


# Meeting Preferences for Specific Contraceptive Methods: An Overdue Indicator

Kristen Lagasse Burke and Joseph E. Potter 

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*Fertility surveys have rarely asked people who are using contraception about the contraceptive method they would like to be using, implicitly assuming that those who are contracepting are using the method they want. In this commentary, we review evidence from a small but growing body of work that often-times indicates this assumption is untrue. Discordant contraceptive preferences and use are relatively common, and unsatisfied preferences are associated with higher rates of method discontinuation and subsequent pregnancy. We argue that there is opportunity to center autonomy and illuminate the need for and quality of services by building on this research and investing in the development of survey items that assess which method people would like to use, as well as their reasons for nonpreferred use. The widespread adoption of questions regarding method preferences could bring indicators of reproductive health services into closer alignment with the needs of the people they serve.*

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## INTRODUCTION

In the long history of surveys of fertility and reproductive health, contraceptive users are almost always asked about the method they are using but are not asked if the method they are using is what they would like to be using. The implicit assumption seems to be that those who are contracepting have obtained and are using their preferred method.

Most of the effort on assessing the extent of mismatches between the demand for and use of contraception has focused on “unmet need,” defined as the difference between the current use of contraception in a population and the level of use that would be achieved if everyone in that population with a presumed need were actually practicing contraception. The distinction is between using versus not using a method, and “need” is constructed from a series of questions regarding circumstances bearing on a person’s presumed need for contraception. The substantial literature on unmet need has primarily focused on perceived gaps in method use in low- and middle-income countries (Bradley and Casterline 2014; Cleland, Harbison, and Shah 2014).

Assessments of unmet need have largely eluded contraceptive preferences, and the possibility that existing estimates might severely misjudge true unmet need by failing to account

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Kristen Lagasse Burke, Joseph E. Potter, Population Research Center and Department of Sociology, University of Texas at Austin, Austin, TX, 78712, USA. E-mail: kristenburke@utexas.edu.

for contraceptive satisfaction or desire has been raised previously. Some argue that unmet need may be underestimated, as “there are indications some, maybe many, of the women who are classified as having a met need are dissatisfied with their current contraceptive method” (Rominski and Stephenson 2019). In testing a new metric that expanded the definition to include method satisfaction in a prospective cohort study in Kenya, researchers found higher levels of unmet need than previously detected (Rothschild, Brown, and Drake 2021). Yet, they and others note that need may also be overstated if there is no demand for contraception among those who are not contracepting (Rothschild, Brown, and Drake 2021; Senderowicz and Maloney 2022; Moreau et al. 2019).

In this commentary we argue that, in assessing the degree to which the demand for contraception is met, there is much to be gained by focusing directly on individuals’ preferences for specific methods and determining if they are using the method that they want. Our argument for measuring whether people are using their desired method is threefold. First, unsatisfied preferences are predictive of other important reproductive health outcomes, including contraceptive continuation and pregnancy. Second, an assessment of the degree to which preferences are satisfied is, on its own, an indicator of reproductive autonomy that reflects on need for and quality of care. Third, information on whether preferences for specific methods are satisfied and reasons for nonpreferred use can inform efforts to address the barriers responsible for mismatches.

We begin with a review of the limited number of studies that have addressed the possibility of discordance between method preferences and contraceptive use. We review survey questions used for this purpose, additional findings regarding reasons for nonpreferred method use and, if available, the reproductive health outcomes associated with not using a preferred method. Later, we elaborate on why we believe that preferences and concordant use are central to concerns regarding reproductive autonomy and improving quality of care. We also consider the merits of assessing preferences and whether they are met relative to other indicators of method satisfaction or desirability, and make specific recommendations for items to be included in future fertility surveys.

## RESEARCH ON CONTRACEPTIVE PREFERENCES: AN OVERVIEW

To our knowledge, there are at least 12 surveys that have directly assessed contraceptive preferences and discordant method use since the year 2000 (Table 1). We review the content and results of these surveys to provide an overview of how method-specific preferences have been assessed but note that this does not constitute a systematic review.<sup>1</sup>

There have been four nationally representative surveys conducted in the United States that assess preferences. The first we know of is a survey that was conducted in 2004 among

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1 We focus on quantitative surveys that measure both contraceptive preferences and use simultaneously, allowing a calculation of discordance. Studies that assessed individuals’ preferences among a limited array of method options were not included, nor were studies that assessed the effect of contraceptive counseling on preferences before and after counseling. We are aware of a small number of studies not included in our overview which collect data on both method use and preference, but have not published question text or rate of discordant preferences and use (Ajong et al., 2018; Rahmanpour et al., 2010; Sherpa, Sheilini, and Nayak 2013; Thomson et al., 2012; Tsehaye et al., 2013; Weldegerima and Deneke, 2008; see Yeh et al. 2022).

