship status and insurance status (Abraham et al. 2015; Finer et al. 2012; Peipert et al. 2011). To examine sociodemographic sub-group trends in LARC use, logistic regression models were utilized to assess the effect of year on LARC use in each stratum. Data were analyzed using SAS 9.4.

Results

Sample Characteristics

The majority of participants identified as non-Hispanic white (67%) and were between ages 18 and 20 years (67%). Women mostly identified as heterosexual (93%) and had health insurance (94%). More than half of women reported not being in a relationship (52%). In 2013, less than half of women reported using *any contraception* at last vaginal sex, 35% of women reported using *SARC* and 33% of women used a condom (Fig. 1). Overall, among contraception users, only 2.5% of college women reported using a LARC method (Table 1) and IUDs were used more than implants (90 vs. 10%, *data not shown*).

Trends in Contraceptive Use

Condoms and *any contraception* did not significantly change in use from 2008 to 2013; however, *SARC* decreased, while *other contraception* and *LARC* increased. Specifically, LARC use significantly increased each year and doubled from 2008 to 2013. Data from fall 2013 showed that more college women reported LARC use compared to 2008 (aOR = 2.62 95% CI 2.23–3.07). In 2013, *other contraceptive* method use showed small, yet significant increases and LARC use significantly increased. There were no statistically significant changes in *SARC* and *condom* use over time after adjusting for the effects of covariates (Table 1).

LARC Use by Sociodemographic Sub-groups

Given the significant increase in LARC use between 2008 and 2013, a sub-group analysis was conducted to identify LARC trends among demographic sub-groups. This revealed LARC use significantly increased across sociodemographic factors (Table 2).

Race/Ethnicity

Among race categories, only women who identified as Asian or other race did not experience increases in LARC use. However, in 2011 women who identified as white, bi/multiracial or Hispanic had significant increases in LARC use compared to their counterparts in 2008. Those who identified as black were 2.5 times more likely to use LARC in 2013 compared to 2011.

Fig. 1 Contraception use among U.S. college women by year, NCHA-II 2008–2013. In 2013, less than half of women reported using any contraception at last vaginal sex, 35% of women reported using short-acting reversible contraception (SARC), 33% of women used a condom, 20% an "other" form of contraception such as barrier or other natural method, and 4% of women reported using a form of long-acting reversible contraception
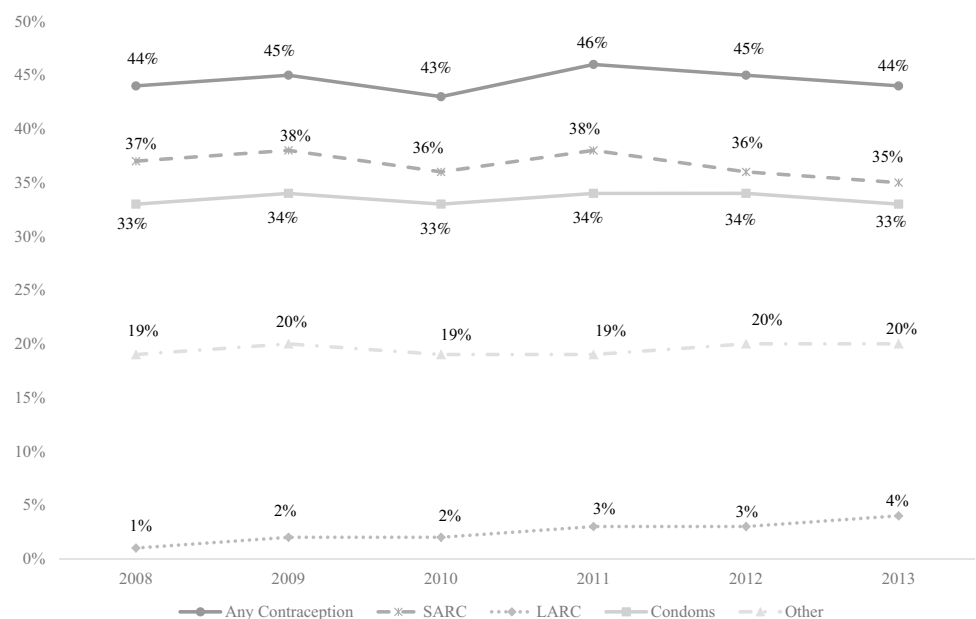
Table 1 LARC use trends over time among college women in the U.S., NCHA-II 2008–2013

