Birth Control Access and Selection among Youths Experiencing Homelessness in the United States: A Review

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Youths experiencing homelessness (YEH) become pregnant at five times the general population rate. Education, social, and health care systems struggle to adequately address this young community's sexual and reproductive health needs, yet social workers are well positioned across sectors to address their sexual and reproductive health and well-being. A growing body of literature exists on the factors affecting YEH's access and selection of birth control, prompting the present review that aimed to understand this process and inform better attuned sexual and reproductive health approaches. Using a systematic search and analytic approach, we retrieved 203 articles, of which 23 met inclusion criteria. Key findings emerged across socioecological levels, including barriers and facilitators to condom use; the differential impact on YEH of hormonal birth control side effects; and the devastating effects of economic insecurity leading to sexual exploitation, survival sex, and exposure to violence. Implications include the need for multilevel intervention that addresses youths' knowledge, attitudes, and behavior as well the need to improve social norms and system design to provide better attuned care for YEH.

KEY WORDS: *birth control; contraception; homelessness; sexual health; youths*

Youths experiencing homelessness (YEH) have one of the highest subgroup rates of pregnancy in the United States (Dworsky, Morton, & Samuels, 2018; Greene & Ringwalt, 1998), which has the highest rate of adolescent pregnancy compared with similarly developed nations (Sedgh, Finer, Bankole, Eilers, & Singh, 2015). In addition, YEH suffer from poorer health overall in comparison to stably housed youths and exhibit more risk-taking behavior compared with stably housed peers (Ensign & Santelli, 1998). This research suggests that the sexual health needs of YEH are likely largely being unmet by current U.S. medical, educational, and social services. Yet, social workers and their allied colleagues are well positioned to address such needs across sectors. To inform efforts to improve the quality of sexual and reproductive education, prevention services, and health care provided to YEH, a thorough examination of factors relevant to how YEH access and select birth control in the current system is required.

The rate of unplanned/unintended and adolescent pregnancies among YEH is significant: 44 percent of female YEH ages 18 years to 25 years are pregnant or parenting (Dworsky et al., 2018). Although resilient in the face of great challenges, YEH face enormous daily stressors, including struggling to meet basic food and shelter needs as well as being at risk for sexual assault (Coates & McKenzie-Mohr, 2010; Tyler, Whitbeck, Hoyt, & Cauce, 2004). YEH frequently engage in sexual risk behaviors, such as early sexual debut, and are often sexually exploited, such as being forced to engage in survival sex (that is, exchanging sex for basic needs like food or shelter; Greene & Ringwalt, 1998).

To better serve the population of YEH through attuned direct practice, policy, and research that will ultimately improve sexual and reproductive health equity for this population, a review of the existing literature is critical. This article aims to provide a scoping review of the literature regarding factors that affect YEH's access to and selection of birth control.

METHOD

Definitions

We used the definition of "homelessness" provided by the U.S. Department of Housing and

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Urban Development (2011), which defined *homeless people* as

- those who are living in places not meant for humans to live, such as in emergency shelter or in transition housing, or exiting an institutional place of temporary residence where they resided for up to 90 days;
- people who are losing their primary place of residence at night within the next 14 days and who lack resources to secure an alternative location;
- families with children or unaccompanied youths who have not had a stable place of residence in the past 60 or more days; and
- people fleeing or attempting to flee domestic violence situations who do not have an alternative place of residence or the resources needed to secure one.

Birth control is defined broadly to encompass any form of contraceptive method whether hormonal or nonhormonal; non-Western forms of birth control, such as herbal practices; and abstinence. The term "youths" refers to adolescents and emerging adults ages 12 to 25 years.

The socioecological model provides a clear framework for examining factors related to YEH's access and selection of birth control at the intrapersonal, interpersonal, and systems levels (see, for example, Adebayo & Gonzalez-Guarda, 2017). As such, the socioecological model was used as an organizing framework for literature analysis and presentation of the findings. The findings of this review are not designed to provide a comprehensive description of youths' lived experiences of accessing and selecting birth control at different levels of the socioecological model. Rather, it is an overview of common factors.

Article Selection and Results Categorization

All articles included in this review appeared in peer-reviewed journals; reported findings from original research pertaining to the experience of assessing and selecting birth control among YEH; were written in English; and used data collected in the United States. Articles that were unavailable through the University of Maryland library or interlibrary loan services were not included in this review. The search was not limited by publication year.

In December 2017, we searched three robust databases: EBSCO, Public Health ProQuest, and PubMed. We conducted each search using keywords tailored to each database, including "YEH," "homeless teenagers," "street youth," and "birth control." After removing duplicates and articles falling outside the preceding criteria based on a review of study abstracts, we thoroughly analyzed the remaining sample of 23 articles. Figure 1 details our search results and article exclusion process in a PRISMA (preferred reporting items for systematic reviews and meta-analyses) flow diagram (Moher, Liberati, Tetzlaff, & Altman, 2009).