**TABLE 1 Summary of surveys that have assessed contraceptive preferences, including question wording, survey population, and results from published analyses**

| Survey name  | Year(s) of data collection | Data collected | Survey question(s)  | Survey population and sample analyzed  | N <sup>a</sup>                     | Cross-sectional or longitudinal analysis of preferences | Percent with an unsatisfied preference               | What predicts having an unsatisfied preference? (Unsatisfied preference as a dependent variable) | What does having an unsatisfied preference predict? (Unsatisfied preferences as an independent variable) | Method use |
|--|----------------------------|----------------|---|--|------------------------------------|---|--|--|--|------------|
|  |                            |                |   |  |                                    |   |  |  |  |            |
| Frost and Darroch (2008)   | 2004                       |                | If you could use any birth control method available and you did not have to worry about cost, would you like to switch methods?   | Nationally representative sample of U.S. women aged 18–44 who were at risk or an unintended pregnancy. Analysis restricted to those who were using a reversible contraceptive method.  | 1,640                              | Cross-sectional   | 31%  |  |  |            |
| Texas Postpartum Contraception Study, two cities (Potter et al., 2014, 2016) | 2012–2014                  | x              | What birth control method would you like to be using [3/6] months from now? Are there any methods that you would like to be using or would consider using [3/6] months from now but which you have heard are not available from your provider or which are not covered by your insurance? Can you tell me why you're not using [preferred method] right now? (open-ended) (Among those who did not want or were unsure about having more children): Would you like to have had a tubal ligation in the hospital right after delivering your new baby? | Survey of women who delivered in one of three hospitals in Texas who were aged 18–44, did not want more children for at least two years, and delivered a healthy baby they intended to take home from the hospital. Administered shortly after delivery, 3, 6, 12, 18, and 24 months after delivery. Question asked of those who had not had a tubal ligation and were not pregnant. At baseline and 3 months, the question referred to what method they would want to be using at 6 months after delivery (6 and 3 months from now, respectively). At 6 months, it asked about desired use 3 months from now. | Survey n = 695; varies by analysis | Longitudinal  | 62% (Potter et al., 2014); 67% (Potter et al., 2016) | Age, parity, insurance status, household income  | Pregnancy  |            |

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**TABLE 1 (Continued)**

| Survey name   | Year(s) of data collection | Data collected | Survey question(s)   | Survey population and sample analyzed   | N <sup>a</sup> | Cross-sectional or longitudinal analysis of preferences | Percent with an unsatisfied preference | What predicts having an unsatisfied preference? (Unsatisfied preference as a dependent variable) | What does having an unsatisfied preference predict? (Unsatisfied preferences as an independent variable) |
|---|----------------------------|----------------|--|---|----------------|---|--|--|--|
| Women's Healthcare Experiences and Preferences Study (He et al. 2017) | 2013                       | x              | <p>If you could choose any type of birth control method in the future, regardless of cost or other difficulties, what method would you most like to use? Are you currently using the type of birth control that you would most like to use? What is the reason(s) that you are not currently using the type of birth control that you would most like to use? (select all)</p> | Population-based survey of women in the U.S. aged 18–55. Analysis restricted to those aged 18–44 who were sexually active with a male partner in the last year; were not pregnant in the last year; were not trying to become pregnant, and were not sterile for noncontraceptive reasons.      | 363            | Cross-sectional   | 36%                                    | Method use   |  |
| Women's Access to Health Services Study (Hopkins et al. 2018)         | 2014–2015                  | x              | <p>If you could use any birth control method you wanted, what method would you use? Why are you not currently using the birth control method you selected in [previous question]? (select all)</p>   | Sample of female community college students in Texas aged 18–24 who attended one of three community colleges and were at risk of pregnancy. Analysis restricted to those who had ever had sex; were not pregnant or trying to become pregnant, and were not using a preferred permanent method. | 966            | Cross-sectional   | 54%                                    | Usual source of care, relationship status, and parity  |  |

