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Factors Influencing Contraception Use in Sexual Minority Women: A Systematic Literature Review

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Factors Influencing Contraception Use in Sexual Minority Women:

A Systematic Literature Review

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N695- Alternative Plan Paper

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Abstract

Contrary to widespread beliefs that lesbian, gay, bisexual, transgender, queer, plus (LGBTQ+) women do not need contraceptive care, sexual minority women (SMW) engage in vaginal-penile sexual contact which puts them at risk for unintended pregnancy. SMW assigned female gender at birth are at higher risk for less reliable and consistent contraceptive use and thus unintended pregnancy (Everett et al., 2017). This leads to the question of factors which cause SMW to be less engaged in contraceptive services. Through synthesis of studies addressing SMW and contraceptives, four themes developed: attitudes towards contraception, obstacles to care, knowledge gaps, and ways to improve care. Contraceptive providers and organizations were perceived to be geared toward heterosexual contraceptive needs, thus leaving SMW feeling unincluded and consequently not participating in or reaping benefits of contraceptive education and use. Health care providers need to increase their knowledge of LGBTQ+ behaviors and the spectrum of sexual orientations, as well as increase their use of inclusive language. Providers should not assume that a patient does not require contraception based on their sexual orientation alone, conversations should include sexual preferences and behaviors to determine which contraception options are appropriate for each patient regardless of stated sexual orientation. Providers also lacked basic knowledge about transgender male's contraceptive needs and fertility. This literature review highlights the need for further research on effective communication for providers as well as targeted contraceptive interventions for LGBTQ+ individuals. The literature review also shows the need to further examine racial SMW experiences and needs for contraceptive care.

Keywords: culturally sensitive, contraception, lesbian, young adult, heteronormative, sexual minority women, guidelines, female assigned at birth, transgender man.

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Factors Influencing Contraception Use in Sexual Minority Women: A Systematic Literature Review

The National Institutes of Health Sexual and Gender Minority Research Office (2019) has defined sexual gender minorities (SGM) as follows:

> SGM populations include, but are not limited to, individuals who identify as lesbian, gay, bisexual, asexual, transgender, Two-Spirit, queer, and/or intersex. Individuals with same-sex or -gender attractions or behaviors and those with a difference in sex development are also included. These populations also encompass those who do not self-identify with one of these terms but whose sexual orientation, gender identity or expression, or reproductive development is characterized by non-binary constructs of sexual orientation, gender, and/or sex. (para. 6)

Sexual minorities have struggled for their right to disclose their sexuality publicly and not be persecuted. Many providers are becoming more inclusive of sexual minority women (SMW) and recognizing their unique needs, but their health care in all areas lags heterosexual individuals and even sexual minority men (Everett & Mollborn, 2014). From decreased access to healthcare due to lack of insurance and resources to increased rates of unintended pregnancies (Everett et al., 2017), lesbian, gay, bisexual, transgender and queer (LGBTQ+) women are at higher risk for harm due to lack of knowledge on this issue. SMW are more likely to have a greater number of male partners and are at higher risk for unintended pregnancy than their heterosexual peers (Bodnar & Tornello, 2019). Indeed, even knowing the meaning of LGBTQ+ sexuality is a mystery to many providers (Wahlen et al., 2020). "Sexual orientation is a multi-faceted construct that includes sexual identity, sexual behaviors, and sexual attraction" (Everett et al, 2018, p 2). Incorrect assumptions about the contraceptive needs of LGBTQ+ individuals are pervasive

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despite evidence that LGBTQ+ women engage in penile-vaginal sex. Copen et al. (2016) reports that 88.6% of SMW have a history of penile-vaginal intercourse. In the last 12 months 82% of bisexual and 17% of lesbian SMW in a large population-based study by Everett et al. (2018) reported having a male partner. However, even in SMW with infrequent penile-vaginal sex, there is a correlation with higher unintended pregnancy rates due to decreased use of highly effective methods or any method of contraception at all (Ela & Budnik, 2017).

These statistics highlight that SMW need contraceptive care services just as much as heterosexual women. "Evidence suggests that sexual minority women (SMW) constitute a considerable proportion of contraceptive-seeking clients—as many as 1 in 3.5. However, SMW are less likely than are heterosexual women to receive clinical contraceptive counseling." (Higgins et al, 2019, p. 1680). Family care practitioners have an opportunity to intervene and provide comprehensive contraceptive counseling and care to LGBTQ+ patients as sexual education in the United States is often delayed until after first intercourse, ineffective depending on state of residence, and widely exclusive or harmful to LGBTQ+ individuals (Bodnar & Tornello, 2019).

Gallup reports that the percentage of Americans identifying as lesbian, gay, bisexual or transgender is increasing, from 3.5% in 2012 to 4.5% in 2017 (Newport, 2018). Often patients may consider themselves 'trans' or LGBTQ+ but have not officially announced their sexual preferences or perhaps have not yet concluded where they fit in the spectrum of sexuality or gender. In one study of trans individuals, the average age of starting to feel gender dysphoria was 8.5 years, but disclosure of their status was not until an average of 10 years later (Olson et al., 2015).

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These disparities in health care highlight why “[s]exual and gender minorities [are] formally designated as a health disparity population for research purposes” by the National Institutes of Health (Pérez-Stable, 2016, para. 1). Research has indeed increased in the last 10 years, but data has not yet progressed beyond expert opinion and qualitative studies around LGBTQ+ patients and contraceptive care. This systematic review attempts to determine reasons that SMW are not engaging in contraceptive care in the proportion heterosexual women are. Answering this question can provide useful information for planning future studies focused on targeted interventions for SMW and contraceptive uptake.

Literature Review

Methods

Database search

The entire literature search, screening, and abstraction were performed solely by the author. The literature search was conducted October 2020 - March 2021. Databases that focused on nursing, medicine, and sociology were chosen through the Minnesota State University, Mankato library portal. Additionally, articles were located through bibliographic review and Google Scholar search. Eight research databases were searched for articles that were published in the last 10 years, full-text availability, peer-reviewed, and English language as the criteria. Appendix A describes the databases chosen for research including names of databases, years included, search limitations, and database subjects.

Data abstraction and screening

Systematic searching was done to find research trials and qualitative studies that address sexual minority women, transgender men, and contraceptives. Keywords associated with SMW and contraception were used. The search yielded 1,944 articles based on the select keyword

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criteria. Appendix B highlights the data abstraction search terms, dates, databases, and results. 136 titles and brief abstracts were included for further review.

Inclusion and exclusion criteria

Articles were first reviewed by title and brief abstract in the search results; 136 articles were included for further review. Seventeen articles were duplicates and removed, leaving 119 articles. Articles were then reviewed by abstract; fifty-one articles were included in the final review. These articles were reviewed in depth for subject, intervention, and population of interest. Appendix C details citations, whether the article was included or excluded, and rational for inclusion/exclusion. Fourteen citations were included in the systematic review after duplicates were removed and studies which did not meet criteria were excluded. Appendix D portrays the Prisma Flow Diagram for this review.