Results are organized into one of three levels of the socioecological model: (1) intrapersonal, (2) interpersonal, or (3) structural factors related to YEH's experience of accessing and selecting birth control. *Intrapersonal factors* are those pertaining to the individual's thoughts, feelings, and behaviors. *Interpersonal factors* are those pertaining to the individual's interactions with other people, such as their intimate partners, friends, and family. *Structural factors* are those pertaining to the youth's interactions with larger social and institutional systems or, more broadly, the functioning of these systems as it pertains to the access and selection of birth control. Articles with findings that pertained to more than one level or subcategory are referenced in the Results section more than once to accurately represent the youths' experiences. See Table 1, which summarizes key information for each article, including study authors, date, research question(s), research design, sample, and findings.

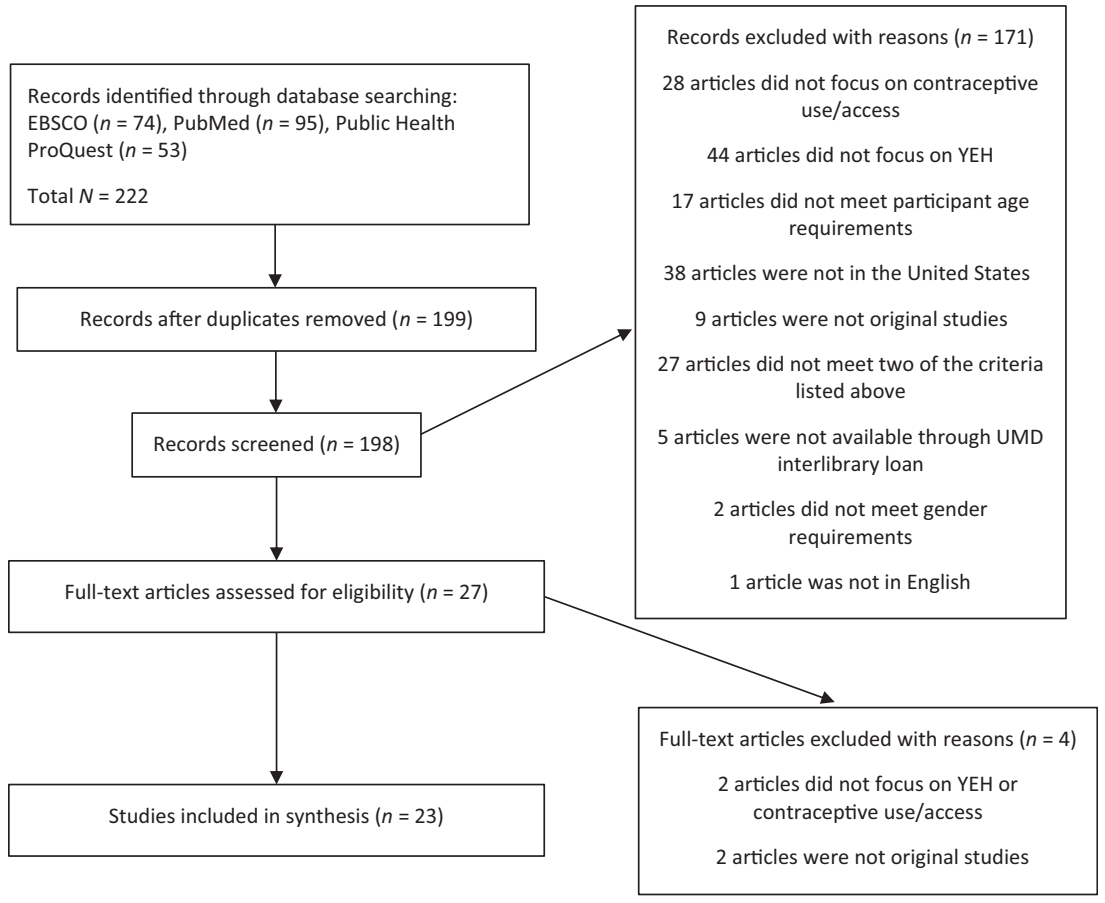
RESULTS: MULTILEVEL FACTORS AFFECTING HOW YOUTHS ACCESS AND SELECT BIRTH CONTROL

A detailed analysis of the extant peer-reviewed literature revealed an array of intrapersonal, interpersonal, and structural factors affecting how YEH access and select birth control in the United States. Findings are organized by socioecological level as follows.