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**TABLE 1 (Continued)**

| Survey name  | Year(s) of data collection | Data collected | Survey question(s) | Survey population and sample analyzed  | N <sup>a</sup>                          | Cross-sectional or longitudinal analysis of preferences | Percent with an unsatisfied preference | What predicts having an unsatisfied preference? (Unsatisfied preference as a dependent variable)        | What does having an unsatisfied preference predict? (Unsatisfied preferences as an independent variable) |
|--|----------------------------|----------------|--------------------|--|---|---|--|---|--|
| Examining Contraceptive Use and Unmet Need among Women Veterans (Judge-Golden et al. 2020)             | 2014–2016                  | x              | x                  | <p>If you could choose any method of contraception or birth control to prevent pregnancy, what would be your ideal choice? Why aren't you currently using this method of contraception? (open ended)</p> <p>Nationally representative sample of U.S. women veterans aged 18–45 who had visited the VA for a primary care visit within the last year. Analysis restricted to those who were sexually active with a man in the past month, not pregnant or trying to become pregnant, greater than 6 weeks postpartum, and with no history of infertility or hysterectomy.</p>   | 979                                     | Cross-sectional   | 42%                                    | Race/ethnicity, history of mental health disorder, presence of a gynecologist at VA primary care site   |  |
| Texas Postpartum Contraception Study, six cities (Potter et al. 2017, Burke, Thaxton, and Potter 2021) | 2014–2018                  | x              | x                  | <p>What birth control method do you want to be using [3/6] months from now? If you could get any birth control method you wanted for free, what method would you use? Can you tell me why you're not using [preferred method] right now? (open-ended) (Among those who did not want or were unsure about having more children): Would you have liked to have had your tubes tied right after you had your baby?</p> <p>Survey of women who were uninsured or publicly insured at the time of delivery in one of eight Texas hospitals who were aged 18–44. Administered shortly after delivery, 3, 6, 12, 18, and 24 months after delivery. Question asked of those who had not had a tubal ligation and those who were not pregnant. At baseline and 3 months, the question referred to what method a respondent wanted to be using at 6 months after delivery (6 and 3 months from now respectively) and was followed with a prompt regarding cost. From six months forward, it asked about getting any method for free.</p> | Survey $n = 1,700$ ; varies by analysis | Longitudinal  | 42% initial, 58% with prompts          | Hospital provision of immediate postpartum LARC, nativity, source of prenatal care, race/ethnicity, age | Contraceptive continuation, pregnancy  |

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TABLE 1 (Continued)

| Survey name  | Year(s) of data collection | Data collected | Survey question(s)  | Survey population and sample analyzed  | N <sup>a</sup>   | Cross-sectional or longitudinal analysis of preferences | Percent with an unsatisfied preference  | What predicts having an unsatisfied preference? (Unsatisfied preference as a dependent variable)  | What does having an unsatisfied preference predict? (Unsatisfied preferences as an independent variable) |
|--|----------------------------|----------------|---|--|--|---|---|---|--|
| Umoyo Wa Thanzi (Huber-Krum et al. 2018)   | 2017–2018                  | x              | If you could choose any family planning method you wanted, choose, now or in the future if any?   | Cluster-based survey of women aged 15–44 living in the Lilongwe District in Malawi. Analysis restricted to those who had ever had sex, had not had a tubal ligation, and were not pregnant.  | 818  | Cross-sectional   | 63%   | Satisfaction with current family planning choice, pregnancy desires, and sexual activity  |  |
| National Survey of Family Growth (Burke, Potter, and White 2020, Kavanaugh, Pliskin, and Hussain 2022) | 2015–2017, 2017–2019       |                | If you did not have to worry about cost and could use any type of contraceptive method available, would you want to use a different method? | Nationally representative sample of the noninstitutionalized population of U.S. women aged 15–49. Those who had never used a method or were not currently using a method were asked if they would want to use "a method." Burke et al. use 2015–2017 data restricted to those aged 15–44 who had sex with a male partner in the last 3 months, were not pregnant, and were not trying to become pregnant. Kavanaugh et al. use 2015–2019 data restricted to those aged 15–49 who had sex with a male partner in the last 12 months, were not trying to become pregnant, were not using permanent contraception, and had an income less than 300% of the federal poverty level. | 2,744 (Burke, Potter, and White, 2020)<br>4,251 (Kavanaugh, Pliskin, and Hussain 2022) | Cross-sectional   | 22% (Burke, Potter, and White 2020); 23% of contraceptive users, 39% of nonusers (Kavanaugh, Pliskin, and Hussain 2022) | Current method use, race/ethnicity, age, household income, insurance status, access to reproductive healthcare, receipt of person-centered contraceptive counseling |  |

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**TABLE 1 (Continued)**

| Survey name   | Year(s) of data collection | Data collected | Survey question(s)  | Survey population and sample analyzed   | N <sup>a</sup> | Cross-sectional or longitudinal analysis of preferences | Percent with an unsatisfied preference | What predicts having an unsatisfied preference? (Unsatisfied preference as an independent variable)  | What does having an unsatisfied preference predict? (Unsatisfied preferences as an independent variable)               |
|---|----------------------------|----------------|---|---|----------------|---|--|--|--|
| Ohio Survey of Women (Chakraborty et al., 2021)               | 2018–2019                  | x              | If you could use any birth control method you wanted, what method(s) would you use? What is the main reason you are not using the birth control method you want to use? (select all that apply from a list of options)  | Population-based survey of women aged 18–44 in Ohio. Question asked of and analysis restricted to those who were using any method of contraception.                                   | 1,390          | Cross-sectional   | 25%                                    | Socioeconomic status (composite measure of educational attainment and income), race/ethnicity, and sense of control having had a women's check-up visit in the past year | Method satisfaction, consistency of method use, confidence in correct method use, and sense of control over method use |
| KFF Women's Health Survey (Frederiksen, Ranji, and Long 2021) | 2020                       | x              | If you could use any type of birth control method available, would you want to use a different method than you're currently using, or not? What is the primary reason you are not using your preferred method of birth control? (select one from list of options) | Probability-based panel of U.S. women aged 18–64. Question asked of and analysis restricted to those who were aged 18–49 who had used birth control or condoms in the past 12 months. | 1,323          | Cross-sectional   | 18%                                    | Insurance status, income   |  |