	2008			2009			2010			2011			2012			2013		
	N	%	aOR (95% CI)[f]	N	%	aOR (95% CI)[f]	N	%	aOR (95% CI)[f]	N	%	aOR (95% CI)[f]	N	%	aOR (95% CI)[f]	N	%	aOR (95% CI)[f]
Any contraception[a]	6706	45	1.00 (ref)	6753	45	1.04 (0.99–1.09)	6564	43	**1.06 (1.01–1.11)**	6781	46	**1.07 (1.02–1.13)**	6841	45	**1.09 (1.03–1.14)**	7324	44	1.04 (0.99–1.09)
LARC[b]	209	1	1.00 (ref)	309	2	**1.43 (1.20–1.71)**	299	2	**1.50 (1.26–1.80)**	433	3	**2.07 (1.75–2.45)**	456	3	**2.23 (1.90–2.64)**	598	4	**2.62 (2.23–3.07)**
SARC[c]	5652	37	1.00 (ref)	5658	38	1.03 (0.98–1.08)	5484	36	1.05 (1.00–1.11)	5665	38	1.05 (1.00–1.10)	5646	37	1.04 (0.99–1.10)	5941	36	0.98 (0.94–1.03)
Condom[d]	5135	33	1.00 (ref)	5050	34	1.02 (0.97–1.07)	5141	33	1.04 (0.99–1.09)	4990	34	1.01 (0.97–1.06)	5215	34	1.05 (1.00–1.10)	5503	33	1.00 (0.95–1.05)
Other contraception[e]	2891	19	1.00 (ref)	2967	20	1.06 (1.00–1.12)	2927	19	1.07 (1.00–1.13)	2854	19	1.02 (0.96–1.08)	3048	20	**1.09 (1.03–1.16)**	3317	20	**1.09 (1.03–1.16)**

Bold values indicate significance of p < 0.05

[a] Any contraceptive use at last vaginal sex
[b] Intrauterine device or a subdermal hormonal implant
[c] Pill, shot, patch, ring
[d] Male or female condom
[e] Diaphragm/cervical cap, contraceptive sponge, spermicide, fertility awareness, withdrawal, sterilization, other method
[f] Adjusted for age, race/ethnicity, sexual orientation, relationship status, and insurance status

Age

Overall, LARC use significantly increased among age categories; women ages 21–24 years were more likely to use LARC in 2013 than 2008 (OR = 3.23 95% CI 2.50–4.19) as were those ages 18–20 years (OR = 2.24 95% CI 1.83–2.75).

Sexual Orientation

Compared to 2008, heterosexual college women and sexual minority college women reported LARC use more in 2013. College women that identified as heterosexual were nearly two times more likely to report LARC use in 2013 compared to 2008; and college women who identified as a sexual minority were more than three times as likely to report using a LARC method.

Relationship Status

LARC use significantly increased among women in all relationship types from 2008 to 2013 except for those who were included in the *other relationship* category. Women who were not in a relationship were twice as likely to report LARC use in 2013 than 2008. Notably, those who were in a relationship and cohabiting were almost four times more likely to report LARC use in 2013 than 2008.

Insurance Status

Over time, women who were insured and those who were not insured showed higher levels of LARC use, and those who reported having no insurance were more than three times as likely to report using LARC in 2013 than 2008.

Discussion

We identified trends in LARC use among college women from years 2008 to 2013. Findings from this study demonstrated that LARC use has consistently increased among college women from 2008 to 2013. In 2013, college women were 2.6 times more likely to report using a LARC method at last vaginal sex compared to 2008. Additionally, less common contraceptive methods (e.g., diaphragm, cervical cap) had a slightly significant increase between 2008 and 2013; thus, suggesting college women are using non-hormonal methods to prevent pregnancy. *SARC, condoms* and *any contraception* either decreased or remained stable, which could indicate satisfaction among current contraception users or that users are switching to different methods.