Intrapersonal Factors

Youths who had ever run away from home were more likely than youths who had never run away to have unprotected sex (Mayfield Arnold, Song, Legault, & Wolfson, 2012). YEH used multiple forms of contraception, and condom use was the most common (Forst, 1994). Although condoms

Figure 1: Search Results



Notes: YEH = youths experiencing homelessness; UMD = University of Maryland.

were the most commonly used form of birth control, many YEH elected to not use condoms: Halcón and Lifson (2004) found that of the sexually active male YEH in their study, 55.9 percent reported not wearing a condom the last time they had sex. Decisions about condom use were affected by multiple intrapersonal level factors shaped by YEH's past and present experiences. Male youths tended to be more likely than female youths to use condoms, and men with 10 or more years of education or who were concerned about HIV were more likely to use (Anderson, Freese, & Pennbridge, 1994). MacKellar et al. (2000) found that male YEH were less likely to use a condom when they reported a weaker internal locus of control; if they were neglected or physically abused in the past; and if they had low self-esteem, low self-control, and little social support. However, female YEH were less likely to use condoms when they had a stronger internal locus of control (MacKellar et al., 2000).

Factors such as not engaging in exchange sex (Anderson et al., 1994), knowing their HIV status, having fewer lifetime sexual partners, and using alcohol or marijuana less frequently (MacKellar et al., 2000) were also associated with female youths' being less likely to use condoms. Furthermore, although they acknowledged the importance of using female condoms when male condoms were unavailable, female YEH typically did not report use of the female condom at all, and the stigma surrounding the female condom affected their decision of whether to use this contraceptive method (Haignere et al., 2000). However,

Table 1: Review Summary—How Youths Experiencing Homelessness Access and Select Birth Control

Article Number	Authors (Year)	Research Questions	Research Design	Sample	Findings	Socioecological Level
1	Anderson, Freese, & Pennbridge (1994)	What is the prevalence of sexual risk behaviors and the correlates of condom use among homeless youths?	Cross-sectional	$N = 610$ homeless youths ages 13 to 23 years from five drop-in centers in Hollywood, CA	45% of male and 30% of female youths used a condom at last sex. A higher percentage of HIV-positive male youths (78%) reported condom use at last sex when compared to HIV-negative male youths and male youths who had not been tested (43%). A higher percentage of male youths who had completed the 10th grade or higher (49%) and those who self-identified as homosexual (58%) reported condom use at last sex compared to those less educated and of a different sexual orientation. Among female youths, higher rates of condom use were reported by those who engaged in exchange sex (44%) and survival sex (43%) as well as those ages 13 to 14 years (47%). Lower rates were reported by women who had ever been pregnant (20%) and who had left home two or more years ago (19%). Male youths with 10 or more years of education ($OR = 2.63$) and those concerned about HIV ($OR = 1.91$)—indicated via having had an antibody test—had an increased odds of condom use. Among female youths, those engaging in exchange sex had 3.16 times the odds of condom use. Each year increase in age ($OR = .71$) and having had a past pregnancy ($OR = .27$) decreased the odds of condom use.	Intrapersonal
2	Craddock, Rice, Rhoades, & Winetrobe (2016)	Are parental relationships always protective factors for sexual risk-taking behaviors among Black, Latinx,	Cross-sectional	$N = 754$ Black, Latinx, and White homeless youths ages 14 to 25 years in Los Angeles	Black youths' sexual risk behaviors decreased when they talked to a parent about sex, condom use, and HIV testing. Latinx youths who had an emotionally supportive parent were less likely to have multiple sexual partners.	Interpersonal

(Continued)

Table 1: Review Summary—How Youths Experiencing Homelessness Access and Select Birth Control (Continued)

Article Number	Authors (Year)	Research Questions	Research Design	Sample	Findings	Socioecological Level
		and White homeless youths?			For White youths, it was reported that those who had a parent to talk to were more likely to use a condom.	
3	Dasari et al. (2016)	What are the barriers to uptake of LARC among homeless young women?	Cross-sectional; mixed-methods	$N = 15$ women between the ages of 18 and 24 years who had histories of homelessness	The main barriers to LARC uptake among homeless young women were the mistrust of health care workers and the inadequate services received from health care workers. The mistrust of health care workers was rooted in the participants' being concerned about not receiving the truth about LARC's side effects, such as bleeding, weight gain, pain of insertion, and infertility. Money was not a reported barrier: When it was provided for free, the likelihood of use was still less than 50%.	Structural
4	Ensign (2000)	What are the attitudes and behaviors of homeless women when it comes to health issues and contraception?	Cross-sectional; semi-structured interviews and focus groups	$N = 20$ homeless female youths ages 15 to 23 years in Seattle	Condoms were reported to be the most often used form of birth control because of availability. Pregnancy, depression, and illness were the top three health issues identified. Irregular menses was discussed as a problematic side effect to contraception.	Intrapersonal and structural
5	Ensign & Santelli (1997)	How do the risk-taking behaviors, health status, and access-to-care issues of homeless youths and foster youths compare?	Cross-sectional	$N = 109$ shelter-based homeless youths; $n = 41$ street youths; $n = 68$ foster youths	Street youths were more likely to report previous exposure to violence and forced sex than shelter-based and foster youths. Street youths had riskier behaviors and poorer access to health care than foster youths.	Structural
6	Ensign & Santelli (1998)	What factors contribute to homeless adolescents' health status, risk-taking behaviors, and access-to-care issues compared to the	Cross-sectional	$n = 109$ homeless youths and $n = 1{,}010$ non-homeless youths ages 12 to 17 years in Baltimore	Compared to the general adolescent population, homeless youths were involved in riskier behaviors and had worse physical and mental health. Homeless adolescents were 7 times more likely to be depressed, 1.8 times more likely to use	Intrapersonal and structural

