patients. They may also reflect known differences in communication style. These results do not exclude the possibility that patients who choose a female physician are different in other ways that make them more likely to be vaccinated. Limitations include inability to record vaccinations not reimbursed by Medicare. Understanding contributors to these vaccination differences may provide insights into improving vaccination efforts for influenza and other diseases, particularly among minority patients.

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Association Between Patients’ Perceptions of the Sexual Acceptability of Contraceptive Methods and Continued Use Over Time

Despite contraception's health and social benefits, many women report nonuse and discontinuation due to method dissatisfaction. Burgeoning research suggests that sexual acceptability influences contraceptive practices. In a large cohort of new-start contraceptive users, we examined the association of sexual function, satisfaction, and self-reported sexual acceptability with continued contraceptive use over time.

Methods | Data were obtained from the HER Salt Lake Contraceptive Initiative, a cohort study (Contraceptive Trial Registration Number NCT02734199) approved by the University of Utah institutional review board. All interested participants completed the informed consent process and the baseline survey in a private room. From March 2016 to March 2017, family planning clients received their desired contraceptive method at no cost and could switch or discontinue at any time. At baseline, 1, 3, and 6 months, participants completed sexual acceptability measures including the Female Sexual Function Index (FSFI-6) and the 20-item New Sexual Satisfaction Scale (NSSS). In follow-up surveys, they reported whether, and how, their contraceptive method had affected their sex life in the past month (from “a lot worse” to “a lot better”).

Investigators used multivariable logistic regression models to assess patterns of noncontinuation (switching or discontinuation) of enrollment method by 6 months. Independent variables were perceived sexual effect of method and changes in FSFI-6 and NSSS scores. Covariates included bleeding changes and frequency of adverse effects captured by the Menstrual Symptom Questionnaire, divided into physical (eg, breast tenderness) and mood-related (eg, depression) changes.

| Table 1. Sexuality Measures, Bleeding Changes, and Adverse Effects, 0 to 1 Month, Among New-Start Contraceptive Users (N = 2027) |
|-----------------|-----------------|
| Variable Mean (SD) |
| Effect of method on sex life, measured at 1 mo only, No. (%) |
| Has made my sex life a lot worse | 924 (45.6) |
| Has made my sex life a little worse | 1361 (67.1) |
| Has had no effect on my sex life | 774 (38.2) |
| Improved my sex life a little | 529 (26.1) |
| Improved my sex life a lot | 529 (26.1) |
| New sexual satisfaction scale, range 20-100 |
| Average baseline score | 75.8 (16.6) |
| Average change in score from 0-1 mo | −2.1 (16.9) |
| Female Sexual Functioning Index-6, range 0-5 |
| Average baseline score | 23.4 (4.8) |
| Average change in score from 0-1 mo | 0.0 (5.3) |
| Changes in vaginal bleeding, measured at 1 mo only, No. (%) |
| I’ve had no vaginal bleeding | 297 (14.7) |
| I’ve had less bleeding than before | 531 (26.2) |
| I’ve had no change from before | 275 (13.6) |
| I’ve had more bleeding than before | 924 (45.6) |
| Menstrual Symptoms Questionnaire: mood symptoms, range 0-5 |
| Average baseline score | 1.7 (1.3) |
| Average change in score from 0-1 mo | 0.30 (1.5) |
| Menstrual Symptoms Questionnaire: physical symptoms, range 0-5 |
| Average baseline score | 1.2 (0.8) |
| Average change in score from 0-1 mo | 0.25 (0.9) |

* Mood adverse effects include feelings of depression or changes in mood. b Physical adverse effects include headaches, bloating, cramping, diarrhea or constipation, acne, weight gain or loss, and breast tenderness.
Controls included enrollment method and sociodemographic factors related to contraceptive practices (eg, age, relationship status, and education). Participants selected their race(s) and ethnicity from 7 listed categories, including a write-in option.

Results | Among 2027 eligible participants included in the analyses, 610 (30.1%) selected the levonorgestrel, 52 mg, intrauterine device (IUD), 454 (22.4%) the etonogestrel contraceptive implant, 367 (18.1%) oral contraceptive pills, 303 (15.0%) copper T380A IUD, 190 (9.4%) depo medroxyprogesterone acetate injection, and 103 (5.1%) vaginal ring. Less than 1% selected all other methods.

Participants reported no significant changes in FSFI-6 and NSSS scores (Table 1). However, at 1 month, 107 participants (52.8%) in total said their new method improved their sex life (529 [26.1%] “improved a lot”; 542 [26.7%] “improved a little”; 340 [16.8%] in total said their sex life worse (291 [14.4%] “a little worse”; 49 [2.4%] “a lot worse”); and 616 (30.4%) reported no sexual effect. Respondents whose method made their sex life “a lot worse” had 3.3 increased odds of noncontinuation by 6 months—more robustly than other adverse effects. Qualitative research on contraceptive sexual acceptability documents multiple domains that may help explain this effect, including sexual spontaneity, psychological disinhibition, and partner connection when feeling well protected against unwanted pregnancy.¹

Study strengths include its large sample size, prospective design, and use of multiple measures to assess sexual experiences. Limitations of this study include that the outcome measure was affected by the large proportion of participants who initiated IUDs or implants—methods that require more effort to discontinue than pills, rings, and injections. Though we included only participants with complete variables, sensitivity analyses indicated that results held when we included all participants.

These findings suggest that the sexual acceptability of a contraceptive method may have an important role in whether a patient continues to use it. Finding methods that favorably align with users’ sexual experiences may reduce noncontinuation and improve patients’ sexual lives and well-being.

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COMMENT & RESPONSE

Caution Against Overinterpreting Time-Restricted Eating Results

To the Editor We read the randomized clinical trial from Lowe et al1 with great interest. Investigators have compared timed-resticted eating (TRE, daily 16 hours fasting and 8-hour eating window) with consistent meal timing (CMT, 3 meals daily with snacking permitted) in adults with obesity. In the TRE group, noncaloric beverages were permitted outside the 8-hour eating window. The CMT group received meal coaching with daily text messages, “fruits and vegetables are healthy snacks,” “start your day with a healthy breakfast,” and “regular meals reduce snacking.” All the participants were instructed to measure daily weight, which were automatically uploaded from the study-provided weighing scales. The primary outcome was weight loss. Noncaloric beverages were allowed in fasting cycles in the TRE group.

Sucralose is one of the most common noncaloric sweetener used in the US. Consumption of sucralose is shown to increase acute insulin reaction to glucose and decrease insulin sensitivity.2 Also, noncaloric beverages are associated with weight gain and metabolic syndrome in the US.3,4 In theory, the insulin secretion from noncaloric beverages during the fasting cycle negates the metabolic benefit of fasting. It is possible that participants in the TRE group consumed noncaloric beverages, comparable in amount or more than the CMT group, resulting in insulin secretion in the fasting cycle. In the absence of absorbable nutrients in the fasting cycle, insulin availability decreases basal metabolic rate, leading to decrease in energy expenditure, as seen in patients with diabetes, insulin therapy or treatment with sulphonylureas increases insulin secretion and causes weight gain, whereas metformin therapy improves insulin resistance and does not cause weight gain.5