Data extraction and synthesis

Included articles were reviewed in their entirety and themes developed. All included studies were peer-reviewed from reputable journals. All articles included in the review were level IV-VII evidence. Many of the studies were qualitative studies which were conducted via survey or interview. All articles included were published within the last six years. Articles under review and their characteristics are summarized in Appendix E.

Results

Four major themes emerged from reviewing the literature; attitudes towards contraception, patient obstacles to care, knowledge gaps, and ways to improve contraception care.

Attitudes towards and use of contraception

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SMW were interested in receiving more information about contraception options when visiting with health care providers (Blunt-Vinti et al., 2018). SMW reported having more sexually active weeks, and more gaps in contraceptive coverage compared to heterosexual peers (Ela & Budnick, 2017). Less effective contraceptives (OCPs, condoms, withdrawal, plan B) and inconsistent use of contraceptives were frequently reported by SMW (Blunt-Vinti et al., 2018; Gomez et al., 2015; Higgins et al., 2019; Light et al., 2018; Stark, et al., 2019). Contraceptives and long acting reversable contraceptives (LARCs) are underused in SMW compared to heterosexual women (Stoffel et al., 2017). Contraceptives are used by SMW patients for reasons in addition to contraception, i.e., STI prevention, menstrual suppression (Gomez et al., 2015; Greene et al., 2019; Higgins et al., 2019; Stark, et al., 2019).

Contraceptive use in SMW is often seen as unnecessary, or even contrary to their identity in the LGBTQ+ community, which can increase hesitancy to use contraception (Higgins et al., 2019; Stark, et al., 2019; Stoffel et al, 2017). In addition, Higgins et al. (2019) reports that SMW may "go it alone" regarding contraceptive choices and counseling due to fear of stigma from their community. Further, even though a significant portion of SMW have sexual relationships with cisgender males, there is fear of rejection from queer community for disclosing this information through tangible means such as contraceptive prescriptions (Higgins et al., 2019).

Obstacles to care

Previous negative experiences relating to queer identity with health care providers in any context decreases SMW future interactions with health care, and specifically reproductive care, and this can involve not only direct bullying or awkward, uncomfortable responses to SMW specific topics (Greene et al., 2019; Fuzzell et al., 2016; Haley et al., 2019; Higgins et al., 2019). Negative experiences can lead to not feeling safety in disclosing sexual behavior which increases

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the chance that a patient will lie about sexual activities to get what they feel they need rather than having an individualized conversation (Greene et al., 2019).

Confidentiality of sexual information is important to effective contraceptive counseling, and verbal assurance of confidentiality is more effective than written (Fuzzell et al., 2016; Klein et al., 2018). Many of the articles highlighted the use of heteronormative language in contraceptive care and thus LGBTQ+ patients felt uninvited to discuss contraception (Fuzzell et al., 2016; Greene et al., 2019; Higgins et al., 2019; Klein et al., 2018).

SMW reported feeling powerless over their own body and choices due to past trauma, patriarchy, and violence towards women in general, and SMW in particular, and thus might avoid addressing contraceptives due to this sense of helplessness (Higgins et al., 2019).

Knowledge gaps

Provider knowledge of SMW and trans-men health needs is often inadequate and is not uniformly taught in basic medical education. Indeed, many clinicians report not being adequately trained in SMW healthcare or report being uncomfortable caring for SMW (Krempansky et al., 2020). The default assumption tends to be that women are straight which alienates LGBTQ+ patients (Fuzzell et al., 2016; Greene et al., 2019; Higgins et al., 2019). It was the general perception of SMW that sexuality and sexual health was not discussed frequently enough in health care visits (Fuzzel et al., 2016).

Sexual identity was often presumed to be congruent with sexual behavior (Everett et al., 2018; Fuzzell et al., 2016; Greene et al., 2019; Higgins et al., 2019; Stoffel et al., 2017), and thus many providers may assume SMW do not need contraceptives (Greene et al., 2019; Higgins et al., 2019; Stoffel et al., 2017). Peers (friends, romantic partners, and online) were often a big source of sex education for queer adolescents, whether that information is reliable or not (Haley

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et al, 2019). Sex education in schools is lacking in general, and often does not contain information specific to LGBTQ+ individuals, or even acknowledge their existence (Haley et al., 2019).

Trans-males report that they may be unsure of or use testosterone as their method of contraception (Abern et al., 2018; Gomez et al., 2015; Krempansky et al., 2020; Light et al., 2018; Stark, et al., 2019). In addition, trans-males have concerns about use of contraceptives interacting with testosterone (Gomez et al., 2015; Krempansky et al., 2020; Light et al., 2018; Stark, et al., 2019). In addition to inadequate advice, providers may also give incorrect advice to trans-males that testosterone is a suitable contraceptive (Abern et al., 2018; Gomez et al., 2015; Haley et al., 2019; Krempansky et al., 2020; Light et al., 2018). Finally, contraception is not routinely discussed after initiation of hormone therapy for trans-men despite testosterone being a teratogen and inadequate for contraceptive use (Abern et al., 2018).

Ways to improve care

Clinics striving to be LGBTQ+ friendly find SMW were more comfortable in discloser of their sexual history due to SMW viewing and perceiving a provider or clinic as being “safe” (Greene et al., 2019). Clinics that prominently display LGBTQ+ friendly symbols increase SMW comfort with disclosure of sexual concerns (Fuzzell et al., 2016; Klein et al., 2018). Providers should ask about sexual activity in a straightforward, non-heteronormative way, and explain why the information is important (Fuzzell et al., 2016; Greene et al., 2019). Assisting the patient to come out as queer can help SMW to increase contraceptive use (Higgins et al., 2019), and providers should ensure that serious sexual discussions should occur without parents/guardians in the room with adolescents to improve communication and disclosure (Fuzzell et al., 2016).

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Having meaningful and affirming conversations can increase engagement of LGBTQ+ patients (Fuzzell et al., 2016; Greene et al., 2019).

Personalized contraceptive counseling regardless of sexual orientation or identity was shown to increase Long-Acting Reversible Contraceptive (LARC) uptake in SMW in the setting of a family planning clinic (Everett et al., 2018). Use of contraceptives, particularly LARCs can increase confidence in LGBTQ+ identity (Higgins et al., 2019), and information on how LARCs such as IUDs (intrauterine devices) can reduce gender dysphoria through menstrual suppression should be discussed when appropriate (Haley et al., 2019).

LGBTQ+ individuals reported the non-contraceptive health-care encounter experiences influenced effectiveness and disclosure during contraceptive care visits (Greene et al., 2019). In addition, anticipatory sexual education should be given in all health care visits rather than just those that focus on sexual health (Fuzzell et al., 2016). SMW also reported a need for increased screening for mental health and substance use concerns during contraceptive care visits due to the relationship between mental and sexual health (Stoffel et al., 2017).