(Continued)

Table 1: Review Summary—How Youths Experiencing Homelessness Access and Select Birth Control (Continued)

Article Number	Authors (Year)	Research Questions	Research Design	Sample	Findings	Socioecological Level
		general adolescent population?			the emergency room, and 2.6 times more likely to have a history of pregnancy.	
7	Ensign & Panke (2002)	What are the reproductive health-seeking behaviors, sources of advice, and access-to-care issues among homeless adolescent women?	Cross-sectional; semi-structured interviews and focus groups	$N = 20$ female youths ages 14 to 23 years in Seattle	Sources of advice primarily included other women, whether friends, mothers, or professional adults. Regarding health-seeking behaviors, participants reported first administering self-treatment for minor injuries instead of immediately going to the doctor. Homeless female youths reported numerous access-to-care issues, including being asked personal questions, facing transportation challenges, experiencing negative characteristics of the clinic (such as clinics being hostile), and observing a lack of trust and respect from doctors.	Intrapersonal and structural
8	Evans, Handschin, & Giesel (2014)	What are the common reasons for utilization of health care services at a free homeless youth clinic?	Retrospective chart review	$N = 744$ clinical encounters for $N = 371$ homeless youths ages 12 to 23 years in Seattle	Female homeless youths were much more likely than male homeless youths to access clinic services for STI testing (18.2% versus 9.8%, respectively) and contraception (17.5% versus not reported).	Structural
9	Forst (1994)	What are the sexual risk profiles of homeless youths in San Francisco, California?	Cross-sectional	$N = 160$ homeless youths M age = 16.6 years, in San Francisco	Age at first sex ranged from 6 years to 18 years ($M = 13.7$ years). Many (48.2%) did not currently use any form of contraception. Condoms were the most commonly used method (42.5%) followed by oral contraceptives (5.6%), and condom and foam use (3.1%).	Intrapersonal and structural
10	Frost & Bolzan (1997)	How do services and programs that deliver contraceptive services to low-income women allocate their funding?	Cross-sectional	$N = 3{,}119$ agencies, including hospitals, health departments, community and migrant health centers, Planned Parenthood	Agencies that received Title X funding were more likely than other agencies to offer free condoms, teach teenagers communication or negotiation skills, operate school-based or school-linked clinics, and serve hard-to-reach groups, such as women who abuse substances,	Structural

(Continued)

Table 1: Review Summary—How Youths Experiencing Homelessness Access and Select Birth Control (Continued)

Article Number	Authors (Year)	Research Questions	Research Design	Sample	Findings	Socioecological Level
				affiliates, and independent agencies	prison inmates, disabled women, and homeless men and women. Title X funded agencies were less likely than other agencies to provide noncontraceptive services. Of agencies that received Title X funding for their family programs, 66% also got maternal and child health block grant funds and social services block grants or community or migrant health center funding.	
11	Halcón & Lifson (2004)	What is the prevalence of sexual risks that make homeless youths susceptible to a variety of short-term and long-term health consequences? What demographics are associated with those risks?	Cross-sectional	$N = 203$ homeless youths ages 15 to 23 years in Minneapolis	Of sexually active males, 55.9% reported not using a condom at the last time they had sex. Of sexually active females, 41.0% reported having more than one male partner in the past month, and 53.2% reported having sex without a condom. Female youths were more likely to report not using barrier protection. Of the youths in the sample, 55% reported two or more of the following risks: sexual intercourse in the past 30 days, multiple partners, nonuse of barrier method during sex, history of STI, and history of survival sex.	Intrapersonal
12	Haignere et al. (2000)	What are adolescents' attitudes about female condoms compared to male condoms before and after a brief female condom-focused educational intervention?	Experimental	$N = 65$ high-risk, sexually active adolescents ages 13 to 18 years	Before the intervention, almost 100% of participants had heard of the female condom but only 2% used it. Reasons participants reported that they did had not used the female condom were because their partners forbade it and threatened them if they wanted to use it. After the intervention, approximately 9% used the condom, nearly 20% took it out of the wrapper, and almost 12% stated they would use it in the future.	Intrapersonal
13		Which are the HIV risk factors for homeless	Cross-sectional			Intrapersonal

(Continued)

Table 1: Review Summary—How Youths Experiencing Homelessness Access and Select Birth Control (Continued)