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**TABLE 1 (Continued)**

| Survey name  | Year(s) of data collection | Data collected | Survey question(s) | Survey population and sample analyzed  | N <sup>a</sup>  | Cross-sectional or longitudinal analysis of preferences | Percent with an unsatisfied preference | What predicts having an unsatisfied preference? (Unsatisfied preference as a dependent variable)  | What does having an unsatisfied preference predict? (Unsatisfied preferences as an independent variable) |
|--|----------------------------|----------------|--------------------|--|---|---|--|---|--|
| Kozlowski et al. (2022)                              | 2017–2018                  | x              | x                  | What birth control method or methods would be IDEAL, if any? Please circle all that apply using the pictures below. Do any of the following make it hard for you to get the kind of birth control you want? (select all that apply from a list of options) | Convenience sample of women aged 18–45 who reported housing insecurity or homelessness and used homeless services at one of four shelters in Salt Lake County, Utah.                    | 90  | 59%                                    |   |  |
| Survey of the Health of Wisconsin (Svan et al. 2022) | 2021                       | x              | x                  | If you could use any birth control method you wanted, what method would you use? If you are not using your preferred birth control method(s), why or why not? Please list all reasons that apply.  | Probability-based sample representative of adults in Wisconsin; data from wave 2 of a COVID-19 impact survey. Analyses restricted to women aged 18–49 who were currently contracepting. | 247   | 33%                                    | Household income, worry about job loss, worry about running out of food, running of food, inability to afford balanced meals, financial stress, loss of household income due to COVID-19, inability to pay rent/mortgage due to COVID-19, had to relocate due to COVID-19 |  |

<sup>a</sup> Refers to the number of responses analyzed in published manuscripts and reports. The number of people surveyed or asked about their preferred method may be greater than this reported number.



women aged 18–44 who were at risk of an unintended pregnancy (Frost and Darroch 2008). The preference question, “If you could use any birth control method available and you did not have to worry about cost, would you like to switch methods?” was asked of 1,640 women using reversible contraception, 31 percent of whom said they would like to switch.

The National Survey of Family Growth (NSFG), the premier fertility survey in the United States, began asking about preferences in 2015 using a question focused on cost, similar to that used by Frost and Darroch. In 2015–2017 NSFG, 22 percent of women aged 15–44 who were at risk of an unintended pregnancy would prefer another method (Burke, Potter, and White 2020). Kavanaugh et al. (2022) pooled data from the 2015–2017 and 2017–2019 cycles of the NSFG. In their analysis of data from women with low incomes aged 18–49 and at risk of unintended pregnancy, they found that 23 percent of contraceptive users and 39 percent of contraceptive nonusers would prefer to use a(nother) method in the absence of cost. In both the survey analyzed by Frost and Darroch as well as the NSFG, no information was collected about which method someone would like to use or reasons for nonpreferred use beyond cost.

A smaller U.S. survey that asked about preferences in 2013 included a sample of 363 women who provided information on their preferences (He et al. 2017). One’s preferred method was determined by asking: “If you could choose any type of birth control method in the future, regardless of cost or other difficulties, what method would you most like to use?” Later, women were asked if they were using the method they would most like to use, and if not, their reasons for nonpreferred use. In this sample, 36 percent were not using their preferred method.

The fourth study was the 2020 KFF Women’s Health Survey, which assessed preferences among a sample of 1,323 women who had used contraception in the last year (Frederiksen, Ranji, and Long 2021). The preferred method question was, “If you could use any type of birth control method available, would you want to use a different method than you’re currently using, or not?” Overall, 18 percent reported not using their preferred method, though the survey did not assess which method women would prefer.

Several studies have assessed preferences among more specific populations. An assessment of concordance between preferences and use in a low-income country setting was carried out in a rural district of Malawi (Huber-Krum et al. 2021). Respondents were asked, “If you could choose any family planning method you wanted, which method would you choose, now or in the future?” Partnered women were asked the same question regarding their male partner’s preferences. Responses were obtained from a total of 818 women, including 719 partnered women. Only 37 percent were using their preferred method. A nearly identical fraction was using the method that they said their partner preferred.

