

# Menstrual Pattern in Upper Secondary School Students, Khon Kaen, Thailand

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**Objectives:** to determine the prevalence of menstrual patterns and effects of menstrual bleeding on academic and daily life activities of the upper secondary school students.

**Methods:** This study is cross-sectional study students enrolled in three upper secondary schools of Khen Kaen, Thailand a total of 339 secondary schools students were randomly selected and asked to respond an anonymous questionnaire. Only students who had already started menstruating were requested to participate in. Information was collected by a questionnaire which composed of items on demographic data, menstrual patterns, impact of menstruation academic and daily life activities and related menstrual symptoms.

**Results:** Three hundred and thirty nine students whose ages between 15 and 19 years, were surveyed. Their mean age of menarche was  $12.3 \pm 1.1$  years. The menstrual cycles of 75.0 % of them (n=254) were regular and the rest (n=85) were irregular. There were four patterns of menstrual irregularity. The prevalence of oligomenorrhea, polymenorrhea, menorrhagia or hypermenorrhea and metrorrhagia were 9.4 % (n=8), 35.3% (n=30), 17.7 % (n=15) and 37.6 % (n=32), respectively. Academic and daily life activities such as poor classroom concen-

tration 48.2% (n=41), school absenteeism 8.2% (n=7), limited sport activity 42.3% ( n=36 ) and limited social activities 27.6 % ( n=23 ) were interfered. False negative of surveyed student's perception of abnormal menstruation was 17.8 %. The first consultant of their menstrual irregularity was their mother in 90.6 % ( n=307 ), the second order was to search for knowledge from internet and social medias 22.67% (n=77), only 0.8 % ( n=3 ) asked their teacher who given menstrual health program. The other symptoms related with menstruation such as dysmenorrheal 86.4 % ( n=292 ), irritability 82.0% ( n=278), tired feeling 56.3 % ( n=191 ), breast tenderness 51.8% (n=172), anxiety 26.2% ( n=89) and headache 33.0% ( n=112).

**Conclusion:** Abnormal menstrual bleeding is common in menstrual disorders; however, the first order is dysmenorrheal. Metrorrhagia and polymenorrhea had high prevalence. Academic as well as daily life activities and missing perception of normal menstruation were affected. Consequently, health promotion programs in secondary school should be provided for improving the menstrual health.

**Keywords:** Menstrual pattern, Adolescent, Metrorrhagia, Polymenorrhea, Menorrhagia or hypermenorrhea, Oligomenorrhea