Article Number	Authors (Year)	Research Questions	Research Design	Sample	Findings	Socioecological Level
	T. P. Johnson, Aschkenasy, Herbers, & Gillenwater (1996)	youths in a large urban area and the associated behaviors with these factors?		$N = 196$ homeless youths ages 13 to 21 in Chicago	The majority of the sample reported having multiple sexual partners in the 12 months preceding the interview. The majority of the sample reported at least one AIDS risk behavior, and 11.2% reported four or more. Of sexually active youths, 28.6% reported irregular condom use.	
14	R. J. Johnson, Rew, & Sternglanz (2006)	What are the differences in sexual self-concept between males and females who reported a history of sexual abuse and those who did not? What are the differences in personal resources for sexual health between those who self-reported a history of sexual abuse and those who did not?	Cross-sectional	$N = 371$ homeless youths ages 16 to 23 years from urban central Texas	Female participants were more likely than males to report being sexually abused. There were no statistically significantly differences in sexual self-concept between abused and non-sexually abused participants. Participants who self-reported abuse scored lower and reported engaging in more sexual risk-taking compared to non-sexually abused participants. Participants who self-reported non-sexual abuse had a significantly greater future time perspective, had greater self-care practices, and reported engaging in more sexual self-care behaviors compared to sexually abused participants. There were no statistically significant differences between sexually abused and non-sexually abused participants pertaining to knowledge of STIs, intention to use condoms, self-efficacy to use condoms, and assertive communication.	Intrapersonal
15	Kennedy, Tucker, Green, Golinelli, & Ewing (2012)	What are the influences of risky HIV sexual behavior among homeless youths?	Sequential mixed-methods	$N = 40$ homeless youths ages 13 to 23 in Hollywood and Westside regions of Los Angeles County	All youths were able to name 25 people within their social network and complete the personal network interview. Partner connectedness was indirectly related to condom use.	Intrapersonal and interpersonal

(Continued)

Table 1: Review Summary—How Youths Experiencing Homelessness Access and Select Birth Control (Continued)

Article Number	Authors (Year)	Research Questions	Research Design	Sample	Findings	Socioecological Level
					Three factors predicted unprotected sex: social network, school attendance among people in their social network, and people in their social network who were drinking partners.	
16	Kral, Molnar, Booth, & Watters (1997)	What is the prevalence of sexual risk behaviors and substance use among homeless youths?	Cross-sectional	$N = 775$ homeless or runaway youths younger than 19 years old in San Francisco, New York City, and Denver	Homeless youths participated in a variety of risky sexual behaviors: A majority of the sample engaged in sexual intercourse under the influence of drugs or alcohol. Of these individuals, 56% reported not using a condom when this occurred. Of the sample, 97% reported drug or alcohol use, and 76% used drugs besides alcohol in the past 3 months.	Intrapersonal
17	MacKellar et al. (2000)	Are there gender differences in sexual behaviors and factors associated with not using condoms among homeless and runaway youths?	Cross-sectional	$N = 879$ heterosexual sexually active homeless and runaway youths ages 13–20 years	Among males, not wearing a condom was predicted by previously causing one or more pregnancies, having lower perceived self-control, using marijuana more, having higher reported physical abuse, knowing someone who had died from AIDS, and having lower reported sociability. Among females, not using condoms was predicted by using marijuana more, having less social support, understanding HIV status, and having been forced to have sex. Although there were many differences reported, both genders reported not using a condom because of only having sex with one partner.	Intrapersonal and interpersonal
18	Mayfield Arnold, Song, Legault, & Wolfson (2012)	What are the risk behaviors of runaway youths who return home?	Cross-sectional	$N = 1{,}191$ youths ages 16 to 21 years	Those with a history of being a runaway were more likely to have a history of sex without using birth control in the past 12 months. Even if youths returned home after having run away, they were still likely to engage in risky behaviors in the future.	Intrapersonal
19	Rice (2010)	How does the presence of condom-using peers in	Cross-sectional	$N = 103$ homeless youths ages 16 to 26 years in	The majority (55%) reported having sex without a condom during last sexual intercourse.	Interpersonal

(Continued)

Table 1: Review Summary—How Youths Experiencing Homelessness Access and Select Birth Control (Continued)

