

MEETING ABSTRACT

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# Association of menstrual cycle related symptoms with mood changes

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## Background

Nearly 80% of women experience some worsening of physiological and psychological symptoms a few days before the onset of menstruation, and these symptoms have an influence on well-being, and behaviour. Due to the premenstrual-period related symptoms relationship, family, and work-related conflicts may occur. Even economical loss has to be taken into consideration due to decrease in ability to work, and staying out of work. The aim of our study was to investigate the association between mood changes throughout the menstrual cycle phases of healthy women.

## Materials and methods

88 healthy women not meeting criteria for any DSM-IV premenstrual phase-associated disorders completed the STAI State Anxiety Scale (STAI-S), SCL-51 and the ZSDS during first cycle on three predefined days (early follicular, late follicular and late luteal phase). Data were analysed using Generalized Linear Model Analysis (GENMOD).

## Results

A significant effect of phase of the cycle was observable in case of the state anxiety scale ( $F = 6.27$ ,  $p = 0.0022$ ), the SCL-51 total score ( $F = 5.31$ ,  $p = 0.0055$ ), the somatization subscale of the SCL51 ( $F = 4.16$ ,  $p = 0.0167$ ), the depression subscale of the SCL51 ( $F = 4.58$ ,  $p = 0.0111$ ), the obsessive-compulsive subscale of the SCL51 ( $F = 3.63$ ,  $p = 0.0278$ ) and the interpersonal sensitivity scale of the SCL51 ( $F = 5.71$ ,  $p = 0.0038$ ). Significant effect of phase also emerged on the ZSDS ( $F = 3.14$ ,  $p = 0.0452$ ).

## Conclusions

In case of healthy women there is a significant fluctuation during the menstrual cycle in anxiety, somatisation, depression, obsessive compulsive symptoms and interpersonal sensitivity, so in the majority of women psychological well-being is significantly associated with the phase of the cycle. In case of psychological and psychiatric investigations, cycle phase thus should be taken into consideration since it may influence measurements even in case of healthy women.

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