

Supplemental Appendix A Details on additional survey measures for an online survey of transgender, nonbinary, and gender-expansive people assigned female or intersex at birth in the United States

Note: Text in curly brackets (*i.e.*, {})
indicates customizable survey text.

Customizable survey text:

“Next is a list of medical words for various body parts and experiences related to sex and fertility (the ability to get pregnant). We may ask you about these body parts in reference to your own body or to another person’s body, such as a sexual partner. For each word, please let us know if you use the word listed. If you use another word, please write it in. **To improve your overall survey experience, we will use your preferred words for each of the following items whenever possible in this survey, beginning AFTER this section. We will not be able to display your own words until AFTER this section is completed.**”

Customizable survey text—birth control:

“**Birth control** can be used for more than one reason. Some people use birth control to avoid getting pregnant. It can include using a condom, not having any sex (abstinence), taking a pill every day to prevent pregnancy, having been sterilized, having an implant put in your arm, or many other medications, devices, and/or practices. Some people use birth control for nonpregnancy related reasons, like gender-affirmation, clearing up their skin, reducing body hair, or preventing sexually transmitted infections.”

“After reading this definition, please tell us if you use this word, or what word you use instead.”

- Yes, I use the words "birth control"
- No, I use a different word. The word(s) I use instead of "birth control" is:
- Prefer not to say

Customizable survey text—pregnant:

“To be **pregnant** is to have cells growing/dividing in the uterus that could turn into a baby.”

“After reading this definition, please tell us if you use this word, or what word you use instead.”

- Yes, I use the word "pregnant"
- No, I use a different word. The word I use instead of "pregnant" is:
- Prefer not to say

Sex assigned at birth:

“What sex were you assigned at birth, for example on your original birth certificate?”

- Female
- Male
- Not listed (please specify):
- Prefer not to say

→ Based on write-in responses, we created two additional categories, presented in [Table 1](#) (“Intersex” and “Sex was not assigned at birth”)

Gender identity:

“If you had to choose from the list below, although we acknowledge that these categories may

not be ideal, what best describes your current gender identity at this time? Select all that apply.”

- Agender
- Cisgender Man (a person that identifies as a man and was assigned male sex at birth)
- Cisgender Woman (a person that identifies as a woman and was assigned female sex at birth)
- Genderqueer
- Man
- Non-binary
- Transgender Man
- Transgender Woman
- Two-Spirit (feel free to include your tribe’s specific language for your identity, if you would like):
- Woman
- Additional gender category, please specify:
- Prefer not to say

Sexual orientation:

“Do you consider yourself to be: (Select all that apply)”

- Asexual
- Bisexual
- Gay
- Lesbian
- Pansexual
- Queer
- Questioning
- Same-gender loving
- Straight/heterosexual
- Another sexual orientation (please specify):

Race and ethnicity:

“Which category(ies) best describe you? Select all that apply.”

- American Indian or Alaska Native - What tribe(s) are you affiliated with?:
- Black or African American
- Central Asian
- East Asian
- Hispanic or Latinx
- Middle Eastern or North African
- Native Hawaiian and Pacific Islander
- South Asian
- South East Asian
- White
- Unknown
- Not listed, please tell us:
- None of these

Race and ethnicity were included in our analyses given racial and ethnic disparities in contraceptive care resulting from systemic racism and oppression.¹

→ For our regression analyses, we combined the following race categories into one “Asian and Pacific Islander” category: “Central Asian”, “East Asian”, “Native Hawaiian and Pacific Islander”, “South Asian”, and “South East Asian”

Considers self at risk for unintended pregnancy:

“Do you consider yourself to be at risk for getting {pregnant} at a time when you do not want to be pregnant (unintended {pregnancy})?”

- Yes
- No

- I don't know

Ever sterilized

"Due to the limitations in electronic survey design and the many options below, we are unable to use your preferred words for this question and will instead use medical terms."

"Which methods of birth control/pregnancy prevention have you EVER used FOR THE PURPOSE OF PREGNANCY PREVENTION? Select all that apply."

- [List of contraceptive options was included]
- **"Sterilization (I'm sterilized, or I've had my tubes tied, ovaries removed, and/or uterus removed or other procedure which makes getting pregnant impossible)** (sterilization involves a surgical procedure that closes or blocks the fallopian tubes so eggs and sperm cannot meet and result in pregnancy)"

Ever used contraception for gender affirmation:

"Now we would like to ask you a few questions about {birth control}. As a reminder, '{birth control}' can be used by people for different things. Some people use {birth control} to avoid getting {pregnant}. Other reasons people use {birth control} include things like gender-affirmation, clearing up their skin, reducing body hair, or preventing sexually transmitted infections."

"Have you ever used a method of {birth control}, for any reason?"

- Yes
- No
- I don't know

If YES: "What are the reasons that you have used birth control? Select all that apply."

- To affirm my gender
- To avoid getting a sexually transmitted infection (STI) from someone else
- To avoid spreading a sexually transmitted infection (STI) that I have
- To avoid symptoms associated with my period like: chest tenderness, bloating, acne,
- Pain from cramping, heavy bleeding (sometimes referred to as premenstrual syndrome or PMS)
- To stop having a period
- To prevent pregnancy
- Prevent hair growth (hirsutism)
- To reduce chronic pelvic pain (including endometriosis)
- To treat another medical condition
- Not listed (please specify):
- None of these

→ We coded participants as ever using contraceptives for gender affirmation if they responded, "To affirm my gender"

Wants to avoid estrogen

"Does whether or not a {birth control} method releases estrogen in your body matter to you?"