Article Number	Authors (Year)	Research Questions	Research Design	Sample	Findings	Socioecological Level
		the social networks of homeless youths affect condom use? Does this impact vary by location of social tie (home-based versus street-based) and the method used to maintain the social tie (face-to-face versus networking technologies)?		Los Angeles who reported one or more sexual partners in the past three months	Some participants reported having multiple sex partners in the past three months and not using a condom during last sexual intercourse (25%), whereas others reported one sex partner in the past three months and condom use at last sexual intercourse (26%). Those with a street-based, interpersonal tie with a condom-using peer had .30 times the odds of reporting sex without a condom at last intercourse. Those with a home-based, condom-using peer with whom they interacted with electronically had .10 times the odds of sex with multiple partners and sex without a condom as well as 3.5 times the odds of reporting one partner and condom use. Larger social circles were associated with more sexual partners and decreased condom use.	
20	Saewyc & Edinburgh (2010)	Can protective factors be reestablished to improve the developmental trajectory of exploited runaways?	Quasi-experimental	$N = 68$ runaway girls ages 12 to 15 years	There was improvement in school-related factors, risk behaviors and negative health outcomes, and sexual health and risk behaviors. Girls receiving services had higher protective factors and lower risk behaviors at six months, and this was sustained at 12 months follow-up.	Structural
21	Tucker, Sussell, Golinelli, Zhou, Kennedy, & Wenzel (2012)	What are the attitudes and behaviors of homeless youths about pregnancy? What are the psychosocial correlates of those attitudes and behaviors?	Mixed-methods; cross-sectional	$N = 277$ sexually active homeless youths ages 13–24 years (quantitative survey) and $N = 37$ sexually active homeless youths (qualitative interviews)	Youths reported that homelessness would create structural barriers to raising a child. They shared feeling not ready to settle down and that pregnancy would prevent them from particular goals being reached. Youths who were highly motivated to avoid pregnancy were more likely to be using dual contraception and less likely to not use any form of contraception. Of the males, 32% and 44% of the females who were highly	Intrapersonal and interpersonal

(Continued)

Table 1: Review Summary—How Youths Experiencing Homelessness Access and Select Birth Control (Continued)

Article Number	Authors (Year)	Research Questions	Research Design	Sample	Findings	Socioecological Level
					motivated to avoid pregnancy used either no contraception or withdrawal.	
22	Winetrobe et al. (2013)	What is the association between contraceptive service utilization, pregnancy attitudes, and pregnancy history?	Cross-sectional	$N = 386$ homeless youths ages 13–25 at two drop-in centers in Los Angeles	Those with antipregnancy attitudes were significantly more likely to use effective contraception. Those who had access to condoms and birth control were significantly more likely to use them. Those with a high school education were significantly more likely to report using contraception. Youths reported using less highly effective methods and more less effective methods of contraception.	Intrapersonal
23	Yen, Parmar, Lin, & Ammerman (2015)	Are youths who are uninsured aware of and knowledgeable about emergency contraceptives?	Cross-sectional	$N = 439$ youths ages 13 to 25 years in San Francisco; 40% were currently homeless or homeless within the past year	Female youths were more likely than male youths to be aware of emergency contraceptive pills, to correctly identify that emergency contraceptive pills are not an abortion, and to report that they can access emergency contraceptives. There was no significant difference between age groups for awareness of emergency contraceptive and misconception of emergency contraceptives as an abortion pill.	Intrapersonal and structural

Notes: LARC = long-acting reversible contraception; STI = sexually transmitted infection.

Haignere et al. (2000) found that male YEH reported feeling comfortable using female condoms. R. J. Johnson, Rew, and Sternglanz (2006) found no statistically significant differences between self-reported sexually abused and nonsexually abused YEH regarding intention to use condoms or self-efficacy to use condoms.

Previous experience with or attitudes toward pregnancy played a role in the selection of birth control among YEH. Female YEH who were previously pregnant were less likely to have used a contraceptive method at their last sexual encounter, influenced by their perceived reduced postpartum susceptibility to pregnancy (Anderson et al., 1994). Female YEH with antipregnancy attitudes were more likely to adopt effective contraceptive methods (Winetrobe et al., 2013).

Side effects of contraceptive methods were a significant deterrent for YEH (Ensign, 2000). Weight gain, delayed resumption of fertility, and irregular menses were cited as side effects that made it difficult for female YEH to trust hormonal contraceptives (Dasari et al., 2016; Ensign, 2000). Many of these side effects were even more problematic in the context of homelessness as opposed to a stably housed female's lifestyle (Ensign, 2000). Irregular menses was an especially troublesome side effect, making it difficult for YEH to maintain personal hygiene throughout menstruation. Use of the birth control pill also was challenging for many young women experiencing homelessness, because it had to be taken in a consistent manner every day, which was unlikely to be compatible with the marked variability and unpredictability typically experienced by YEH (Ensign, 2000).

Interpersonal Factors

For many YEH, the decision to use or not use contraceptives was based not solely on their own thoughts, feelings, and behaviors but also on interactions within their close relationships. YEH in a committed relationship or who had a single sexual partner typically engaged in riskier sexual behaviors when compared with those who were not in such a relationship (Kennedy, Tucker, Green, Golinelli, & Ewing, 2012; MacKellar et al., 2000). Kennedy et al. (2012) found that each one-point increase in youth relationship commitment led to 6.7 times the odds of unprotected sex. Similarly, MacKellar et al. (2000) found that, among male and female homeless and runaway youths, a larger percentage of those with one sexual partner in the past six months reported not using condoms, compared with those with multiple sexual partners. Furthermore, according to Tucker et al. (2012), YEH's reported level of relationship commitment was positively associated with pregnancy attitudes, so that the greater the commitment, the more positively teen pregnancy was viewed. Tucker et al. (2012) found that relationship commitment was correlated with nonuse of contraception, whereas other interpersonal factors (including the number of relatives in one's network and the number of people in one's network who had risky sex), were not significantly correlated to nonuse of effective contraception. In addition, when a sexual partner held the influential role of "financial provider," they might influence more positive pregnancy attitudes (Tucker et al., 2012).