Discussion

Women who identify as sexual minorities have feelings of being excluded from conversations about contraception due to heteronormative language and attitudes which are pervasive in health care and society in general. Even though many SMW are at risk for pregnancy, their needs are not being met, and this literature review highlights reasons for this population's disenfranchisement. The American College of Obstetricians and Gynecologists insists that providers not only be non-discriminatory towards SMW, but to become competent in their care as well (Stoffel et al., 2017). Sex at the discretion of males is promoted in society without regard to consequences such as pregnancy, therefore, women often feel powerless in the

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context of navigating self-empowering sexual health care, and this can be even harder for SMW which are a further marginalized group (Higgins et al., 2019). Discussions regarding contraceptive options should occur with all SMW regardless of their stated sexual orientation, the discussion should focus on contraceptives which are best for pregnancy prevention as well as ancillary benefits in the context of sexual behavior.

Implications for Future Practice

The advanced practice provider needs to be aware of the needs of SMW, how to elicit sexual behaviors of SMW, and how to have a queer inclusive conversation with SMW. Due to the lack of comprehensive research in the context of SMW and contraceptive care, recommendations are currently based on expert opinion and results from this literature review.

The National LGBT Health Education Center (2015) recommends screening for sexual behavior rather than sexual orientation in this way "Have you been sexually active in the past year? Do you have sex with anyone with a penis, a vagina? How many people have you had sex with in the past year?" and proceed with individualized counseling based on responses. A participant in the qualitative study by Greene et al. (2019, p. 6) suggested phrasing sexual orientation and behavior questions like this "Describe your sex life in a way that's comfortable to you."

When caring for trans-masculine patients, providers should emphasize evidence-based information about testosterone and contraception, namely that testosterone can be teratogenic and is not an effective contraceptive (Krempansky et al., 2020). Hormonal contraceptives are safe and effective when used with testosterone, gender dysphoria benefits of contraceptive methods should be emphasized and future fertility plans should be taken into consideration when initiating testosterone and contraception counseling (Krempansky et al., 2020). Providers should

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use gender affirming pronouns that the patient has chosen in a respectful manner, clinics should be welcoming to LGBTQ+ individuals and reinforce this through signage, correct use of pronouns, and gender neutral and inclusive language (Krempansky et al., 2020).

Implications for Research and Education

Requesting grant money for funding further research into specific interventions should be sought as well as partnerships between health care higher education programs to further this goal should be considered. The articles consisted of lower-level evidence utilizing qualitative research and thus less generalizable to the general population. Many of the studies were conducted on white, middle-class, and/or college students, which might miss a significant swath of SMW. Stoffel et al. (2017) and Greene et al. (2019) both report the need for more research on the experiences of SMW of color in all types of clinical encounters. Further research regarding targeted interventions for SMW to increase contraceptive uptake is also needed. In addition, studies that utilize more rigorous methods would provide increasing generalizable results.

Implications for Policy

Implementing inclusiveness "recommendations to guide creating LGBT-friendly clinics, which include training for all staff members, modifications for inclusion on clinic forms, use of inclusive language, and avoiding assumptions about sexual orientation and gender identity." (Stoffel, 2017, p 7). Therefore, institutional policies regarding standardized protocols for LGBTQ+ training for all staff members that are interacting with patients should be initiated. Clinics should expect staff to treat all LGBTQ+ patients with respect, honoring confidentiality and chosen pronouns. In addition, clinics should prominently feature inclusive signage to signal to patients that the space is inclusive and respectful. Fuzzell et al. (2016) recommends fostering

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gender and sexually inclusive spaces through use of Safe Zone training and signage (https://thesafezoneproject.com/).

Conclusion

This systemic literature review attempted to determine factors which influence contraceptive use in SMW. SMW are engaging in contraceptive care at lower rates than heterosexual women despite a demonstrated interest in contraceptives in the SMW population. The four themes identified by this systemic review were attitudes towards contraceptives, obstacles to care, knowledge gaps, and ways to improve care. Discussion of sexual behaviors and contraceptive options should occur at all health care visits regardless of presumed need for contraceptives. Contraceptives, particularly LARCs, should be promoted and normalized in SMW patients through highlighting not only contraceptive benefits but ancillary benefits such as menstrual suppression as well. Providers and clinics should decrease obstacles to contraceptive care through providing an inclusive and safe space as well as providing confidentiality to patients. Knowledge gaps regarding contraceptives can be addressed through increased provider training in LGBTQ+ sexual behaviors as well as transmasculine specific needs. Providers and clinics should have training in providing LGBTQ+ inclusive care as well as providing inclusive clinic atmosphere will improve delivery of contraceptive care. Finally, the need for further research on racial minority SMW and interventions to increase contraceptive uptake in the SMW was identified.

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Appendices

Appendix A

Database Characteristics

Database	Restrictions Added to Search	Dates Included in Database	General Subjects Covered by Database
1. Ex Libris	Full Text; English Language; Peer Reviewed	2010 - 2020	Combined library management of multiple databases.
2. CINAHL Plus	Apply related words, Full Text, Abstract Available, English Language, Peer Reviewed	2010 - 2020	Nursing and allied health, including cardiopulmonary technology, emergency service, health education, medical/laboratory, medical assistant, medical records, occupational therapy, physical therapy, physician assistant, radiologic technology, social service/health care, and more.
3. ERIC	Apply related words, Full Text, Abstract Available, English Language, Peer Reviewed	2010 - 2020	Education journals plus research and technical reports, curriculum and teaching guides, conference papers, dissertations, and books.
4. PubMed	Full Text; English Language; Peer Reviewed	2010 - 2020	Articles about "medicine, nursing, dentistry, veterinary medicine, the health care system, and the preclinical sciences."
5. ProQuest	Full Text, English language, Peer reviewed	2010 - 2020	33 databases with a wide variety of topics including nursing, medicine, and sociology.
6. Sage	None	2010 - 2020	Diverse journals with topics such as Communication Studies, Criminology, Education, Health Sciences & Nursing, Management & Organization Studies, Materials Science, Non-Profit Leadership, Political Science, Psychology, Sociology
7. Bibliographic Review	Articles included for alternate plan paper	2015 - 2020	Articles specifically related to topic.
8. Google	Full Text, English language	2015-2020	All topics and many sources can be searched to find relevant articles.