Two cohort studies conducted in Texas followed postpartum women over the two years after they delivered (Potter et al. 2014, 2017). The second had wider geographic coverage with recruitment of 1,700 women at eight hospitals in six cities across the state beginning in 2014. Preference questions were structured similarly across the two studies, and results were similar; we describe the larger study here. At the baseline and three-month interview, respondents were asked about the method of birth control they wanted to be using six months after delivery and then asked if they would have chosen differently if they could get any method for free. For those who did not want more children or were unsure, an additional prompt asked if they would have liked to have had their tubes tied immediately following delivery. In

interviews conducted at six months and afterwards, preference questions referred to the method respondents would like to use presently. Researchers drew a distinction between initial preferences and elicited preferences that incorporated the responses to prompts concerning both cost and tubal ligation. In this study, 42 percent reported a mismatch between use and preferences at six months after delivery when relying on initial preferences from the three-month interview. This figure rose to 58 percent when using the prompts for elicited preferences.

A survey that explicitly sought to assess the match between the self-reported “ideal” method and current use was carried out among women veterans (Judge-Golden et al. 2020). The analytic sample included 979 women at risk for unintended pregnancy. To ascertain their preferred method, participants were asked “If you could choose any method of contraception or birth control to prevent pregnancy, what would be your ideal choice?” In the case of mismatch with current use, they were further asked why they were not using their ideal method. Mismatch was reported by 42 percent of women.

Four surveys were conducted by researchers in Texas, Ohio, Utah, and Wisconsin, and one additional survey promises U.S. state-level estimates in the future. In Texas, the Women’s Access to Health Services Study was conducted among 966 women aged 18–24 who were enrolled at one of three community colleges (Hopkins et al. 2018). In this study, respondents were asked, “If you could use any birth control you wanted, which method would you use?” Among those who were not using their preferred method, a follow-up question assessed their reasons for nonpreferred use. In this study, 54 percent of women were not using their preferred method.

The Ohio Survey of Women relied on a population-based survey of reproductive age women in Ohio (Chakraborty et al. 2021). The preferred method question was “If you could use any birth control method you wanted, what method(s) would you use?” It was asked of the 1,746 women who were using a contraceptive method, and, of them, 356 provided no response. Among users who gave a preference, 75 percent reported using their preferred method. We are aware of a growing number of surveys that assess method preference and reasons for nonpreferred use in nine U.S. states being carried out by the National Opinion Research Center. To date, Chakraborty et al. 2021 is the only publication from these surveys that we are aware of.

The Survey of the Health of Wisconsin (SHOW) is an ongoing study of adults in Wisconsin (Swan et al. 2022). During the second of a three-wave COVID-19 impact survey conducted in early 2021, SHOW included questions regarding contraceptive preferences, asking, “If you could use any birth control method you wanted, what method would you use?” A follow-up question asked about reasons for nonpreferred use. In a cross-sectional analysis, Swan and colleagues found that one-third of women aged 18–49 who were currently contracepting were not using the method they desired.

In a small Utah-based study focused on women experiencing housing insecurity or homelessness, 59 percent reported not using their ideal method. In this survey, ideal method use was assessed among 90 women with a questionnaire that included both images and text describing the methods, and respondents were able to choose more than one ideal method.

Finally, the Behavioral Risk Factor Surveillance System (BRFSS), a national survey in the U.S. administered by the Centers for Disease Control and Prevention, added a question

regarding contraceptive preferences to their 2022 family planning module. This question asks, “If you could use any birth control method you wanted, what method would you use?” These data will likely be available in 2023 and will provide information on contraceptive use and preferences among female respondents between 18 and 49 living in states that fielded the optional family planning module of the BRFSS questionnaire.

## Factors Associated with Unsatisfied Preferences

Across these studies, common factors associated with having an unsatisfied preference emerged. Those using condoms, withdrawal, and no method of contraception tended to have higher rates of unsatisfied preferences, while those using long-acting reversible contraception (LARC) and hormonal methods generally had higher concordance (Burke, Potter, and White 2020; Chakraborty et al. 2021; Frost and Darroch 2008; He et al. 2017; Hopkins et al. 2018; Judge-Golden et al. 2020; Kavanaugh, Pliskin, and Hussain 2022; Potter et al. 2017; 2014; Swan et al. 2022).

Sociodemographic characteristics were also commonly associated with having a satisfied preference. In several studies, those with fewer economic resources were more likely to report a mismatch than higher income women (Burke, Potter, and White 2020; Chakraborty et al. 2021; Frederiksen, Ranji, and Long 2021; Kavanaugh, Pliskin, and Hussain 2022; Potter et al. 2014; Swan et al. 2022), while insurance coverage or having a usual source of care were associated with using a preferred method (Burke, Potter, and White 2020; Frederiksen, Ranji, and Long 2021; Hopkins et al. 2018; Kavanaugh, Pliskin, and Hussain 2022). Several studies found that White women had the highest rate of concordance compared to women of other races/ethnicities (Burke, Potter, and White 2020; Chakraborty et al. 2021; Kavanaugh, Pliskin, and Hussain 2022; Potter et al. 2017), and many found that characteristics including age, parity, and relationship status were associated with preferred method use (Burke, Potter, and White 2020; He et al. 2017; Potter et al. 2016, 2017).