YEH's families also could play an influential role in shaping their sexual health behavior. Among Black and White YEH, having a parent in one's social network was shown to significantly decrease the odds of condom use during last anal or vaginal sex ($OR = .53$ and $OR = .58$, respectively) (Craddock, Rice, Rhoades, & Winetrobe, 2016). However, among Black YEH, parent–child communication about sex and relationships increased the odds of condom use ($OR = 2.54$; Craddock et al., 2016). This finding suggests that, for Black YEH, prevention efforts should not merely focus on increasing parental involvement, but also focus on the content of the parent–child interactions (Craddock et al., 2016).

Social networks also appeared to have an influential role in informing YEH's opinions about contraception and pregnancy. YEH who had a peer who promoted healthy sexual behaviors were more likely to use condoms (Rice, 2010). The peer could be either living on the streets or be stably housed (Rice, 2010). In contrast, Kennedy et al. (2012) found that social networks did not influence youths' decisions to have unprotected sex but did influence their attitudes toward pregnancy. YEH who had greater contact with peers within their social networks and who regularly attended school had less positive attitudes toward pregnancy (Tucker et al., 2012).

Structural Factors

Within the United States, YEH must overcome systemic obstacles to access and select birth control. Although we found few studies that aimed to explore this topic at the structural level, some studies

directly or indirectly highlighted structural factors that affected how YEH accessed and selected birth control. Those factors included barriers to health care, limited access to comprehensive sexual education, and economic insecurity.

Forst (1994) noted that the U.S. health care system is inefficient in helping vulnerable populations—specifically, YEH—with sexual and reproductive health care because of the country's nearly singular focus on curing diseases and treating medical emergencies. Forst (1994) also noted that rather than focusing on tertiary care, holistic and preventive services should be emphasized, thus complementing current practices by working to reduce the incidence of preventable diseases. To help YEH, Frost and Bolzan (1997) recommended improving accessibility, cost, and quality of health care. These three factors are crucial to provide better sexual and reproductive health care for YEH. Clinics that were more accessible and gave their patients the choice of which contraceptive they received had an increased likelihood of having patients choose more effective contraceptives (Frost & Bolzan, 1997). Furthermore, YEH who were able to have access to free services were more likely to take advantage of them—if they found the services important and relevant in their lives (Evans, Handschin, & Giesel, 2014). As noted by Evans et al. (2014), free health care allowed YEH to take advantage of services to better their lives that they otherwise could not access. Providing access to contraceptives, even if they are not free, significantly increased the likelihood that youths would uptake effective contraception (Winetrobe et al., 2013).

Several studies noted the lack of culturally competent and adequate sexual and reproductive health care for YEH (Dasari et al., 2016; Ensign & Panke, 2002). YEH, as with all subsets of the population, need culturally competent health care (Ensign & Panke, 2002) to obtain optimal health and reach their full life potential. The health care system needs to reduce barriers that YEH often face when interacting with the health care system while also encouraging informed decision-making practices (Dasari et al., 2016). Often, if YEH have a negative relationship with a health care provider, such as receiving inaccurate information or having information withheld from them by a provider, then these youths will be less inclined to uptake birth control, especially long-acting reversible contraception (Dasari et al., 2016).

Yen, Parmar, Lin, and Ammerman (2015) indicated that health care systems need to work to improve the public's perspective about sexual health through educating and reclaiming stereotypes associated with sexual health. In particular, they noted a gap in knowledge about the purpose, access, and proper use of contraceptives among YEH (Yen et al., 2015). Whereas YEH are typically aware of contraceptives generally, persistent gaps in knowledge make it harder for YEH to be fully informed when making a choice about which contraceptive to use (Yen et al., 2015). For example, researchers posited that educating YEH at a young age about the female condom as an additional choice—rather than as a replacement for other types of birth control—may help reduce the stigma associated with the female condom (Haignere et al., 2000). Furthermore, being educated about sexual risk behaviors, negative health outcomes, and sexual health significantly increased protective factors and lowered risk behaviors (Saewyc & Edinburgh, 2010).