Although LARC are recommended for young women (AAP 2014; ACOG 2012), results from this study show that oral contraceptive pills and male condoms are more

Table 2 Sociodemographic characteristics and odds of LARC use among college women in the U.S. by year, NCHA-II 2008–2013

	2008			2009			2010			2011			2012			2013		
	N	(%)	OR	N	(%)	OR	N	(%)	OR	N	(%)	OR	N	(%)	OR	N	(%)	OR
Race-ethnicity[a]																		
White, non-Hispanic	149	71	1.00 (ref)	214	69	**1.55 (1.26–1.90)**	186	62	**1.42 (1.14–1.76)**	333	77	1.00 (ref)	302	66	0.93 (0.79–1.08)	393	66	1.16 (1.00–1.33)
Black, non-Hispanic	15	7	1.00 (ref)	38	12	1.77 (0.95–3.18)	30	10	0.81 (0.35–1.87)	9	2	1.00 (ref)	27	6	**2.54 (1.19–5.45)**	41	7	**2.54 (1.23–5.26)**
Asian	12	6	1.00 (ref)	11	4	0.84 (0.37–1.91)	21	7	1.14 (0.56–2.32)	15	3	1.00 (ref)	19	4	1.07 (0.54–2.12)	22	4	1.26 (0.65–2.45)
Bi/multi-racial	17	8	1.00 (ref)	30	8	1.82 (0.98–3.38)	30	10	1.66 (0.91–3.03)	42	10	1.00 (ref)	51	11	1.07 (0.71–1.62)	73	12	1.38 (0.94–2.03)
Other	3	1	1.00 (ref)	8	3	2.75 (0.72–10.46)	5	2	1.84 (0.44–7.76)	5	1	1.00 (ref)	11	2	1.83 (0.63–5.33)	8	1	1.57 (0.51–4.86)
Hispanic	13	6	1.00 (ref)	12	4	1.02 (0.46–2.25)	27	9	1.60 (0.82–3.13)	29	7	1.00 (ref)	46	10	1.39 (0.87–2.23)	61	10	1.39 (0.89–2.18)
Age (years)																		
18–20	136	65	1.00 (ref)	158	51	1.26 (1.00–1.59)	177	59	1.24 (0.99–1.55)	201	46	1.00 (ref)	222	49	**1.74 (1.41–2.18)**	297	50	**2.24 (1.83–2.75)**
21–24	73	35	1.00 (ref)	151	49	**1.96 (1.48–2.60)**	122	41	**1.92 (1.43–2.58)**	232	54	1.00 (ref)	234	51	**2.93 (2.24–3.82)**	301	50	**3.23 (2.50–4.19)**
Sexual orientation																		
Heterosexual	187	89	1.00 (ref)	279	90	1.49 (0.85–2.61)	274	92	1.21 (0.66–2.16)	401	93	1.00 (ref)	400	88	**2.01 (1.22–3.31)**	533	89	**1.88 (1.15–3.07)**
Sexual minority	22	11	1.00 (ref)	30	10	**1.55 (1.28–1.86)**	25	8	**1.47 (1.22–1.77)**	32	7.39	1.00 (ref)	56	12	**2.22 (1.86–2.64)**	65	11	**2.76 (2.34–3.27)**
Relationship status																		
Not in a relationship	82	39	1.00 (ref)	93	30	1.25 (0.94–1.68)	88	29	1.05 (0.77–1.41)	131	30	1.00 (ref)	137	30	**1.62 (1.23–2.13)**	199	33	**2.19 (1.69–2.84)**
In relationship, not living together	81	39	1.00 (ref)	97	31	1.26 (0.94–1.70)	125	42	**1.60 (1.20–2.11)**	168	39	1.00 (ref)	209	46	**2.74 (2.11–3.55)**	286	44	**3.27 (2.55–4.21)**
In relationship, living together	14	7	1.00 (ref)	45	15	**2.66 (1.45–4.88)**	38	13	**2.83 (1.52–5.27)**	67	15	1.00 (ref)	64	14	**4.42 (2.45–7.94)**	67	11	**3.72 (2.07–6.67)**
Married/partnered	22	11	1.00 (ref)	56	18	**1.81 (1.09–3.01)**	37	12	**1.90 (1.10–3.27)**	52	12	1.00 (ref)	30	7	1.77 (1.00–3.12)	49	8	**2.49 (1.48–4.17)**
Other relationship	10	5	1.00 (ref)	18	6	1.50 (0.68–3.29)	11	4	1.14 (0.78–2.71)	15	3	1.00 (ref)	16	4	2.11 (0.94–4.72)	17	3	2.0 (0.89–4.39)
Insurance coverage																		
Insured	198	95	1.00 (ref)	274	89	**1.45 (1.21–1.75)**	278	93	**1.42 (1.18–1.71)**	392	91	1.00 (ref)	423	93	**2.17 (1.83–2.57)**	556	93	**2.66 (2.26–3.13)**
Not insured	11	5	1.00 (ref)	35	11	**2.85 (1.44–5.65)**	21	7	1.72 (0.83–3.60)	41	9	1.00 (ref)	33	7	**3.07 (1.54–6.11)**	42	7	**3.16 (1.62–6.78)**