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Appendix B

Data Abstraction

Date of Search	Key Words	xLibris	CINAHL	ERIC	PubMed	ProQuest	Sage	Bibliographic	Google
10/15/20	contraception AND lesbian AND "young adult"	635							
10/15/20	"culturally sensitive" contraception AND lesbian AND "young adult"	**13** (2)	0						
10/15/20	"contraception education" AND lesbian AND "young adult"	**3** (0)							
10/23/20	contraception AND "sexual minority" OR lesbian AND "young adult"	266	**5** (2)	**41** (0)	235	136	**57** (8)		
10/23/20	contraception AND "sexual minority" OR lesbian						536		
10/26/20	lesbian contraception guidelines								**7** (1)
3/2021	Bibliographic review							**10** (1)	

***BOLD** = articles reviewed for match with systematic review inclusion criteria (parentheses indicate those articles meeting inclusion criteria)

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Appendix C

Characteristics of Literature Included/Excluded

Reference	**Included or Excluded**	**Rationale**
Abern, L., & Maguire, K. (2018). Contraception knowledge in transgender individuals: Are we doing enough? *Obstetrics and Gynecology, 131*(S1), 65S–65S. https://doi.org/10.1097/01.AOG.0000533319.47797.7e	Included	Population and subject of interest are relevant to the current topic.
Alexander, K. A., Volpe, E. M., Abboud, S., & Campbell, J. C. (2016). Reproductive coercion, sexual risk behaviours and mental health symptoms among young low-income behaviourally bisexual women: Implications for nursing practice. *Journal of Clinical Nursing, 25*(23–24), 3533–3544. https://doi.org/10.1111/jocn.13238	Excluded	Subject is irrelevant to problem of interest.
American College of Obstetricians and Gynecologists (ACOG). (2012). *Health care for lesbians and bisexual women.* https://www.acog.org/en/Clinical/Clinical Guidance/Committee Opinion/Articles/2012/05/Health Care for Lesbians and Bisexual Women	Excluded	Expert opinion which is to broad relative to the problem of interest.
Arbeit, M. R. (2014). What does healthy sex look like among youth? Towards a skills-based model for promoting adolescent sexuality development. *Human Development, 57*(5), 259–286. https://doi.org/10.1159/000367856	Excluded	Subject of study irrelevant to problem of interest.
Blunt-Vinti, H. D., Thompson, E. L., & Griner, S. B. (2018). Contraceptive use effectiveness and pregnancy prevention information preferences among heterosexual and sexual minority college women. *Women's Health Issues, 28*(4), 342–349. https://doi.org/10.1016/j.whi.2018.03.005	Included	Study focuses on problem and population of interest.
Bodnar, K., & Tornello, S. L. (2019). Does sex education help everyone? Sex education exposure and timing as predictors of sexual health among lesbian, bisexual, and heterosexual young women. *Journal of Educational and Psychological Consultation, 29*(1), 8–26. https://doi.org/10.1080/10474412.2018.1482219	Excluded	Study focuses on problem which is not directly related to the subject of interest.
Bouris, A., Guilamo-Ramos, V., Pickard, A., Shiu, C., Loosier, P. S., Dittus, P., Gloppen, K., & Waldmiller, M. J. (2010). A systematic review of parental influences on the health and well-being of lesbian, gay, and bisexual youth: Time for a new public health research and practice agenda. *Journal of Primary Prevention, 31*(5–6), 273–309. https://doi.org/10.1007/s10935-010-0229-1	Excluded	Setting of this study is outside the parameters of the problem of interest.

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Reference	Included or Excluded	Rationale
Carpenter, E., Everett, B. G., Greene, M. Z., Haider, S., Hendrick, C. E., & Higgins, J. A. (2020). Pregnancy (im)possibilities: Identifying factors that influence sexual minority women's pregnancy desires. *Social Work in Health Care, 59*(3), 180–198. https://doi.org/10.1080/00981389.2020.1737304	Excluded	Focus of this study is the wrong subject rather than the problem of interest.
Charlton, B. M., Everett, B. G., Light, A., Jones, R. K., Janiak, E., Gaskins, A. J., Chavarro, J. E., Moseson, H., Sarda, V., & Austin, S. B. (2020). Sexual orientation differences in pregnancy and abortion across the life course. *Women's Health Issues, 30*(2), 65–72. https://doi.org/10.1016/j.whi.2019.10.007	Excluded	Focus of this study is outcomes rather than interventions.
Charlton, B. M., Janiak, E., Gaskins, A. J., DiVasta, A. D., Jones, R. K., Missmer, S. A., Chavarro, J. E., Sarda, V., Rosario, M., & Austin, S. B. (2019). Contraceptive use by women across different sexual orientation groups. *Contraception, 100*(3), 202–208. https://doi.org/10.1016/j.contraception.2019.05.002	Excluded	Population of study is too narrow and age range to wide compared to population of interest.
Charlton, B. M., Nava-Coulter, B., Coles, M. S., & Katz-Wise, S. L. (2019). Teen pregnancy experiences of sexual minority women. *Journal of Pediatric and Adolescent Gynecology, 32*(5), 499–505. https://doi.org/10.1016/j.jpag.2019.05.009	Excluded	Subject of interest irrelevant to problem of interest.
Decker, M. J., Berglas, N. F., & Brindis, C. D. (2015). A call to action: Developing and strengthening new strategies to promote adolescent sexual health. *Societies, 5*(4), 686–712. https://doi.org/10.3390/soc5040686	Excluded	Population too broad compared to population of interest.
DeMeester, R. H., Lopez, F. Y., Moore, J. E., Cook, S. C., & Chin, M. H. (2016). A model of organizational context and shared decision making: Application to LGBT racial and ethnic minority patients. *Journal of General Internal Medicine, 31*(6), 651–662. https://doi.org/10.1007/s11606-016-3608-3	Excluded	Setting and subject too broad compared to problem of interest.
Dermody, S. S., Friedman, M., Chisolm, D. J., Burton, C. M., & Marshal, M. P. (2017). Elevated risky sexual behaviors among sexual minority girls: Indirect risk pathways through peer victimization and heavy drinking. *Journal of Interpersonal Violence, 35*(11–12), 2236–2253. https://doi.org/10.1177/0886260517701450	Excluded	Subject is irrelevant to the problem of interest.
Diamond, L. M., & Wallen, K. (2011). Sexual minority women's sexual motivation around the time of ovulation. *Archives of Sexual Behavior, 40*(2), 237–246. https://doi.org/10.1007/s10508-010-9631-2	Excluded	Subject is irrelevant to problem of interest.