- Yes
- No
- I don't know

→ We coded participants as wanting to avoid estrogen generally if they responded "Yes" (*versus* "No" or "I don't know")

IF YES: "Why does it matter to you if estrogen is released in your body? Select all that apply."

- I do not want to use estrogen because it is a "female" hormone
- I do not want to use estrogen because of its "feminizing" effects
- Another reason that is not listed (please describe):
- I don't know

→ We coded participants as wanting to avoid estrogen because they viewed it as a "female" or "feminizing" hormone if they responded, "I do not want to use estrogen because it is a 'female' hormone" or "I do not want to use estrogen because of its 'feminizing' effects" or if they indicated concerns in open-response text about it counteracting testosterone they are taking.

Ever felt that opinions about their gender identity and/or sexual orientation from healthcare staff have negatively impacted them in a healthcare setting

"In a health care setting, have you ever felt that opinions about your gender identity and/or sexual orientation from health care staff have negatively impacted you (whether these opinions were said out loud or suggested with body language)?"

- Yes - my gender identity
- Yes - my sexual orientation
- Yes - my gender identity AND my sexual orientation
- No
- I don't know

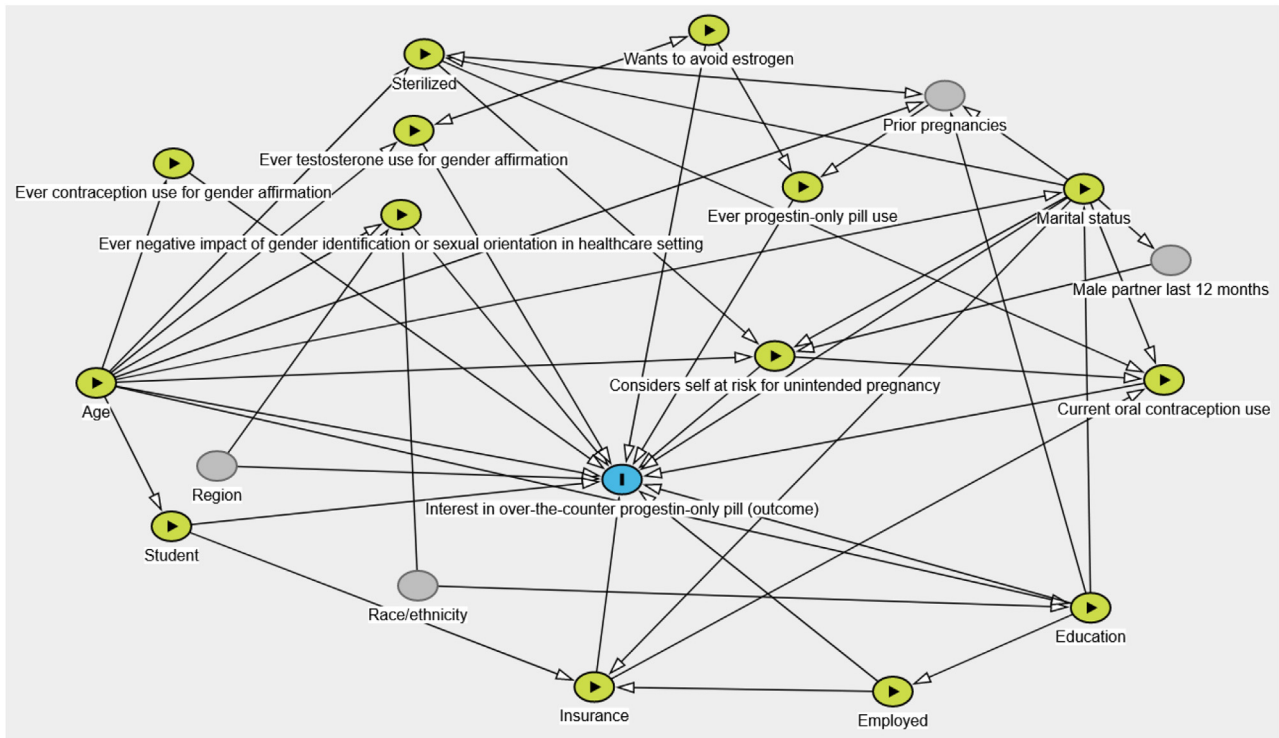
→ We coded participants as having negative experiences in healthcare settings related to gender identify and/or sexual orientation if they responded "Yes - my gender identity", "Yes - my sexual orientation", or "Yes - my gender identity AND my sexual orientation" (*versus* "No" or "I don't know")

Supplementary Reference

1. Key K, Wollum A, Asetoyer C, et al. Challenges accessing contraceptive care and interest in over-the-counter oral contraceptive pill use among Black, Indigenous, and people of color: an online cross-sectional survey. *Contraception* 2023;120:109950.




SUPPLEMENTAL APPENDIX B

A summary directed acyclic graph that represents the study investigators' understanding of the relationships between variables that influence interest in over-the-counter progestin-only pill use for an online sample of transgender, nonbinary, and gender-expansive people assigned female or intersex at birth in the United States



NOTE: This directed acyclic graph is a crude model of factors that influence interest in over-the-counter progestin-only pill use; the authors created individual directed acyclic graphs for each exposure of interest. For brevity, we present only the global directed acyclic graph here, not each individual directed acyclic graph. We ran separate logistic regression models for each exposure of interest. We identified potential confounders for each exposure by constructing separate directed acyclic graphs for each exposure using DAGitty version 3.0 (Nijmegen, The Netherlands). We selected sociodemographic and reproductive health variables from Tables 1-2 as candidates for model inclusion, all known to be confounders of or strong influencers of interest in contraception.

Legend:

-  = outcome variable
-  = exposures of interest (each explored in a separate regression model)
-  = other variable (potential confounder)