Bold values indicate significance of $p < 0.05$

[a] Referent group for race categories 2009–2011 was 2008 and referent group for 2012–2013 was 2011

commonly used. Data from NCHA fall 2013 showed that 54% of female respondents reported using a form of contraception at last vaginal sex (ACHA 2014), which is higher than the number using contraception in this sample. In general, LARC use lags behind these more easily accessible methods as college women may be less familiar with them (Hall et al. 2015). LARC use for this study was measured as use of an IUD or implant; however, when women choose a LARC method, more often it is an IUD (Kavanaugh et al. 2015a, b), which is consistent with these findings. Conversely, some women, including younger women, may perceive IUDs as intrusive and a method previously restricted to women who had given birth, which may cause implants to seem like a more suitable alternative (Fleming et al. 2010).

Furthermore, this study revealed that LARC use has increased among specific sub-groups. Although black women in this current sample used LARC more in 2013 than 2010, use among black women was lower than other racial/ethnic groups. In fact, the proportion of LARC users in this sample is still below national averages for all racial and ethnic groups women in this study. LARC methods were only used by 4% of the sample and the overwhelmingly majority of LARC users identified as white. The current literature highlights differences in LARC use, which are typically negligible rates, among black women (Daniels et al. 2014; Kavanaugh et al. 2015a, b). Researchers have attributed potential differences by race and ethnicity to limited knowledge of LARC among black women, including those in college (Hall et al. 2016), cultural beliefs, and potential medial mistrust (Rocca and Harper 2012). Future research exploring the psycho- and socio-cultural barriers to LARC use is needed.

Current rates of LARC use among young women are still low as compared to older women in the general population (Daniels et al. 2014). This study found that <5% of college women in 2013 were using a LARC method at last intercourse, which is fairly consistent with 5% of women ages 15–24 years who were using a LARC method 2011–2013 (Daniels et al. 2014). Older women 25–34 years had nearly double (11.1%) the LARC use rates of younger women included in the same sample (Daniels et al. 2014). The age range of women in this sample is less robust than in studies of the general population, yet we see a difference in LARC use by age. We might assume that older college women may have longer term and more stable relationships than younger women for which LARC may be more suitable to them. Previous research on pregnancy ambivalence has shown that although young women may want to prevent pregnancy they may think LARC is "too permanent" or too effective a method (Higgins 2017). Furthermore, women believed that LARC was too much of a commitment for a person who was not in a serious relationship (Higgins 2017). Other researchers have described that younger women may

also prefer using coitus-dependent methods or that they may favor methods that they can discontinue independent of a provider (Sundstrom 2012). These preferences for contraception may vary by relationship status and other romantic and personal factors (i.e. woman's perceived life stage or pregnancy ambivalence) that were not assessed in this study given the limitations of the dataset.

