

Effect of Perceived Stress on Menstruation among Adolescent Girls in a Selected College, Kanchipuram District, Tamil Nadu, India

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Abstract

Effect of Perceived Stress on Menstruation among Adolescent Girls in a Selected College, Kanchipuram District, Tamil Nadu, India. The objectives were to assess the effect of perceived stress on menstruation among adolescent girls in a selected college, Correlate between perceived stress and blood flow during menstruation among adolescent girls, Associate between perceived stress on menstruation among adolescent girls with their selected demographic variables, Associate between blood flow during menstruation among adolescent girls with their selected demographic variables. The convenient sampling technique was used to select 50 samples. The data were collected by using perceived stress scale and pictorial blood assessment scale. The collected data were tabulated and analyzed. Descriptive and inferential statistics were used. The result showed that 12% of samples having low stress level, 80% of samples having moderate stress level and 8% of samples having severe stress level and 16% of samples had low bleeding, 30% of samples had normal flow and 54% of samples had severe flow. There was moderate positive correlation ($r = 0.84$) between perceived stress and blood flow among adolescent girls. The demographic variables like menstrual cycle periodicity ($X^2=1.78$) stress level, ($X^2=3.87$) blood flow and duration of menstrual flow ($X^2=4.32$) stress level, ($X^2=5.93$) blood flow had significant association with stress and blood flow during menstruation respectively.

Keywords: Perceived stress, Menstruation, Adolescent girls.

Introduction

Background of the Study: Menstruation, also known as a period or monthly, is the regular discharge of blood and mucosal tissue (known as menses) from the inner lining of the uterus through the vagina.^[1]

The first period usually begins between twelve and fifteen years of age, a point in time known as menarche. However, periods may occasionally start from eight years old children and still it is considered normal.^[1]

The average age of the first period is generally later in the developing world and earlier in the developed world.^[1]

Among women, it's very common to experience stress during the normal monthly cycling of ovulation. It is not uncommon and actually almost predictable to have subtle and not-so-subtle fluctuations in menstruation.^[2]

Many women notice erratic, unpredictable bleeding or a delay of menstruation when they encounter

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particularly difficult times such as deadlines at work or school, personal illness, or death of a loved one.^[2]

Need for Study:

Nazish Rafique and Mona H. Al-Sheikh (2018) conducted a cross sectional study on prevalence of menstrual problems and their association with psychological stress in young female student studying health science. Results showed that **Ninety-one percent of the students were suffering from some kind of menstrual problem. High perceived stress (HPS) was identified in 39% of the students.** A significant positive correlation was found between HPS and menstrual problems. Therefore, it was recommended that **health science students should be provided with early psychological and gynecological counselling to prevent future complications.**^[3]

Ziba Raisi Dehkordi (2017) conducted a cross-sectional study to evaluate the effect of perceived stress on dysmenorrhea among female students residing in dormitory in Shahrekord University of Medical Sciences in Shahrekord, Iran. Results showed that **66 students had a PSS score >20 High stress levels (PSS >20) was associated with only menstrual irregularities and not with duration, amount of flow or dysmenorrhea.**^[4]

Statement of the Problem: Effect of Perceived Stress on Menstruation among Adolescent Girls in a Selected College, Kanchipuram District, Tamil Nadu, India.

Objectives:

- Assess the effect of perceived stress on menstruation among adolescent girls in a selected college.
- Assess the blood flow during menstruation among adolescent girls in a selected college.
- Correlate between perceived stress and blood flow during menstruation among adolescent girls.
- Associate between perceived stress during menstruation among adolescent girls with their selected demographic variables.
- Associate between blood flow during menstruation among adolescent girls with their selected demographic variables.

Hypothesis:

H₀: There is no correlation between perceived stress and blood flow during menstruation.

H₀: There is no significant association between perceived stress on menstruation among adolescent girls with the selected demographic variables.

H₀: There is no significant association between blood flow during menstruation among adolescent girls with the selected demographic variables.

Operational Definitions:

Perceived stress: Perceived stress is the feelings or thoughts that an individual has about how much stress they are under at a given point (During menstruation) or over a given time period which will be assessed using **Perceived stress scale.**

Menstruation: Any amount of blood loss during first three days of girl's monthly cycle, which will be assessed using **Pictorial blood assessment scale.**

Adolescent girls: Girls in the age group of 18-20 years.

Research Methodology: A Quantitative approach with descriptive design was used in the study. The study was conducted among Adolescent girls in Allied Health Science, Chettinad Academy of Research and Education. A convenient sampling technique was used to select 50 samples with the following inclusion criteria. Adolescent girls who are: Studying 1st and 2nd year in Allied Health Science, Chettinad Academy of Research and Education, Age group between 18-20 years, Able to read and write in English. The data was analysed by using descriptive and inferential statistics.

Data Collection Procedure:

- The researcher got prior permission and consent from the study participant.
- The questionnaire was given to collect the data on demographic variables.
- PSS scale was given to assess the perceived stress during their menstrual period.
- PBAS scale was given to the sample and asked them to fill during menstruation.
- Duration of data collection was 1 week.

Ethical Consideration:

- UG Committee clearance was obtained.
- Human Ethics committee clearance was obtained.

- Prior permission from the head of the institution was obtained.
- Informed consent was obtained from the samples.
- Confidentiality was maintained.

Findings: Findings of the study were presented under the following headings based on the study objectives.

Objective 1: Assess the effect of perceived stress on menstruation among adolescent girls.

The finding of the present study revealed that,

12% of adolescent girls had Low stress level.

80% of adolescent girls had Moderate stress level.

8% of adolescent girls had Severe stress level.

Objective 2: Assess the amount of blood flow during menstruation among adolescent girls.

16% of adolescent girls had low bleeding.

30% of adolescent girls had normal blood flow.

54% of adolescent girls had severe bleeding.

Objective 3: Correlate between perceived stress and blood flow among adolescent girls.

The result showed that moderate positive correlation ($r = 0.84$) between perceived stress and blood flow among adolescent girls.

Objective 4: Associate between perceived stress during menstruation among adolescent girls with their selected demographic variables.

Result showed that the demographic characteristics like menstrual cycle periodicity ($X^2=1.78$) and duration of menstrual flow ($X^2=4.32$) have significant association

whereas the demographic characteristics like Age ($X^2=5.01$), Department ($X^2=6.22$), Age at menarche ($X^2=12.89$) and menstrual irregularities ($X^2=6.78$) have no significant association with perceived stress during menstruation.

Objective 5: Associate between blood flow during menstruation among adolescent girls with their selected demographic variables.

Result showed that the demographic characteristics like menstrual cycle periodicity ($X^2=3.87$) and duration of menstrual flow ($X^2=5.93$) have significant association whereas the demographic characteristics like Age ($X^2=2.13$), Department ($X^2=8.20$), Age at menarche ($X^2=15.51$) and menstrual irregularities ($X^2=2.58$) have no significant association with blood flow during menstruation.

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