Economic insecurity among YEH promoted sexual exploitation, such as *survival sex*, which was defined as "the trading of sex for food, money, and shelter" (Kral, Molnar, Booth, & Watters, 1997, p. 110). Unfortunately, YEH were commonly sexually exploited: Survival sex was one way by which they managed economic insecurity in extremely difficult circumstances (Ensign, 2000; Kral et al., 1997). Economic insecurity leads to difficulty meeting basic needs, which may lead to sexual exploitation and survival sex (Kral et al., 1997; T. P. Johnson, Aschkenasy, Herbers, & Gillenwater, 1996). Ensign and Santelli (1997) found that, compared with shelter-based and foster youths, youths who lived on the streets were more likely to report higher rates of violence and forced sex. Compared with the general adolescent population, they also were more likely to be depressed, use the emergency room, and have a history of pregnancy (Ensign & Santelli, 1998). Mitigating economic insecurity among YEH may thus reduce their sexual health risk, including the need for survival sex and related exposure to sexual violence and possible pregnancy.

DISCUSSION

Myriad factors at the intrapersonal, interpersonal, and structural levels of youths' social ecology directly interact to affect how YEH access and select birth control. Such factors suggest multiple opportunities to intervene to better support YEH.

Improvement in YEH's Knowledge, Attitudes, and Behavior

Results of this review indicate that YEH are affected both by their own knowledge, attitudes, and behavior related to birth control and by those of their social network. The opportunities for bolstering YEH's strengths and decreasing risks are numerous, from reaching them by locating influencers in their social networks to providing attuned sexual health education both at and beyond school, to giving their parents culturally tailored support in how to address their children's sexual health needs before to and during adolescence.

Youths who are homeless need support in considering and preparing for birth control side effects, such as irregular spotting, as well as making changes to their birth control selection to best fit their needs. Special care should be taken to help couples plan for birth control use, even when in committed relationships, and to thoughtfully consider pregnancy timing.

Improvement in Social Norms, System Design, and Attuned Responses to YEH

Review results suggest many potential avenues for improving broader social and system responsiveness to the needs of YEH as they access and select birth control. The economic realities of homelessness are such that paying for birth control is unlikely to be a priority. Indeed, sex is quite likely be used as a survival strategy to get money to buy food or to establish a (temporary) place to live.

Youth-friendly, housing-first models that prioritize providing housing first, followed by supportive services, may greatly reduce exploitation or even eliminate the need for using sex to meet basic needs by youths who are homeless. Health care systems are often underprepared to reach and connect with YEH as well as to meet their often complex needs. Review results indicate that health care systems need a youth-friendly, trauma-informed approach to outreach, engagement, and service provision to shift how services are offered to youths who are homeless.

Strengths and Limitations

The present study offers an important contribution to the literature as one of few that systematically synthesizes what is known about how YEH access and select birth control and as one that organizes findings by level of YEH's social ecology. Organizing findings by socioecological level eases interpretation and application. The study is limited to application in the United States because only studies from this particular country were included and analyzed in the review. Although every effort was made to locate articles, when they were unavailable through our institution or affiliated institutions, we were unable to include them in our analysis. Study implications should be considered in light of these strengths and limitations.

Implications for Social Work Practice, Policy, and Research

Implications of this study include the need for multilevel, comprehensive interventions to assist YEH in the process of accessing and selecting birth control. Programs such as Wahine Talk (Aparicio et al., 2019, 2018; Kachingwe et al., 2019) offer promising approaches to holistic sexual health promotion among young women who are homeless, addressing their needs at intrapersonal, interpersonal, and structural levels through trauma-informed, youth-friendly programming. Supporting medical providers as part of the intervention team, as happens in Wahine Talk, is important: Stevens (2018) found that providers tend to minimize patients' concerns about contraception side effects, which can be especially problematic for young women who are homeless (Ensign, 2000).

More targeted, individually focused intervention may also be of benefit. Rew, Fouladi, Land, and Wong's (2007) intervention findings suggest that gender-specific programming may be helpful. Boustani, Frazier, and Lesperance's (2017) adaptation of SiHLE (Sisters, Informing, Healing, Living, and Empowering) (DiClemente et al., 2004), called SiHLE-YFC (Smart Teens Informing, Healing, Living, Empowering for Youth in or at risk for Foster Care), suggests that education-focused interventions tailored to the needs of YEH may also be of benefit. Economic interventions, including the Contraceptive CHOICE Project (Secura, Allsworth, Madden, Mullersman, & Peipert, 2010), suggest that removing financial barriers by making birth control free may improve uptake of longer acting birth control methods among women. Policy across social, medical, and economic spheres that encourages prevention and intervention sexual health services for YEH across socioecological levels is indicated.

Future research that includes participatory action approaches that enable YEH to shape the future of sexual health services for both themselves and other youths in a similar situation would help ensure that the voices and experiences of YEH themselves are centered as we collectively work to understand, develop, and test interventions to better support their sexual health needs. The present review suggests numerous pathways to improving how YEH access and select birth control based on the extant peer-reviewed literature. **HSW**

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