Age may also influence women's knowledge and sexual and reproductive health literacy. Like women, in the general population, those in college may have low health literacy related to contraception. Women may overestimate the efficacy of less effective methods such as SARC methods and have misconceptions about less familiar methods, such as LARC. In a sample of college women, the majority of women incorrectly believed that IUDs can cause abortion if a woman became pregnant and that IUDs can lead to infertility (Hall et al. 2016). Findings from other studies substantiate claims related to young women's misconceptions about LARC methods (Brown et al. 2013; Sundstrom et al. 2015). Regarding relationship status, women not in a relationship, women in relationships and not cohabiting with partners, women cohabiting with partners, and married women reported increased rates of LARC use. Studies on LARC use have consistently shown that cohabitation with sex partners is significantly associated with LARC use (Finer and Zolna 2016; Jones et al. 2015; Kavanaugh et al. 2015a, b). While cohabiting women are more likely to use LARC than their counterparts in other types of relationships (Kavanaugh et al. 2015a, b), they are also more likely to experience unintended pregnancy than women in different relationships (Finer and Zolna 2016). In a study that assessed effective contraception use and continuation, women who were in longer term relationships were more likely to use effective methods than women in casual relationships (Upadhyay et al. 2016). Additionally, college women in relationships are also less likely to use LARC methods with condoms (dual use) (Thompson et al. 2017). Monogamy is a protective factor against the risk of sexually transmitted infections, however, multiple sex partners and serial monogamy could increase a woman's risk (Fielder and Carey 2011; Kelley et al. 2003). In the current study, partnered women of all relationship types experienced increased rates of LARC use, including women not in relationships who may engage in casual sex and hook-ups (Fielder and Carey 2011). Therefore, providers should assess women's risk of unintended pregnancy and STIs regardless of relationship status.

Lastly, much of the literature cites lack of insurance as a barrier to LARC use, which may be mitigated by the increasing number of public and private funding mechanisms available to make LARC methods more accessible and affordable to at-risk and disadvantaged women (Peipert et al. 2011; Ricketts et al. 2014). Pilot projects and feasibility studies, which aimed to increased access to contraception,

particularly LARC, diminished or reduced cost barriers for reproductive-age women thus increasing the number of women choosing LARC (Dehlendorf et al. 2010; Eisenberg et al. 2013; Ricketts et al. 2014). College women may face financial constraints, which may make LARC use less likely. Furthermore, having insurance does not ensure access to LARC on campus as some on-campus health clinics may not accept students' insurance. However, among this sample of college women, LARC use rates increased regardless of insurance status.

This study has its limitations including self-report data, which may present issues related to social desirability and accuracy of students' recall. Only colleges and universities that paid to participate in the surveillance system were included in this study, which introduced sampling bias and limited the generalizability of study findings to all higher education institutions (Rahn et al. 2016). Additionally, these data did not provide information as to when women had a LARC method inserted, which could have occurred prior to college attendance.

Notwithstanding the above limitations, this study fills a gap in the research and describes trends in LARC use among a population at risk for unintended pregnancy. With a large majority of young adult women attending college, colleges and student health service departments have an opportunity to promote positive sexual and reproductive health outcomes for college women (Cheng and Van Leuven 2015) but may first need to address barriers to LARC information and access. Healthy Campus 2020's student objectives aim to improve family planning for college women by reducing unintended pregnancy and increasing number of students who use contraception (ACHA 2012). Currently, limited data exists around structural and institutional barriers to contraception for college women and their partners. One study showed that 70% of colleges surveyed reported having a student health center on site and nearly 20% reported offering LARC to its students (Habel et al. 2018). Regional differences in contraceptive access for college women could diminish if colleges and universities are equipped to provide comprehensive and timely contraceptive services. When institutions are unable to provide the full range of necessary services, collaborations between community-based providers or local health departments could augment service delivery. Additionally, barriers to LARC use persist and future interventions should consider how to appropriately educate college women about contraceptive options, increase affordability and access to LARC methods, and incorporate patient-centered strategies into contraceptive counseling (Cheng and Van Leuven 2015).

This study adds to the current literature regarding LARC use among college women. College attendance presents opportunities to provide targeted services to young women and improve health and wellness outcomes across the life course. Information is needed to assess additional factors that influence college women's decision to use LARC and strategies to address misinformation and misconceptions that may persist throughout this population. Findings from this study could also have policy implications for colleges to offer and expand women's access to contraceptive information and services on campus. Ultimately, future work should seek to examine and eliminate barriers to college women choosing a contraceptive method they believe works best for them.

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