The Correlation Between Physical Exercise and The Incidence of Pre-Menstrual Syndrome in The XI Grade Female Student of SMAN 1 Sentolo

Fenthy Vabiella, Alfaina Wahyuni
Faculty of Medicine and Health Sciences
Universitas Muhammadiyah Yogyakarta - Indonesia

ICMHS

Life Sciences Society

BACKGROUND

- The premenstrual syndrome is emotionally and physically symptoms which suffered prior to menstruation due to the increase of estrogen level. In Indonesia, the incidence of premenstrual syndrome is 70% - 90% (Adelina 2010 cit Delfi Lutan, 2007).
- Premenstrual syndrome are complaints that usually begins from one week to a few days prior to menstruation and disappear after menstruation, even though sometimes continued until the menstruation stops (Simanjuntak, 2005).
- Exercise is one of treatment to reduce the symptoms of premenstrual syndrome, because the exercise can improve endorphin that prevent an increasing of estrogen level.
- The purpose of this study was to determine the relationship between sports activity and the occurrence of premenstrual syndrome.

RESEARCH DESIGN

- The Research is an analytical study using the cross sectional method.
- The sample are 66 female students of grade XI SMA 1 Sentolo.
- The validity and reliability testing had been conducted using test person product moment correlation test and the formula KR - 20.
- Respondents filled out a questionnaire and using chi square test to analyse the data.



THE RESULT

Sport activity	n	%
Regularly	9	13,6
Not Regularly	57	86,4
Total	66	100

Premenstrual Syndrome	n	
Mild	6	9,1
Moderate	29	43,9
Severe	31	47,0
Total	66	100

Variable	Premenstrual Syndrome			X2	P
Sport activity	Mild	Moderate	Severe	9,587	0,008
Regularly	22,2%	77,8%	0%		
Not Regularly	6%	38,6%	54,4%		

DISCUSSION

- Women who suffered premenstrual syndrome occurs due to excess estrogen.
- Exercise regularly and sustainable contribute to improving the production and release of endorphins.
- Endorphin plays a role in regulation of estrogen. The excess estrogen can be prevented by increasing endorphin. (Nurlela et al, 2008).
- Deficiency of endorphin in the body can lead to pre-menstrual syndrome, but with physical activity such as exercise can stimulate release of endorfin and cause a feeling comfortable despite premenstrual syndrome occurs (Yane, 2010).

CONCLUSION

There is relation between the excercise activity with pre-menstrual syndrome incident in student grade XI at SMAN 1 Sentolo.