

# DO WOMEN PRESENT WITH DELIBERATE SELF HARM (OR THOUGHTS OF SELF HARM) TO ACCIDENT AND EMERGENCY DEPARTMENT, MID-WEST REGIONAL HOSPITAL LIMERICK MORE FREQUENTLY THAN CONTROLS, IN THE LOW OESTROGEN/LOW PROGESTERONE PHASES OF THEIR MENSTRUAL CYCLE?

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## BACKGROUND

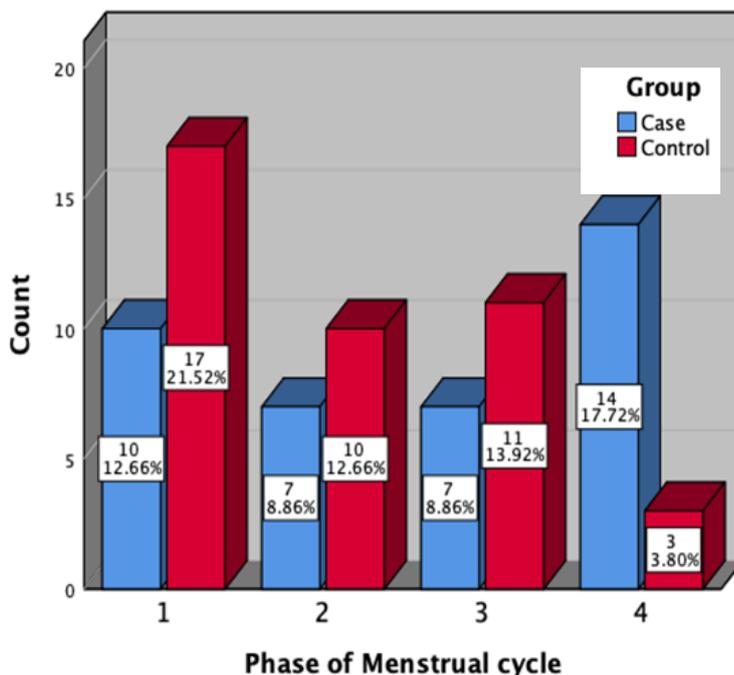
Available literature is contradictory regarding the role of the menstrual cycle in women presenting with deliberate self-harm, suicide attempts and thoughts thereof. Some of the better designed studies would suggest an increase in suicidality and self-harm in the late luteal and early follicular phases of the menstrual cycle. Since fluctuations in hormone levels across the menstrual cycle can be manipulated, if this is a factor in suicidality or self-harm, this is potentially a modifiable risk factor.

## OBJECTIVES/AIMS

To ascertain if women present with deliberate self-harm or thoughts of self-harming to Accident and Emergency Department, Mid- West Regional Hospital Limerick more frequently than controls, in the low oestrogen/low progesterone phases of their menstrual cycle.

## METHODS

Data was collected from 79 women, 38 cases and 41 controls with regular menstrual cycles who presented to A&E. They were asked specifically for the first day of their last menstrual period and the length of their cycle, this information was standardised to 28 days using an accepted 'count back/count forward' method which allowed a day of cycle from 1 to 28 to be assigned. This allowed phase of menstrual cycle to be compared for the two groups. Women with irregular menstrual cycles and those receiving hormonal contraception were excluded. Other information collected included age, reason for A&E attendance, for cases reason for crisis referral for psychiatric assessment, psychiatric diagnosis (if any) and record of prescribed medication for all 79. For cases only, presence of alcohol or illicit drug at time of presentation was also recorded.



A Chi-square test was performed in order to investigate any association between the menstrual cycle and the group (case vs control). The test was significant ( $\chi^2 = 10.252$ ,  $p = 0.017$ ), and a comparison between the expected and observed values revealed that cases were more likely to present at the end of their cycle while controls were more likely to present at the beginning of their cycle.

## RESULTS

Results indicate that women in the cases group were more likely to present in the late luteal phase of their menstrual cycle. ( $p=0.017$ ). Use of alcohol or illicit drugs was not shown to be greater in those who actually self-harmed compared to those who had self-harm or suicidal ideation although the numbers were too small to be significant. Women in the cases group were taking significantly more prescribed medication.

## CONCLUSIONS

This study would suggest that more research is warranted to investigate if women who present to A&E with self-harm, suicidality or thoughts thereof might benefit from greater focus on their menstrual cycle. The late luteal phase of the cycle is a time of falling oestrogen and progesterone levels and these levels can be manipulated.