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Reference	Included or Excluded	Rationale
Ejaife, O. L., & Ho, I. K. (2017). Healthcare experiences of a black lesbian in the United States. *Journal of Health Psychology, 24*(1), 52–64. https://doi.org/10.1177/1359105317690036	Excluded	Subject is too broad related to problem of interest.
Ela, E. J., & Budnick, J. (2017). Non-heterosexuality, relationships, and young women's contraceptive behavior. *Demography, 54*(3), 887–909. https://doi.org/10.1007/s13524-017-0578-y	Included	Population and subject are relevant to problem of interest.
Estes, M. L. (2017). "If there's one benefit, you're not going to get pregnant": The sexual miseducation of gay, lesbian, and bisexual individuals. *Sex Roles, 77*(9), 615–627. https://doi.org/10.1007/s11199-017-0749-8	Excluded	Setting and subject are not relevant to problem of interest.
Everett, B. G., McCabe, K. F., & Hughes, T. L. (2017). Sexual orientation disparities in mistimed and unwanted pregnancy among adult women. *Perspectives on Sexual and Reproductive Health, 49*(3), 157–165. https://doi.org/10.1363/psrh.12032	Excluded	The subject of this study is irrelevant, and the study focuses on outcomes rather than intervention of interest.
Everett, B. G., Sanders, J. N., Myers, K., Geist, C., & Turok, D. K. (2018). One in three: Challenging heteronormative assumptions in family planning health centers. *Contraception, 98*(4), 270–274. https://doi.org/10.1016/j.contraception.2018.06.007	Included	Population and subject are relevant to problem of interest.
Fish, J. (2010). Promoting equality and valuing diversity for lesbian, gay, bisexual and trans patients. *InnovAiT, 3*(6), 333–338. https://doi.org/10.1093/innovait/inp192	Excluded	Expert opinion that is not specific to the subject of interest.
Francis, A., Jasani, S., & Bachmann, G. (2018). Contraceptive challenges and the transgender individual. *Women's Midlife Health, 4*(1). https://doi.org/10.1186/s40695-018-0042-1	Excluded	Age of participants is outside the range of interest.
Fuzzell, L., Fedesco, H. N., Alexander, S. C., Fortenberry, J. D., & Shields, C. G. (2016). "I just think that doctors need to ask more questions": Sexual minority and majority adolescents' experiences talking about sexuality with healthcare providers. *Patient Education and Counseling, 99*(9), 1467–1472. https://doi.org/10.1016/j.pec.2016.06.004	Included	Population and subject are relevant to problem of interest.
Fuzzell, L., Shields, C. G., Alexander, S. C., & Fortenberry, J. D. (2017). Physicians talking about sex, sexuality, and protection with adolescents. *Journal of Adolescent Health, 61*(1), 6–23. https://doi.org/10.1016/j.jadohealth.2017.01.017	Excluded	Population and subject are too broad compared to problem of interest.
Gessner, M., Bishop, M. D., Martos, A., Wilson, B. D. M., & Russell, S. T. (2020). Sexual minority people's perspectives of sexual health care: Understanding minority stress in sexual health settings. *Sexuality Research and Social Policy, 17*(4), 607–618. https://doi.org/10.1007/s13178-019-00418-9	Excluded	Focus on perceptions of sexual health care by sexual minorities.

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Reference	Included or Excluded	Rationale
Goldberg, S. K., Reese, B. M., & Halpern, C. T. (2016). Teen pregnancy among sexual minority women: Results from the national longitudinal study of adolescent to adult health. *Journal of Adolescent Health, 59*(4), 429–437. https://doi.org/10.1016/j.jadohealth.2016.05.009	Excluded	Incorrect subject and outcome focused.
Gomez, A., Walters, P., & Dao, L. (2015). "Testosterone in a way is birth control": Contraceptive attitudes and experiences among transmasculine and genderqueer young adults. *Contraception, 94*(4), 422-423. https://doi.org/10.1016/j.contraception.2016.07.145	Included	Population and subject of interest are relevant to current topic.
Greene, M. Z., Carpenter, E., Hendrick, C. E., Haider, S., Everett, B. G., & Higgins, J. A. (2019). Sexual minority women's experiences with sexual identity disclosure in contraceptive care. *Obstetrics and Gynecology, 133*(5), 1012–1023. https://doi.org/10.1097/AOG.0000000000003222	Included	Population, setting, and subject are relevant to problem of interest.
Griffin, M., Jaiswal, J., Krytusa, D., Krause, K. D., Kapadia, F., & Halkitis, P. N. (2020). Healthcare experiences of urban young adult lesbians. *Women's Health, 16*, 1-8. https://doi.org/10.1177/1745506519899820	Excluded	Subject is not relevant to problem of interest.
Haley, S. G., Tordoff, D. M., Kantor, A. Z., Crouch, J. M., & Ahrens, K. R. (2019). Sex education for transgender and non-binary youth: Previous experiences and recommended content. *The Journal of Sexual Medicine, 16*(11), 1834–1848. https://doi.org/10.1016/j.jsxm.2019.08.009	Included	Population and subject are relevant to problem of interest.
Hartnett, C. S., Lindley, L. L., & Walsemann, K. M. (2017). Congruence across sexual orientation dimensions and risk for unintended pregnancy among adult U.S. women. *Women's Health Issues, 27*(2), 145-151.e2. https://doi.org/10.1016/j.whi.2016.10.010	Excluded	Subject not relevant to problem of interest.
Higgins, J. A., Carpenter, E., Everett, B. G., Greene, M. Z., Haider, S., & Hendrick, C. E. (2019). Sexual minority women and contraceptive use: Complex pathways between sexual orientation and health outcomes. *American Journal of Public Health, 109*(12), 1680–1686. https://doi.org/10.2105/AJPH.2019.305211	Included	Population and subject relevant to problem of interest.
Kazyak, E., Park, N., McQuillan, J., & Greil, A. L. (2014). Attitudes toward motherhood among sexual minority women in the United States. *Journal of Family Issues, 37*(13), 1771–1796. https://doi.org/10.1177/0192513X14554396	Excluded	Subject not relevant to problem of interest.
Klein, D. A., Berry-Bibee, E. N., Baker, K. K., Malcolm, N. M., Rollison, J. M., & Frederiksen, B. N. (2018). Providing quality family planning services to LGBTQ+IA individuals: A systematic review. *Contraception, 97*(5), 378–391. https://doi.org/10.1016/j.contraception.2017.12.016	Included	Population and subject are relevant to problem of interest.

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Reference	Included or Excluded	Rationale
Klein, E. W., & Nakhai, M. (2016). Caring for LGBTQ+ patients: Methods for improving physician cultural competence. *The International Journal of Psychiatry in Medicine, 51*(4), 315–324. https://doi.org/10.1177/0091217416659268	Excluded	Subject too broad compared to problem of interest.
Knight, D. A., & Jarrett, D. (2017). Preventive health care for women who have sex with women. *American Family Physician, 95*(5), 314–321. Retrieved from https://www.aafp.org/afp/2017/0301/p314.html	Excluded	Subject too broad compared to problem of interest.
Krader, C. G. (2015). Emergency contraception. *Contemporary Pediatrics, 32*(6), 24–26. Retrieved from http://images2.advanstar.com/Drupal/CNTPED/digitaledition/cntped0615_ezine.pdf	Excluded	Subject too narrow compared to problem of interest.
Krempasky, C., Harris, M., Abern, L., & Grimstad, F. (2020). Contraception across the transmasculine spectrum. *American Journal of Obstetrics and Gynecology, 222*(2), 134–143. https://doi.org/10.1016/j.ajog.2019.07.043	Included	Population and subject are relevant to problem of interest.
Light, A., Wang, L.-F., Zeymo, A., & Gomez-Lobo, V. (2018). Family planning and contraception use in transgender men. *Contraception, 98*(4), 266–269. https://doi.org/10.1016/j.contraception.2018.06.006	Included	Population and subject relevant to problem of interest.
Maas, M., & Lefkowitz, E. (2015). Sexual esteem in emerging adulthood: Associations with sexual behavior, contraception use, and romantic relationships. *Journal of Sex Research, 52*(7), 795–806. https://doi.org/10.1080/00224499.2014.945112	Excluded	Subject not relevant to problem of interest.
Magee, J. C., Bigelow, L., DeHaan, S., & Mustanski, B. S. (2011). Sexual health information seeking online: A mixed-methods study among lesbian, gay, bisexual, and transgender young people. *Health Education & Behavior, 39*(3), 276–289. https://doi.org/10.1177/1090198111401384	Excluded	Subject too broad compared to problem of interest.
McCauley, H. L., Dick, R. N., Tancredi, D. J., Goldstein, S., Blackburn, S., Silverman, J. G., Monasterio, E., James, L., & Miller, E. (2014). Differences by sexual minority status in relationship abuse and sexual and reproductive health among adolescent females. *Journal of Adolescent Health, 55*(5), 652–658. https://doi.org/10.1016/j.jadohealth.2014.04.020	Excluded	Subject not relevant to problem of interest.
Meadows, E. (2018). Sexual health equity in schools: Inclusive sexuality and relationship education for gender and sexual minority students. *American Journal of Sexuality Education, 13*(3), 297–309. https://doi.org/10.1080/15546128.2018.1431988	Excluded	Subject not relevant to problem of interest.