## Reasons for Nonpreferred Use

Of the surveys reviewed, one did not assess reasons for nonpreferred method use (Huber-Krum et al. 2021), and two implicitly assessed preference/use mismatch due to cost alone (Burke, Potter, and White 2020; Frost and Darroch 2008; Kavanaugh, Pliskin, and Hussain 2022). Judge-Golden et al. classified the reasons for nonpreferred use into modifiable and nonmodifiable factors, from a health systems perspective. Among modifiable reasons that emerged from theirs and other studies, cost and affordability ranked highly (Chakraborty et al. 2021; Coleman-Minahan et al. 2018; Frederiksen, Ranji, and Long 2021; He et al. 2017; Hopkins et al. 2018; Judge-Golden et al. 2020), but many other factors contributed to the mismatch. Provider barriers to provision of specific methods, including inaccurate counseling, and system barriers, like facilities not offering the full scope of methods, also contributed to nonpreferred method use (Coleman-Minahan et al. 2018; Frederiksen, Ranji, and Long 2021; Hopkins et al. 2018; Kozlowski et al. 2022).

In the study by Judge-Golden et al., over three-quarters of the reasons for nonpreferred use were considered nonmodifiable via health systems. These included partner influences, pregnancy plans, or side effects; similar reasons emerged in other studies. Judge-Golden and

colleagues surmised that respondents may have interpreted the word “ideal” with respect to contraceptive use without accounting for their current life circumstances. This question highlights some of the unresolved issues in accurately assessing method preferences and the potential importance of directly addressing context in question wording.

## Consequences of Failing to Meet Contraceptive Preferences

With respect to contraceptive use, having a preference/use mismatch was associated with less consistent and confident method use, as well as a diminished sense of control over their method among women in Ohio (Chakraborty et al. 2021). From longitudinal studies of postpartum contraceptive use in Texas, those who were using their preferred method were more likely to continue use than women using the same method who wanted to use something else. Among postpartum users of short-acting hormonal methods, 61 percent preferred a different method of contraception at the time of delivery, and those who preferred a more effective method had higher rates of discontinuation (Burke, Thaxton, and Potter 2021). Similarly, among postpartum LARC users, those who wished that they had a tubal ligation at the time of delivery had higher discontinuation rates (Ela et al. 2022).

Lower continuation rates among those not using their preferred method might be a positive outcome if discontinuation resulted in switching to their preferred method, but in the prospective Texas postpartum studies, that was rarely the case. Among the 358 users of short acting hormonal methods who switched to another method, only 13 percent subsequently initiated use of their preferred method (Burke, Thaxton, and Potter 2021).

Other studies have found similar results regarding method continuation among those using a nonpreferred method. A study conducted in East Java, Indonesia, in the late 1980s assessed respondents' preferences prior to their receipt of a method, and those who were denied their preferred method were more likely to discontinue over the subsequent year (Pariani, Heer, and Van Arsdol 1991). Which method a person was using had no bearing on their continuation trajectory; what mattered was whether they were using their desired method.

A recent clinical trial conducted in Durban, South Africa, also showed substantially higher discontinuation among those not assigned their preferred method (Beesham et al. 2022). In this study, after agreeing to accept whichever method they were assigned, participants were randomized to receive the contraceptive injection, copper IUD, or implant. At the conclusion of the trial, participants were asked what method they had hoped to have been assigned. Six-month continuation for those who wanted and received the injection or IUD was higher than for those who were assigned those methods while wanting another.

Two analyses of the Texas postpartum data attempted to determine the consequences of failing to get one's preferred method on subsequent pregnancies. In an analysis based on the first cohort, 403 women were categorized according to whether they experienced a barrier or had accessed their preferred method within six months after delivery. The estimated cumulative risk of pregnancy over 24 months was 34 percent for those who had experienced any type of barrier compared to 12 percent for those who had not encountered a barrier (Potter et al. 2016).

The second analysis, from the larger cohort study of postpartum contraception in Texas, included 1,441 women and the central predictor was whether an individual obtained her

preferred method within three months after delivery (Potter et al. 2022). After reweighting to adjust for possible confounders, those who had not initiated their preferred method use by three months were about twice as likely to become pregnant within the next 18 months as those who had accessed their preferred method.

