

**P-473 Should couples be educated on how to try to conceive (TTC) before an infertility diagnosis? A comparative study of fertile, subfertile and infertile couples**

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**Study question:** What sexual strategies do individuals TTC with different fertility status use?; What are the predictors of sexual dysfunction(SD) and frequency of intercourse(IF) when TTC?

**Summary answer:** TTC strategies with no evidence of effectiveness are the most used. Poor marital quality predicted SD, and female SD was a significant predictor of IF.

**What is known already:** It is well known that couples TTC have low fecundity knowledge. Previous evidence showed that after 12 months the frequency of intercourse decreases. After seeing a fertility specialist couples report a feeling of waiting time by attempting natural conception, which can be associated to evidence of an overestimation and excessive confidence in the success of fertility treatments. Existing guidelines recommend intercourse every other day, but no comparative studies exist up to date on what sexual strategies are used in different fertility status and what are the predictors of sexual frequency and sexual dysfunction when trying to conceive.

**Study design, size, duration:** This study is part of a randomized controlled trial on the effects of timed intercourse in psychosocial outcomes. Data was collected between July 2016 and November 2019 via an advertising strategy and obstetrics/gynecology centers. Inclusion criteria were: i) adult in a marital/cohabitation heterosexual relationship >1 year; ii) not knowing of any condition that can prevent pregnancy; iii) being actively TTC; iv) female age >22<42 years old; v) no previous children. Measurements were carried out online.

**Participants/materials, setting, methods:** Our final sample had 399 subjects (252 women). Participants rated the use of the following strategies: intercourse every other day (EOD), fertile week (FW), basal temperature, cervical mucus monitoring (CMM), ovulation predictor kits (OPK), and keeping legs elevated afterwards (EL). We also accessed psychological adjustment, relationship quality, SD and IF. Comparisons between groups were made by analysis of variance (ANOVA) and Chi-square tests, and logistic regression was used to determine predictors of SD and IF.

**Main results and the role of chance:** Participants were highly educated (72.8%), in the relationship for 9 years ( $\pm 5.2$ ), cohabitating for 5 ( $\pm 3.6$ ), and TTC for 2.5 years (range 0-16). Women were 33 years old ( $\pm 4.4$ ) and men 36 ( $\pm 5.5$ ). Regarding fertility status, 22.6% of participants were TTC <12 months, 22.8% >12 months but not diagnosed, 23.6% had a diagnosis but no treatment, and 31.1% had ART.

The most reported female strategy in all groups was EL, and the most never used was OPK. Differences were found in EOD, with significantly more women TTC <12 months that never used it, and more women with previous ART using it. Women who had ART are the ones who more frequently use FW and CMM comparing to other women ( $P > .05$ ). In all groups, the majority reported IF once or twice/week. SD was found in 17.5% of women and 10.9% of men. Age (OR 0.91, 95%CI 0.85-0.97) and SD (OR 2.47, 95%CI 1.02-6.02) were the only predictors of low IF for women, with no significant findings for men. Poor relationship quality increased the risk of SD for both men (OR 0.11, 95%CI 0.03-0.40) and women (OR 0.46, 95%CI 0.03-0.40), and depression increased the risk of female SD (OR 1.24, 95%CI 1.06-0.46).

**Limitations, reasons for caution:** The cross-sectional nature of this study does not allow causal relationships to be determined. Further cohort studies allowing to assess differences as couples cross different fertility status are warranted. There are important predictors of SD that were not considered, specifically the comorbidity of diseases and pain.

**Wider implications of the findings:** Findings indicate that individuals TTC are misinformed, and that those using evidence-based sexual strategies are fertility patients. SD should be screened in patients TTC given that it might be an important predictor of IF. Couples might benefit from counselling to improve marital quality and consequently sexual functioning.

**Trial registration number:** NCT028140069