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Reference	Included or Excluded	Rationale
Murray Horwitz, M. E., Pace, L. E., & Ross-Degnan, D. (2018). Trends and disparities in sexual and reproductive health behaviors and service use among young adult women (aged 18-25 years) in the United States, 2002-2015. *American Journal of Public Health, 108*, S336–S343. https://doi.org/10.2105/AJPH.2018.304556	Excluded	Subject is too broad compared to problem of interest.
Scott, A. (2013). The practice nurse's role in contraception choice. *Primary Health Care, 23*(6), 16–22. https://10.7748/phc2013.07.23.6.16.e713	Excluded	Population too broad compared to population of interest.
Snyder, B. K., Burack, G. D., & Petrova, A. (2016). LGBTQ+ youth's perceptions of primary care. *Clinical Pediatrics, 56*(5), 443–450. https://doi.org/10.1177/0009922816673306	Excluded	Subject too broad compared to problem of interest.
Stark, B., Hughto, J. M. W., Charlton, B. M., Deutsch, M. B., Potter, J., & Reisner, S. L. (2019). The contraceptive and reproductive history and planning goals of trans-masculine adults: A mixed-methods study. *Contraception, 100*(6), 468–473. https://doi.org/10.1016/j.contraception.2019.07.146	Included	Population and subject relevant to problem of interest.
Starrs, A. M., Ezeh, A. C., Barker, G., Basu, A., Bertrand, J. T., Blum, R., Coll-Seck, A. M., Grover, A., Laski, L., Roa, M., Sathar, Z. A., Say, L., Serour, G. I., Singh, S., Stenberg, K., Temmerman, M., Biddlecom, A., Popinchalk, A., Summers, C., & Ashford, L. S. (2018). Accelerate progress- Sexual and reproductive health and rights for all: Report of the Guttmacher-Lancet commission. *The Lancet, 391*(10140), 2642–2692. https://doi.org/10.1016/S0140-6736(18)30293-9	Excluded	Subject too broad compared to problem of interest.
Stoffel, C., Carpenter, E., Everett, B., Higgins, J., & Haider, S. (2017). Family planning for sexual minority women. *Seminars in Reproductive Medicine, 35*(5), 460–468. https://doi.org/10.1055/s-0037-1604456	Included	Population and subject relevant to problem of interest.
U.S. Department of Health and Human Services. (2014). *LGBT health and well-being.* https://www.hhs.gov/programs/topic-sites/lgbt/enhanced-resources/reports/health-objectives-2011/index.html	Excluded	Subject too broad compared to problem of interest.
Wingo, E., Ingraham, N., & Roberts, S. C. M. (2018). Reproductive health care priorities and barriers to effective care for LGBTQ+ people assigned female at birth: A qualitative study. *Women's Health Issues, 28*(4), 350–357. https://doi.org/10.1016/j.whi.2018.03.002	Excluded	Subject too broad compared to problem of interest.
Youatt, E. J. (2015). Receipt of sexual health services among young adult sexual minority women. *Contraception, 92*(4), 394. https://doi.org/10.1016/j.contraception.2015.06.160	Excluded	Subject of interest not relevant to problem of interest.

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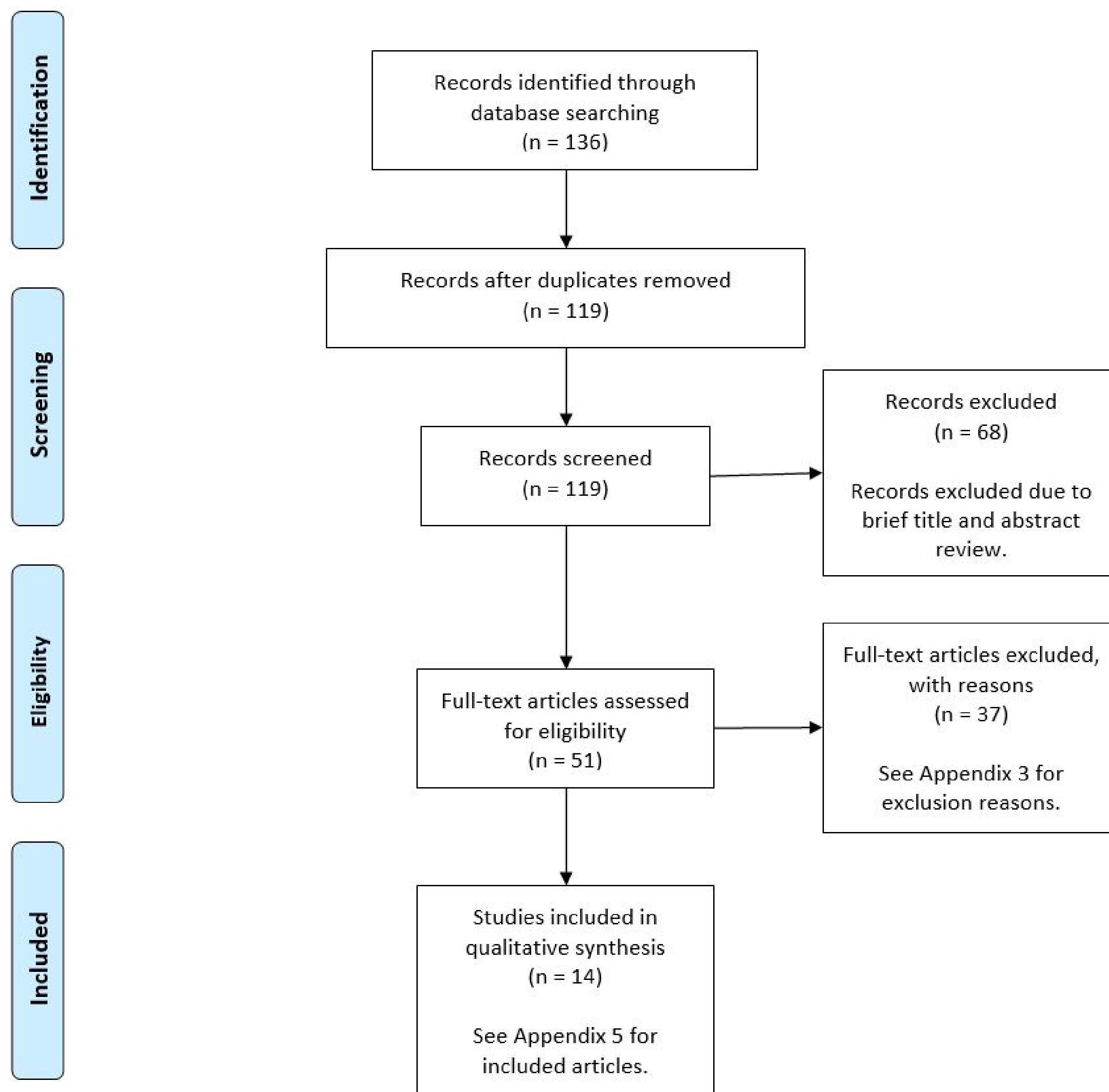
Appendix D
Prisma Flow Chart



