

European College of Neuropsychopharmacology – Barcelona conference

Women’s mood worsens during ‘pill pause’ period of monthly contraceptive pill cycle

Pre-conference notification: for immediate release, 17.00 CEST Wednesday 27th September 2023

Type of work: peer-reviewed/observational study/people

Barcelona: Most contraceptive pills are based on a cycle of taking the pill for 21 days, and then stopping the pill for 7 days. Now researchers have found that women’s mood worsens during the 7 pill-free days. This work will be presented at the ECNP congress in Barcelona on 8th October, after recent publication (see notes).

Lead researcher, Professor Belinda Angela Pletzer (of Paris Lodron University, Salzburg, Austria) said *“We investigated women’s mental health during the pill pause in long-term pill users: since they are long-term users, this means that they tolerate the pill very well. We found that during the pill pause women’s mood worsens and they display similar mental health symptoms to those women display during menstruation when they are not on hormonal contraceptives”*.

Over the period from April 2021 to June 2022 the researchers studied 120 women who took a range of oral contraceptive pills, and 60 who didn’t. They tested their mood twice a month using a series of validated questionnaires. Those women who used oral contraceptives showed a 7% increased anxiety score and a 13% increase in negative feelings score during the 7-day pill pause.

Belinda Pletzer continued *“We don’t exactly know the mechanism behind this change, we are working on unpicking this just now. It is unclear, whether the change is a direct effect of hormone withdrawal or due to the physical side effects of the withdrawal bleeding which happens when you stop the daily pill. Oral contraceptives are very widely used, with up to half of younger women using them in parts of Northern Europe. Like any medicinal product, there are side-effects, but there are also non-contraceptive benefits. It seems that long-term users, who tolerate their pill well, benefit from mood-stabilizing effects when they are actively taking the pill. In practical terms it may mean that, if women notice a mood worsening during their “pill pause” they should consult with their doctor about adjusting their pill cycles”*.

Commenting, Professor Inger Sundström Poromaa (Professor of Obstetrics and Gynaecology at the University of Uppsala, Sweden) said:

“Many women prefer not to have withdrawal bleeding while on hormonal contraceptives. Professor Pletzer’s study provides important and additional evidence why pill-free intervals of hormonal contraceptives can be skipped”.

This is an independent comment, Professor Sundström Poromaa was not involved in this work.

This work will be presented at the ECNP Congress on Sunday 8th October.

Notes

The conference abstract for this work, "Oral contraceptives impact on cognition in healthy_women" (B. Pletzer) can be seen at

<https://www.ecnp.eu/congress2023/ECNPcongress/programme/programme#!abstractdetails/0000526150>

The paper "*Mental Health Symptoms in Oral Contraceptive Users During Short-Term Hormone Withdrawal*" Isabel A. Noachtar, MSc; Vibe G. Frokjaer, MD, PhD; Belinda Pletzer, PhD is published in JAMA Network Open on 27th September 2023
JAMA Network Open. 2023;6(9):e2335957. doi:10.1001/jamanetworkopen.2023.35957

None of the comments in this press release appear in the published paper.

This work is presented at the 36th European College of Neuropsychopharmacology annual conference, which takes place in Barcelona and online from 7th-10th October, see <https://www.ecnp.eu/Congress2023/ECNPcongress>. Up to 5000 delegates are expected to attend. The ECNP is Europe's main organisation working in applied neuroscience.