## DISCUSSION

Findings from the studies reviewed point to both the opportunities and challenges involved in measuring contraceptive preferences and their concordance with actual use. Even in the best-case-scenario studied, the frequency of mismatch was nontrivial; the proportion with unsatisfied preference ranged from 18 percent to 67 percent. Moreover, several of the studies reviewed suggest that having preferences met can make a substantial difference in method continuation and eventual pregnancy outcomes. We take these as indications that measuring preferences could meaningfully advance assessment of the need for and quality of services in a way that evaluating contraceptive use alone cannot.

### Contraceptive Preferences as an Indicator of an Autonomy

Measuring contraceptive preferences and assessing the degree to which they are met is responsive to calls to elevate autonomy in family planning (Potter et al. 2019; Senderowicz 2020). As others have argued, “what questions researchers ask ... and what outcome variables are used have implications for the lens through which women’s reproductive health is seen” (Dehlendorf et al. 2018). Advocates for quality, rights-based contraceptive care have long concerned themselves with patient choice and autonomy (Bruce 1990), but population-level metrics have not yet caught up. This concern was highlighted by RamaRao and Jain (2015) who note the tension between the numeric goals of FP2020 (Brown et al. 2014) and honoring a rights-based perspective (Hardee et al. 2014). Although some use of preference measures appears as far back as the late 1970s in the Contraceptive Prevalence Surveys (Lewis 1983), widespread use of these measures has not taken hold. We argue that the measurement of method-specific preferences and concordance of use with preferences are person-centered indicators of the extent to which people have control over their contraceptive decisions.

### Measuring Preferences Exposes Opportunities to Improve Care

While measuring contraceptive preferences and assessing the degree to which they are met does not provide a detailed assessment of the full process of contraceptive counseling and provision, it has the potential to identify major deficiencies and possible solutions. In instances where preference greatly exceeds use for a particular method, the solution may be to expand access to that method. However, the solution to gaps in use versus preferences will not always be increasing access. Resolving mismatches might also involve considering forces like coercion, which may affect contraceptive use even in situations where the full range of methods is available (Gomez, Fuentes, and Allina 2014; Higgins 2014). Assessing concordance between method use and desire can identify issues that may otherwise go undetected, such as unwanted LARC continuation (Ela et al. 2022).

Centering preferences can challenge the standard focus on contraceptive use among women within cisgender, heterosexual relationships and help identify gaps in access among other populations. For example, a growing body of scholarship has highlighted the distinct needs and barriers that sexual and gender minority individuals experience regarding contraceptive care (Ela and Budnick 2017; Gomez et al. 2020; Greene et al. 2019). A further example involves men: probing contraceptive desires among men has the potential to uncover latent interest in their use of contraceptive methods, such as vasectomy (Hubert et al. 2016; Shih, Dubé, and Dehlendorf 2013). Implementing measures of contraceptive preferences broadly may offer insights into how to improve care for these and other populations that are often excluded from mainstream concerns regarding reproductive health.

An additional benefit of learning about preferences is that this information can shed light on the factors underlying the mix of contraceptive methods used by different groups within or across populations. For example, in the United States, researchers have noted different patterns of contraceptive use and continuation by race/ethnicity (Jackson, Wang, and Morse 2017; Littlejohn 2012). While structural racism and resulting economic barriers to access are responsible for some of these differences (Sutton et al. 2021), studies have illuminated differences in priorities regarding contraceptive features across racial/ethnic groups, which likely manifest in distinct preferences (Jackson et al. 2016).

Furthermore, there are enormous and largely unexplained differences in method mix across populations globally. For example, the proportion of people using permanent or long-acting methods among all users ranges widely; in Latin America alone, the proportion ranges from 9 percent in Haiti to 74 percent in Mexico (United Nations, Department of Economic and Social Affairs, Population Division 2019). By incorporating measures of preferences in national surveys, researchers can begin to disentangle whether such differences are driven by supply or demand.

## **Contrasting Measures: Contraceptive Preferences, Satisfaction, and Method Choice**

Alternative indicators based on method satisfaction or attribute-specific preferences have been advocated by others concerned with measuring whether people are using the methods that they want. We see soliciting method-specific preferences as an opportunity to add complementary information to these indicators.

Satisfaction questions offer clues as to how people feel about a method they are currently using or have used in the past. This information is important, but it does not directly tell us what people want to use. By contrast, preference measures can be used to generate an estimate of method-specific demand. For example, people may be satisfied with a method they are using, despite preferring another method; such was the case for a number of postpartum LARC users in Texas (Ela et al. 2022). In these scenarios, interest in another method goes undetected when relying solely on satisfaction measures.