(Moher et al., 2009)

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Appendix E

Literature Review Table of Included Studies

Citation	Study Purpose	Pop (N)/ Sample Size (n)/ Setting	Design/ Level of Evidence	Variables/ Instruments	Intervention	Findings	Implications
Abern, L., & Maguire, K. (2018). Contraception knowledge in transgender individuals: Are we doing enough? *Obstetrics and Gynecology, 131*(S1), 65S–65S. https://doi.org/10.1097/01.AOG.0000533319.47797.7e	Transgender views, knowledge, and use of contraception	N- transgender men and women age 18-65 n=120	Qualitative study/ Level VI	n/a Online survey	n/a	Most respondents were at risk for pregnancy, were unsure of sex hormones as contraception, and had been given incorrect advice on hormones.	Highlights misinformation and lack of information surrounding gender transition hormones.
Blunt-Vinti, H. D., Thompson, E. L., & Griner, S. B. (2018). Contraceptive use effectiveness and pregnancy prevention information preferences among heterosexual and sexual minority college women. *Women's Health Issues, 28*(4), 342–349. https://doi.org/10.1016/j.whi.2018.03.005	Pregnancy prevention desires of college age women.	N= women who reported engaging in vaginal sex and not wanting to be pregnant, Ages 18-24, n= 6,486, S= National College Health Assessment Fall 2015 dataset.	Case Control Study/ Level IV	Contraceptive effectiveness, desire for pregnancy prevention/ National College Health Assessment (NCHA)-II	n/a	College age women desire pregnancy prevention information, but SMW are less likely to be on a highly effective contraceptive at the time of last vaginal intercourse.	Providers should discuss sexual behavior and contraceptive needs with all patients regardless of sexual orientation.

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Citation	Study Purpose	Pop (N)/ Sample Size (n)/ Setting	Design/ Level of Evidence	Variables/ Instruments	Intervention	Findings	Implications
Ela, E. J., & Budnick, J. (2017). Non-heterosexuality, relationships, and young women's contraceptive behavior. *Demography, 54*(3), 887–909. https://doi.org/10.1007/s13524-017-0578-y	To examine the fertility behaviors of women in relation to their sexual orientation to determine why SMW have a higher pregnancy risk.	N= 18–19-year-old Michigan women, n= 1,003, S= Relationship Dynamics and Social Life (RDSL) study	Longitudinal study/ Level IV	Relationships, sex, and contraceptive use/ Initial interview and weekly surveys	n/a	SMW are less likely to use contraception than heterosexual women. Mostly heterosexual women have low use of contraceptives and higher numbers of sexual partners and sexual encounters than exclusively heterosexual women.	Providers should not assume contraceptive need or use in SMW. Different SM identities have differing sexual and contraceptive patterns and needs. Further research into SM and fertility should be conducted.
Everett, B. G., Sanders, J. N., Myers, K., Geist, C., & Turok, D. K. (2018). One in three: Challenging heteronormative assumptions in family planning health centers. *Contraception, 98*(4), 270–274. https://doi.org/10.1016/j.contraception.2018.06.007	Show proportion of patients which identify as SMW and LARC uptake by SM status when contraception provided at no cost in clinic.	N= Women requesting contraceptive care, n=3901 survey arm of the HER Salt Lake Contraceptive Initiative conducted in a family planning clinic	Case Control Study/ Level IV	SMW identification, sexual behavior, and LARC use/ survey	No-cost contraception	1 in 3 women identified as a SMW. SMW were more likely to choose a LARC.	Assumptions should not be made about contraceptive need based on sexual identity alone. Free and low-cost LARCs should be offered.

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Citation	Study Purpose	Pop (N)/ Sample Size (n)/ Setting	Design/ Level of Evidence	Variables/ Instruments	Intervention	Findings	Implications
Fuzzell, L., Fedesco, H. N., Alexander, S. C., Fortenberry, J. D., & Shields, C. G. (2016). "I just think that doctors need to ask more questions": Sexual minority and majority adolescents' experiences talking about sexuality with healthcare providers. *Patient Education and Counseling, 99*(9), 1467–1472. http://dx.doi.org.ezproxy.mnsu.edu/10.1016/j.pec.2016.06.004	Adolescent perceptions of sexual health conversations with providers.	N= Adolescent males and females aged 12-31, n= 40, S= in-person semi-structured interview	Qualitative study/ Level VI	Age, sexual orientation, race/ in-person interview	n/a	Lack of sexual health conversations with adolescents and barriers to sexual health conversations with providers.	Providers should increase communication about sexuality, should interview patients without parents, and should create a welcoming environment for sexual minorities.
Gomez, A., Walters, P., & Dao, L. (2015). "Testosterone in a way is birth control": Contraceptive attitudes and experiences among transmasculine and genderqueer young adults. *Contraception, 94*(4), 422-423. https://doi.org/10.1016/j.contraception.2016.07.145	Transgender and genderqueer family planning experiences and needs.	N= Gender non-conforming ages 18-29 assigned female sex at birth. n=20	Qualitative study/ Level VI	n/a In-person interviews	n/a	Knowledge gaps on role of testosterone as birth control, unclear advice from providers, lack of family planning counseling, and use of contraceptives for purposes other than birth control.	Patients and providers need increased knowledge on contraception for transgender patients, contraceptives could be framed for uses other than birth control.

