

Hormonal contraception and impact on sexuality

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Context:

The oral contraceptive pill (OC) has been on the market for more than fifty years and has had a tremendous impact on women's reproductive health. Still, there is a remarkable lack of basic knowledge about how OC use may affect women's sexuality and quality of life.

Objective:

To determine whether there is a causal effect of OC treatment on sexuality, general well-being and depressed mood in young healthy women.

Methods:

Sexuality, general well-being and depression were evaluated in a double-blind, randomized, placebo-controlled trial.

Participants:

340 healthy women, aged 18-35 years, were randomized to treatment and 332 completed the study.

Interventions:

A combined OC (150 µg levonorgestrel and 30 µg ethinylestradiol) or placebo for three months of treatment.

Main outcome measures:

Primary outcome measures were the aggregate score on the Profile of Female Sexual Function (PFSF), the global score of Psychological General Well-Being Index (PGWBI) and the Beck Depression Inventory (BDI). Secondary outcomes were the seven domains of the PFSF, the Sexual Activity Log, and the Personal Distress Scale, as well as the six separate dimensions of the PGWBI.

Results:

Overall sexual function was similar in women in the OC and placebo groups. However, the PFSF domains desire (-4.4, 95% CI, -8.49 to -0.38, $P = 0.032$), arousal (-5.1, 95% CI, -9.63 to -0.48, $P = 0.030$) and pleasure (-5.1, 95% CI, -9.97 to -0.32, $P = 0.036$) were significantly reduced in comparison to placebo, whereas orgasm, concern, responsiveness and self-image were similar between groups. Furthermore, OC treatment significantly decreased general well-being compared to placebo (-4.12, 95% CI, -7.18 to -1.06, $P = 0.0085$), and the following PGWBI dimensions compared to placebo: positive well-being (-3.90, 95% CI, -7.78 to -0.01, $P = 0.0492$), self-control (-6.63, 95% CI, -11.20 to -2.06, $P = 0.0046$) and vitality (-6.84, 95% CI, -10.80 to -2.88, $P = 0.0008$). The effect of OC on depressive symptoms, and on the PGWBI dimension depressed mood were not significant.

Conclusions:

This study shows no negative impact of a levonorgestrel-containing oral contraceptive on overall sexual function, although three of seven sexual function domains were adversely affected. There was also a

significant reduction in general well-being by a first choice OC in comparison to placebo in healthy women. However, we found no significant effects on depressive symptoms.

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