From the perspective of many analysts, contraceptives are chosen based on their attributes (International Union for the Scientific Study of Population 2021; Yeh et al. 2022). Apart from cost and access, key dimensions include effectiveness, ease of use, side effects, effects on the return of fecundity, effects on sexual pleasure, and method-specific

contraindications. Measures of preference for attributes can offer information about what people are seeking in contraception, which at a population level can guide the development of new contraceptive technology, or at an individual level may be used in thorough contraceptive counseling to help someone consider the advantages and disadvantages of the various available methods. Eliciting such preferences has been done in focus groups (Garcia, Snow, and Aitken 1997) and can now be done in the context of counseling with computer-assisted programs such as *My Birth Control* (Dehlendorf et al. 2019). But such endeavors are time consuming and, given the complex, highly personal matrix of costs and benefits of each method, do not offer a straightforward way to detect gaps between what people want versus what they are using at a population level.

These scenarios highlight added benefit of measuring method-specific preferences. There may be concern as to how well-informed a person's contraceptive preferences are, but in contrast to decades ago when most modern methods had only recently become available and few were using them, these methods now have a long history in most parts of the world. We believe most people, especially those who are contracepting, have a sense of their contraceptive options as well as the method they would like to be using.

## RECOMMENDATIONS

In view of the distinct benefits of knowing people's preferred method of contraception and whether they are in fact using that method, we recommend that survey researchers implement questions regarding method preferences and use. While the limited number of studies and the assorted approaches taken suggest that there is room for testing and refining survey items, collecting preference data will require the development and implementation of just two questions.

For cross-sectional surveys, we recommend the inclusion of, first, a question about the preferred method. That question, along with the existing standard question regarding current method use can be used to examine the extent of unsatisfied preferences in a population. While the best way to frame the preferred method question is not yet settled, most previous research has included a hypothetical condition regarding accessibility often framed in terms of cost. As a starting point, we suggest the following wording, "If you could use any type of birth control method you wanted, regardless of cost or other difficulties, what method would you most like to use?"

A second question, conditional on discordance between preferences and use, should ask about why the respondent is not using their preferred method. Qualitative research in the United States offers suggestions of relevant barriers to preferred method use in the domains of cost, access, and quality of care (Frohworth et al. 2022), but these barriers will likely be context-dependent (Yeh et al. 2022). Cognitive interviews and field tests can be used to develop instruments that capture the relevant categories in different settings and populations.

Note that this two-step inquiry goes beyond the question now included in the NSFG which, without a question of what a respondent's preferred method is only asks if, due to cost, there is another method the person would want to use. In that case, analysts lack information on the method the respondent would like to be using, as well as whether some who answer

in the negative might prefer to be using another method for a reason other than cost. We see the extent of and the reasons for nonpreferred use as distinct but complementary data points with a direct bearing on the design of policies that would enhance reproductive autonomy.

In prospective surveys in which the interview intervals are relatively close together (e.g., no more than six months apart), questions about method preference could refer to the contraceptive a person would like to be using at the time of the next survey. This research design allows for assessment of whether people are able to actualize their preferences over time as well as identification of change in preference between interviews. Prospective studies also present an opportunity to assess the consequences of unsatisfied preferences for method continuation, future conceptions, and subsequent births.

Moreover, even in cross-sectional surveys, it is relevant to ask people who are not currently able to become pregnant (e.g., those who are pregnant or experiencing postpartum amenorrhea) about the method they would like to use in the future when they are again able to become pregnant; some researchers have begun to do this (Adegbola and Okunowo 2009; Di Giacomo et al. 2013; Ortiz, Arizmendi, and Cornelius 2004; Yilmazel and Balci 2013). These responses can then be compared with the actual, cross-sectional method used by people later in the postpartum interval to assess whether the postpartum method mix aligns with the preferred method mix and also used to anticipate future demand for specific methods. In the same vein, we recommend that the family planning community think expansively about who to solicit contraceptive preferences from, including those who are not sexually active, men, and people who are outside of what is typically considered “reproductive age.”

## CONCLUSION

While we are confident that more and improved collection of data on contraceptive preferences has the potential to further understanding of the contraceptive use patterns throughout the world and to illuminate important policy challenges, we appreciate that this measure has limitations. It is not all-encompassing, as there are many dimensions of reproductive autonomy that extend beyond method preference and use (Upadhyay et al. 2014), and the preferences that individuals have at any given point in time are the product of decades of individual and collective experience as well as institutional structures (Potter 1999). Further, we note the need to validate these measures and acknowledge that there are likely circumstances in which people have not fully formulated contraceptive preferences (Blanc et al. 2021; Kost and Zolna 2019).

However, we see the thoughtful advancement of preference metrics as an opportunity to leverage foundational work that has already begun in asking these questions. Such an effort would draw indicators in reproductive health into closer alignment with the interests of the people the field is meant to benefit. With the careful development and addition of just two questions on nationally representative instruments like the NSFG and the Demographic and Health surveys, as well as on studies of more specific populations, there could be greater knowledge of the gaps in services, and autonomy could become central in the assessment of the need for and quality of reproductive health services.



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