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Citation	Study Purpose	Pop (N)/ Sample Size (n)/ Setting	Design/ Level of Evidence	Variables/ Instruments	Intervention	Findings	Implications
Greene, M. Z., Carpenter, E., Hendrick, C. E., Haider, S., Everett, B. G., & Higgins, J. A. (2019). Sexual minority women's experiences with sexual identity disclosure in contraceptive care. *Obstetrics and Gynecology, 133*(5), 1012–1023. https://doi.org/10.1097/AOG.0000000000003222	Contraceptive needs of SM. Comfort of SMW disclosure in contraceptive encounters.	N= Women aged 20-30 who do not identify as heterosexual, n=22 in 5 focus groups, n=11 individual interview, S= focus groups and individual interviews.	Qualitative descriptive/ Level VI	n/a/ Semi-structured focus groups and interviews	n/a	Experiences of SMW in contraceptive care and disclosure of sexual identity to providers is stressful event comprising 3 stages. Sexual identity and behavior are two distinct discussions that are often overlooked.	Providers should discuss sexual behavior in addition to sexual orientation in an inclusive way and not assume contraceptive needs based on sexual orientation. Contraceptive services should be more accessible.
Haley, S. G., Tordoff, D. M., Kantor, A. Z., Crouch, J. M., & Ahrens, K. R. (2019). Sex education for transgender and non-binary youth: Previous experiences and recommended content. *The Journal of Sexual Medicine, 16*(11), 1834–1848. https://doi.org/10.1016/j.jsxm.2019.08.009	What deficiencies are present in sexual education based on non-binary status and provider views on deficiencies.	N= Transgender and non-binary youth >17 years, parents, and providers, n=21, S= in-depth interviews	Qualitative descriptive/ Level VI	n/a/ semi-structured interviews	n/a	Non-binary youths are receiving inadequate and incorrect sexual advice.	Providers should increase sex education in visits to prevent unprotected sexual encounters.

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Citation	Study Purpose	Pop (N)/ Sample Size (n)/ Setting	Design/ Level of Evidence	Variables/ Instruments	Intervention	Findings	Implications
Higgins, J. A., Carpenter, E., Everett, B. G., Greene, M. Z., Haider, S., & Hendrick, C. E. (2019). Sexual minority women and contraceptive use: Complex pathways between sexual orientation and health outcomes. *American Journal of Public Health, 109*(12), 1680–1686. https://doi.org/10.2105/AJPH.2019.305211	SMW barriers to contraceptive uptake.	N= 20–30-year-old FAB that do not identify as heterosexual, n=22 in 5 focus groups, n=11 individual interviews, S= focus groups and interviews.	Qualitative descriptive/ Level VI	n/a/ semi-structured interview guides	n/a	Barriers to contraceptive uptake are similar and different from hetero women.	Providers should not assume contraceptive need based on orientation and should see queer women as contraceptive users to normalize queer contraceptive use.
Klein, D. A., Berry-Bibee, E. N., Baker, K. K., Malcolm, N. M., Rollison, J. M., & Frederiksen, B. N. (2018). Providing quality family planning services to LGBTQ+IA individuals: A systematic review. *Contraception, 97*(5), 378–391. https://doi.org/10.1016/j.contraception.2017.12.016	Provision of family planning care to LGBTQ+A clients.	N= Descriptive studies published 1985-2016, n=19, S= Electronic databases.	Systematic literature review/ Level V	n/a	n/a	Research on LGBTQ+IA centered interventions is lacking. LGBTQ+IA individuals experience bias when seeking care for family planning which decreased utilization of these services. Provider bias towards LGBTQ+IA family planning exists and has a negative impact on outcomes.	Increased quality family planning care is needed for LGBTQ+IA individuals as well as decreased barriers to care created by hetero focused family planning attitudes. Research into interventions that provide LGBTQ+IA centered care and their impact on family planning outcomes should be conducted.

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Citation	Study Purpose	Pop (N)/ Sample Size (n)/ Setting	Design/ Level of Evidence	Variables/ Instruments	Intervention	Findings	Implications
Krempasky, C., Harris, M., Abern, L., & Grimstad, F. (2020). Contraception across the transmasculine spectrum. *American Journal of Obstetrics and Gynecology, 222*(2), 134–143. https://doi.org/10.1016/j.ajog.2019.07.043	Address misconceptions of transgender contraception needs and guidance for providers of transgender patients.	n/a	Expert opinion/ Level VI	n/a	n/a	Many providers lack basic knowledge of contraception needs of transgender patients.	Providers should increase their knowledge of transgender contraceptive needs and increase inclusiveness through gender-affirming terminology.
Light, A., Wang, L.-F., Zeymo, A., & Gomez-Lobo, V. (2018). Family planning and contraception use in transgender men. *Contraception, 98*(4), 266–269. https://doi.org/10.1016/j.contraception.2018.06.006	Contraceptive use and fertility plans of transgender men (assigned female at birth) during and after transition.	N= Self-identified FTM ages 18-45, n=197, S= anonymous online survey	Cross-sectional/ Level IV	Pregnancy history, contraceptive use, contraceptive method/ survey	n/a	Transgender males are not receiving adequate contraceptive care and are at risk for unintended pregnancy despite testosterone therapy.	Providers need to be aware of the contraceptive needs and unintended pregnancy risks of transgender clients.

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Stark, B., Hughto, J. M. W., Charlton, B. M., Deutsch, M. B., Potter, J., & Reisner, S. L. (2019). The contraceptive and reproductive history and planning goals of trans-masculine adults: A mixed-methods study. *Contraception, 100*(6), 468–473. https://doi.org/10.1016/j.contraception.2019.07.146	Contraceptive use and concerns of FTM.	N= trans-masculine adults, n= 150, S= Clinical interview	Cross-sectional/ Level IV	MAB partners, contraceptive use, fertility plans/ Self-administered survey and medical assessment and interview	n/a	Trans-masculine contraceptive use is affected by social support, social gender affirmation, sociodemographic, and sexual-partner factors. Providers lack knowledge of pregnancy risks of transmasculine adults.	Transmasculine patient need education about contraception and discussion of their risks for pregnancy. Providers should explore their patient's contraceptive needs and provide comprehensive services. Further research is needed into the family planning needs of transmasculine adults.
Stoffel, C., Carpenter, E., Everett, B., Higgins, J., & Haider, S. (2017). Family planning for sexual minority women. *Seminars in Reproductive Medicine, 35*(5), 460–468. https://doi.org/10.1055/s-0037-1604456	Dissemination of current knowledge on the topic of SMW and fertility, contraception, unintended pregnancy, and knowledge gaps.	n/a	Expert opinion/ Level VI	n/a	n/a	SMW is a growing population in the US with unique healthcare needs. Sexual identity and sexual behavior are both important questions to ask patients. Unintended pregnancy rates are higher among SMW, but pregnancy intentions are understudied in SMW. Contraceptive use is poorly studied in SMW.	Sexual identity and sexual behavior are two distinct conversations that providers should have with patients. Contraception should not be overlooked simply because a patient identifies as a SMW. Further research is needed to increase knowledge of fertility and contraceptive needs of SMW.

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Appendix F
Data Themes by Article

Article	Attitudes towards and use of contraception	Obstacles to care	Knowledge gaps	Ways to improve care
Abern, & Maguire, 2018		x	x	
Blunt-Vinti et al., 2018	x			
Ela, & Budnick, 2017	x			
Everett et al., 2018			x	x
Fuzzell et al., 2016		x	x	x
Gomez et al., 2015	x		x	
Greene et al., 2019	x	x	x	x
Haley et al., 2019	x	x	x	x
Higgins et al., 2019	x	x	x	x
Klein et al., 2018		x		x
Krempasky et al., 2020			x	
Light et al., 2018	x		x	
Stark et al., 2019	x	x	x	
Stoffel et al., 2017	x	x	x	x

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